

Department for Environment, Food and Rural Affairs

The Expert Committee on Pesticide Residues in Food (PRiF)

Report on the pesticide residues monitoring programme: Quarter 3 2016

March 2017



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Summary Findings

PRiF is an expert committee of Defra. This is our third quarterly report for 2016. During this year's surveillance programme we are looking for a range of up to 376 pesticides in our fruit and vegetable surveys.

This quarter's programme surveyed 1,019 samples of 26 different foods: apples, apricots, beans with pods, bread, cabbage, cheese, fish (predator & sea), grapes, infant food, jam, leeks, lettuce, milk, okra, peaches & nectarines, pears, peppers, pork, potatoes, prepared fresh fruit, speciality vegetables, spices, spring onions, strawberries and tomatoes. The results show 62 samples contained residues above the maximum permitted levels.

The Health and Safety Executive's Chemicals Regulation Division (CRD) do a screening risk assessment for each residue in each commodity to identify residue levels that could lead to intakes above the relevant reference doses. They then produce detailed risk assessments for every case where the actual residue level found could lead to an intake above the acute reference dose. We have looked carefully at all the findings including the risk assessments.

In most cases, the presence of the residues found would be unlikely to have had any effect on the health of the people who ate the food. In the case of okra, we found a residue in one sample where short-lived effects were possible.

We have published full details of suppliers and retailers of the food sampled in an annex to this report. We have asked suppliers and the authorities of the exporting countries for an explanation of our findings – any responses we received are at Appendix D.

Thanks go to all of those individuals and organisations responsible for helping us put this report together. These include our Secretariat and scientists (both based at the Health and Safety Executive), the samplers from the market research organisation and Government officials who have collected the samples and laboratory staff across the UK who undertook the analysis.

Dr Paul Brantom
Chairman of the Expert Committee on Pesticide Residues in Food

Section I - Introduction

Background

Food safety is important. Modern food production processes have given us plentiful supplies of a wide range of good quality affordable produce.

In the food industry of today the production environment can be managed from the preparation of seeds used for crops, through to growth, harvesting and storage of the produce.

One of the ways the food industry controls the environment in which foodstuffs are produced is by applying pesticides. They help farmers and growers maximise the production of food stuffs by, for example, preventing weeds inhibiting the growth of the crop, or insects destroying or infesting them. Pesticides can also be used to help protect seeds, or prolong the life of crops after they have been harvested. Biological and physical (cultural) controls are also used to protect crops or as part of an integrated system.

As pesticides are used to control unwanted pests, weeds and diseases, they can potentially also harm people, wildlife and the environment. This is why the UK, in common with most other countries, imposes legally enforceable conditions as to how and when pesticides can be used. No pesticide can be supplied or used on a food or ornamental crops in the UK without Government authorisation. To obtain this authorisation the manufacturer of the pesticide must show that it does not present a concern for people's health or the environment. Naturally derived and synthetic pesticides are subject to the same regulation.

Once the authorisation has been granted Government authorities carry out follow up checks to ensure that the authorisation is providing the necessary degree of protection to users, consumers and the environment and that those who use pesticides are complying with conditions specified within it.

The Government authority responsible for checking pesticide residues in foodstuffs is the Health and Safety Executive. Defra's Expert Committee on Pesticide Residues in Food (PRiF) oversees and provides an independent check on this work. We know that the use of pesticides on crops may lead to traces (residues) of these chemicals in food and we expect to find these in our monitoring programme.

Defra's Expert Committee on Pesticide Residues in Food (PRiF)

The Expert Committee on Pesticide Residues in Food was established in 2011. Our members have a broad range of expertise relating to the food supply industry. The main function of the Committee is to oversee Government's £2 million pesticide residues surveillance programme. Previously this work was carried out by the Pesticide Residues Committee.

Our Chairman, Dr Paul Brantom is an independent consultant in toxicological risk assessment. The Committee also includes members with expertise in toxicology, food production and supply as well as two public interest experts.

Information on the membership of the PRiF is also available on the PRiF's website:
<https://www.gov.uk/government/groups/expert-committee-on-pesticide-residues-in-food-prif>

Our role is to advise Ministers, the Health and Safety Executive (HSE) and the Food Standards Agency (FSA) on:

- the planning of surveillance programmes for pesticide residues in the UK food supply and the evaluation of the results;
- Procedures for sampling, sample processing, new methods of analysis, the assessment of variability of pesticide residues in food and related issues.

Surveillance programme

The pesticide residues surveillance programme is designed to enable us to check that:

- maximum residue levels of pesticides are being respected;
- users of pesticides are complying with conditions of use specified in the authorisation; and
- People's intakes of residues are within acceptable limits.

We do this by collecting samples of foodstuffs from a range of points in the supply chain (including supermarkets, corner shops, markets, distribution and supply depots). Each sample is then analysed in carefully selected certified laboratories for residues of up to 393 pesticides. This list is updated each calendar year which means that direct comparison with previous surveys is not always possible for new pesticides added to the list.

All EU countries are required to monitor food for pesticide residues and to carry out a number of specific surveys each year. In 2016 the EU surveys are of apples, cabbage, leeks, lettuce, milk, peaches & nectarines, rye, strawberries, tomatoes and wine. The number of samples to be analysed is greater for the countries with larger populations (such as the UK). Results from the EU surveys are published as a single report. The reports from 1996-2006 are on the Commission's website at http://ec.europa.eu/food/fvo/specialreports/pesticides_index_en.htm. The survey results for 2013 can be found on EFSA's website at <http://www.efsa.europa.eu/en/efsajournal/pub/4038.htm> and those for 2014 at <https://www.efsa.europa.eu/en/efsajournal/pub/4611>.

All EU countries also have a national monitoring programme. The UK programme ensures all the major components of our national diet are sampled (milk, bread, potatoes, fruit and vegetables, cereals and related products, and animal products). The programme is not designed to provide a statistical representation of residues in our diet – it is risk based and looks more at those commodities likely to contain residues. Some commodities are surveyed every year, whilst others are surveyed less frequently, for example once every three years; this is what we call the rolling programme.

The sampling and analysis is carried out in accordance with stringent international standards.

Reporting the results

Results by food commodity

- We include information about the survey (for instance where samples came from) for each commodity
- Detailed tabulated results are at the back of this report - these tables are also available for download from our website
- We summarise our findings and any follow-up action taken.

Risk assessments – single residues

- All results are screened by HSE to check for intakes above the Acute Reference Dose (ARfD). HSE assumes a relatively high level of intake and also assumes that most produce is eaten whole including peel/skin even when these are rarely consumed
- Where intakes above the ARfD are identified, we consider a detailed risk assessment prepared by HSE (at Section II of this report).
- Our observations and the follow-up action taken are summarised in the section for that food.

Risk assessments – multiple combined residues

- Residues of more than one pesticide from the same category/class of particular categories of pesticides, which have a similar toxicological mode of action, are screened by HSE to check for intakes above the combined Acute Reference Dose (ARfD).

- Where combined intakes above the combined ARfD are identified, we consider a detailed combined risk assessment prepared by HSE (at Section II of this report).
- Our observations and any follow-up action taken are summarised in the section for that food commodity.

Risk assessment - conclusions

- Where, in the light of current knowledge and considering the usual level of scientific uncertainty (or precaution) the intake will not cause ill health the conclusion will say no effect on health is expected.
- Where, in the light of current knowledge and considering a slightly higher level of scientific uncertainty (or less precaution) the intake is not likely to cause ill health, the conclusion will be less definite and state that an effect on health is unlikely.
- Where scientific uncertainty is greater more information is provided.

Residues in UK produce of pesticides which are not approved for use on that crop in the UK.

- All residues we detect in UK-produced foods are checked by HSE to make sure the pesticide is approved for use.
- Where no UK approval is identified, details of the sample are referred to HSE's Enforcement Section for follow up.
- Our observations and any follow-up action taken to date are summarised in the section for that food commodity. We may have to withhold details of samples while investigations are underway, in which case the details will be published in a later report.

Residues above the MRL, after taking into account measurement uncertainty

- Samples containing residues above the MRL are listed at Appendix B, and those which are clearly above the MRL after taking into account measurement uncertainty of plus or minus 50% are highlighted.
- Our observations and any follow-up action taken are summarised in the section for that food commodity.

The results in our reports are rounded for publication but not adjusted for measurement uncertainty.

We apply measurement uncertainty only to decide whether to highlight a result as over the MRL in the brand name annex. To do this we use the actual value reported by the laboratory before rounding. If after taking measurement uncertainty into account that value is found to be over the MRL the result will be highlighted in the brand name annex.

For example:

- The lab reports the results of duplicate analysis of a residue above an MRL at 0.023 mg/kg and 0.025 mg/kg giving an average value of 0.024mg/kg. For reporting purpose this value would be 0.02 mg/kg.
- If measurement uncertainty is then applied to the reported value of 0.02 mg/kg it could take the value to between 0.01 - 0.03 mg/kg. If the MRL is 0.01 mg/kg the lower value would be at the MRL and there is no exceedance.
- However if measurement uncertainty is applied to the measured result, eg 0.024 mg/kg the value could then be in the range of 0.012 – 0.036 mg/kg. In this case the lower value is above the MRL and so will be treated as an exceedance.

Residues in organic food

- We monitor pesticide residues in all the UK food supply, including organic food.
- We are not responsible for checking compliance with the rules associated with organic production. However, when we do detect residues in an organic food we explain whether or not those residues indicate a breach of the rules and inform Defra's Organic Farming Branch.

Brand Name Annex

- Full brand name details for samples included in this report are published in a brand name annex. Within this annex, samples with results of interest are highlighted.
- Brand name details are only published when enough follow-up work is completed for us to be reasonably sure whether a breach of the law or good practice has occurred. Therefore sometimes brand name details are withheld pending completion of this work but are published in a later report.

Country of origin

Country (or place) of origin is recorded at the time of sampling, primarily from food labelling

The country of origin on the label or packaging of food other than fresh, whole fruits and vegetables does not necessarily indicate where the food (or the main raw ingredient) was grown or raised. It may be, but it may be where the food was prepared or packed for consumer purchase from ingredients from elsewhere.

Current Issues

Chlorate

We are testing a limited number of foods for chlorate for the first time in 2016, to provide evidence that it is necessary to review the existing default MRL in order to take account of non-pesticide sources. The pesticide sodium chlorate is a residual broad action weed killer, which is not authorised for use in the EU.

Far more likely sources in food are from chlorine-based treatments of drinking and irrigation water as well as chlorine-based surface disinfectants, which are widely used to ensure microbiological safety. We agree with HSE and the FSA that the current MRL needs to take account of these often essential and unavoidable sources.

Our results will add to a growing body of evidence, from both official monitoring across the EU and from the food and farming industries

Meanwhile we are advised by HSE that the statutory default level of 0.01 mg/kg applies to chlorate in all foods under Regulation 396/2005, although Member State authorities can exercise judgement on whether goods they find in exceedance of the MRL can be marketed in their territories. Those judgements are based on specific assessments of risk for the consumer, as allowed for in Article 14 of EC Regulation 178/2002 (laying down the general principles of EU food law and food safety). In particular, consideration of the safety of any residues detected will take into account the 2015 opinion of the EFSA Panel on Contaminants in the Food Chain Risks for public health related to the presence of chlorate in food¹

In the meantime, Member States and trade bodies have submitted sets of monitoring data to support the future setting of substantive MRLs. These data are being considered by the Commission and EFSA. They were due to be discussed at the June meeting of the Standing Committee on Plants Animals Feed and Food (Pesticide Residues section)²; but this was not possible due to other pressing issues. Chlorate was again posted on the agenda for the September meeting, although again no substantial developments were reported.

The continuing suspension of the enforcement of chlorate MRLs means that more time is available to generate additional data and to refine national positions.

HSE and FSA continue to encourage those UK trading bodies and individual companies interested in the outcome of the MRL setting process to generate data in support of appropriate MRLs. If additional data are generated they should ideally cover residues arising across the EU rather than limited to the UK and, where possible, data should identify the treatment histories (timing and nature of sanitation practices etc.) that have contributed to the residues arising.

The Commission has indicated that trade bodies will be formally consulted on any substantive levels that are proposed, which may give further opportunities to submit data and/or reasoned arguments. The Commission has not stated when the consultation is likely to take place. HSE and the Food Standards Agency are providing updates on this process.³

Both the PRiF and Advisory Committee on Microbiological Safety of Food (ACMSF) are taking an active interest in these on-going developments, as well as the separate discussions on the setting of MRLs for biocides.

¹¹ [EFSA Journal 2015;13\(6\):4135 \[103 pp.\]](http://ec.europa.eu/food/plant/standing_committees/sc_phytopharmaceuticals/index_en.htm)

http://ec.europa.eu/food/plant/standing_committees/sc_phytopharmaceuticals/index_en.htm

² (Agendas and summaries are published by the European Commission at

http://ec.europa.eu/food/plant/standing_committees/sc_phytopharmaceuticals/index_en.htm

Residues below the MRL that exceed the ARfD

When MRLs are agreed at the EU level they are set at levels that are compatible with consumer safety. Occasionally, assessment of PRiF monitoring samples containing residues below or at the MRL will show consumer intakes could potentially be above the ARfD. This situation typically arises because of one of three reasons:

The ARfD may have been lowered because of new information but there is a delay before MRLs have been reassessed or new MRLs are put in place;
during the MRLs process the risk assessments are currently based on the highest residue level observed in residues trials used to support the MRL which will often be less than the actual MRL (it is expected that most residues found will be below the MRL, and if for this reason there are later samples which give intakes above the ARfD the numbers are expected to be low);
the agreed EU approach might assume the commodity is peeled and data are used to reduce the intake in the risk assessment at the time of setting MRLs, whereas in the PRiF work risk assessments for the whole commodity are presented as routine and, if information showing the effects of processing on residues level is available to PRiF, a refined assessment is presented.

The first two of these reasons are common to EU assessments and the third represents a difference between the approach used by HSE for the risk assessment and that used at the time the MRL is set. We will highlight how our assessments differ from that done at the EU level so that readers are aware of the basis of the evaluation.

Apple results

Introduction

We have surveyed apples every year since 1995 due to their importance in our diet. The survey includes both eating (dessert) and cooking apples. This year apples are being monitored across the EU as part of the EU co-ordinated multi-annual control programme.

Survey design

We are sampling and reporting apples in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought the apple samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 5 at page 72
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

24 samples were tested for up to 370 pesticide residues

Origin of samples

Cooking

- 12 samples came from the UK

Eating

- 1 sample came from the UK
- 10 samples were imported from outside the EU
- 1 sample came from the EU

Residues found

- 2 samples contained no residues from those sought
- 22 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

17 samples contained residues of more than one pesticide

- 7 samples contained 2 residues
- 6 samples contained 3 residues
- 4 samples contained 4 residues

Risk assessments

Number of risk assessments

The laboratory detected 19 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Apricot results

Introduction

We last surveyed apricots in 2013. We survey apricots as part of our rolling programme of commodities.

Survey design

We are sampling and reporting apricots in quarters three and four of 2016. This is the first part of the survey and covers samples collected between July and September. All samples were of fresh apricots.

The apricot samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 6 at page 78. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

30 samples were tested for up to 368 pesticide residues

Origin of samples

- 5 samples came from the UK
- 25 samples came from the EU

Residues found

- 1 sample contained no residues from those sought
- 29 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

26 samples contained residues of more than one pesticide

- 6 samples contained 2 residues
- 11 samples contained 3 residues
- 5 samples contained 4 residues
- 3 samples contained 5 residues
- 1 sample contained 6 residues

Risk assessments

Number of risk assessments

The laboratory detected 20 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Beans with pods results

Introduction

We have surveyed beans with pods every year since 2008 as we continue to find a high incidence of issues with this commodity.

The survey covers both green beans (runner, French, dwarf and string) and speciality beans (yard long, lima, guar and valere). The speciality beans are varieties that are not commonly grown in Europe.

Due to the high incidents of non-compliance in beans with pods additional import controls have been placed on beans from certain countries before entry in to the EU. When the samples in this report were collected, import controls were in place for yard long beans from Dominican Republic and Thailand, which are subject to 20% import control checks for pesticide residues and 50% of yard long beans from Cambodia are subject to import control checks.

Survey design

We are sampling and reporting beans with pods in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

The bean samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

We are publishing results for this survey on our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 7 at page 84
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Monocrotophos residues

We found a residue of monocrotophos at 0.03 mg/kg, in a sample of guwar beans from India. Monocrotophos is an insecticide that has not been authorised for use in the EU since 2003. There is uncertainty about the potential for monocrotophos to cause genetic damage; therefore, on a precautionary basis we consider any findings of monocrotophos in food as not desirable. However, considering the very low intakes any risks are likely to be low.

A more detailed explanation is with the risk assessments on page 58

Results

When samples were taken

Between July and September 2016

Number of samples

26 samples were tested for up to 361 pesticide residues

Origin of samples

Green Beans

- 6 samples came from the UK
- 6 samples were imported from outside the EU

Speciality Beans

- 11 samples were imported from outside the EU
- 3 samples came from the EU

Residues found

- 11 samples contained no residues from those sought
- 15 samples contained residues above the reporting level
- 7 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

13 samples contained residues of more than one pesticide

- 4 samples contained 2 residues
- 2 samples contained 3 residues
- 2 samples contained 4 residues
- 3 samples contained 5 residues
- 1 sample contained 6 residues
- 1 sample contained 8 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 14 residues above the MRL in speciality beans with pods

- 1 sample from Malaysia contained a residue of chlorfenapyr at 0.02 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from Malaysia contained residues of
 - Chlorfenapyr at 0.2 mg/kg, the MRL is 0.01* mg/kg; and
 - Dithiocarbamates at 2 mg/kg, the MRL is 0.1 mg/kg
- 1 sample from Malaysia contained residues of
 - Chlorfenapyr at 0.2 mg/kg, the MRL is 0.01* mg/kg;
 - Dithiocarbamates at 4.8 mg/kg, the MRL is 0.1 mg/kg; and
 - Emamectin benzoate at 0.02 mg/kg, the MRL is 0.01* mg/kg
- 1 sample from Malaysia contained a residue of fipronil at 0.006 mg/kg. The MRL is 0.005* mg/kg.
- 1 sample from India contained a residue on monocrotophos at 0.03 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from India contained residues of
 - Dithiocarbamates at 1.7 mg/kg, the MRL is 1 mg/kg;
 - Hexaconazole at 0.03 mg/kg, the MRL is 0.01* mg/kg; and
 - Profenofos at 0.04 mg/kg, the MRL is 0.01* mg/kg.
- 1 sample from Malaysia contained residues of
 - Chlorfenapyr at 0.2 mg/kg, the MRL is 0.01* mg/kg;
 - Dithiocarbamates at 3.3 mg/kg, the MRL is 0.1 mg/kg; and
 - lufenuron at 0.05 mg/kg, the MRL is 0.02* mg/kg

Risk assessments

Number of risk assessments

The laboratory detected 28 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. Some of these residues are from pesticides which belong to similar chemical groups, and may have similar toxicological effects. So the risk assessors needed to consider their possible impacts on human health, both on their own and in combination.

HSE carried out a combined risk assessment of the relevant samples. We would not expect any of these combinations to have an effect on health.

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

Bread results

Introduction

As bread is an important staple in our diets, we survey it every year. Each year we include ordinary bread and a type of speciality bread in the survey.

This year the speciality bread we are surveying includes types such as ciabatta, focaccia, naan, pitta, rye, soda and tortilla wraps.

Survey design

We are sampling and reporting bread in quarters three and four of 2016. This is the first part of the survey and covers samples collected between July and September.

A market research company bought the bread samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 8 at page 91
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

107 samples were tested for up to 367 pesticide residues

Origin of samples

Ordinary Bread: Other

- 12 samples came from the UK

Ordinary Bread: White

- 44 samples came from the UK

Ordinary Bread: Wholemeal

- 15 samples came from the UK

Speciality Bread: Brioche

- 1 sample came from the EU

Speciality Bread: Chapattis

- 1 sample came from the UK

Speciality Bread: Ciabatta

- 1 sample came from the EU

Speciality Bread: Naan

- 8 samples came from the UK

Speciality Bread: Pitta

- 8 samples came from the UK

Speciality Bread: Rye

- 1 sample came from the UK

Speciality Bread: Soda

- 3 samples came from the UK

Speciality Bread: Wraps

- 12 samples came from the UK
- 1 sample came from the EU

The country of origin on the packaging does not necessarily indicate where the wheat was grown. It may be where the bread was made or where it was packed for consumer purchase.

Residues found

- 11 samples contained no residues from those sought
- 96 samples contained residues above the reporting level
- None of the samples contained residues above the MRL. We have taken account of how processing (milling and baking) affects residue levels by adjusting the relevant grain MRLs using processing factors (see table 8d on page 99 for details).
- 1 sample was labelled as organic. It didn't contain any residues from those sought

Multiple residues

33 samples contained residues of more than one pesticide

- 28 samples contained 2 residues
- 4 samples contained 3 residues
- 1 sample contained 4 residues

Risk assessments

Number of risk assessments

The laboratory detected 10 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. Some of these residues are from pesticides which belong to similar chemical groups, and may have similar toxicological effects. So the risk assessors needed to consider their possible impacts on human health, both on their own and in combination.

HSE carried out a combined risk assessment of the relevant samples. We would not expect any of these combinations to have an effect on health.

Cabbage results

Introduction

We last surveyed cabbage in 2013. This year cabbage is being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

The survey is of head cabbage only, that is types in which the central leaves form a head, such as white, red, savoy, green and pointed cabbages. It does not include similar vegetables that form no head or only a very loose head, such as kale, borekale, spring greens or collard greens.

Survey design

We are sampling and reporting on cabbages in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought all the cabbage samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 9 at page 100
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

24 samples were tested for up to 360 pesticide residues

Origin of samples

- 24 samples came from the UK

Residues found

- 18 samples contained no residues from those sought
- 6 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

1 sample contained residues of more than one pesticide

- 1 sample contained 2 residues

Risk assessments

Number of risk assessments

The laboratory detected 5 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

One sample contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Cheese (buffalo, ewes & goats) results

Introduction

We survey a different type of cheese each year, this year we are surveying cheese that has been produced from sheep's, goat's or buffalo milk.

Survey design

We are sampling and reporting cheese in quarters three and four of 2016. This is the first part of the survey and covers samples collected between July and September.

A market research agency bought the cheese samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 10 at page 104
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Chlorate

We found chlorate over the default MRL in 14 samples. However we do not think that these findings should be treated as breaches of the legislation, and we have not highlighted them as such in the brand name annex.

We are testing a limited number of foods for chlorate for the first time in 2016, to provide evidence on consumer safety and confirm that it is necessary to review the existing default MRL in order to take account of non-pesticide sources. In particular, chlorine-based treatments of drinking and irrigation water as well as chlorine-based surface disinfectants are widely used to ensure microbiological safety. We agree with HSE and the FSA that the current MRL does not take account of these often unavoidable sources.

This adds to a growing body of evidence, from both official monitoring across the EU and from the food and farming industries.

Following the HSE's risk assessment, we do not expect any of the residues we found to have an effect on health. The residues are more likely to come from key microbiological safety practices rather than pesticide use, so we do not think any change in production practice by the brand-owners or manufacturers is needed in response to these findings. More information on chlorate is available on page 7.

Results

When samples were taken

Between July and September 2016

Number of samples

48 samples were tested for up to 87 pesticide residues

Origin of samples

Buffalo

- 4 samples came from the EU

Goats

- 22 samples came from the UK
- 18 samples came from the EU

Sheep

- 2 samples came from the UK
- 2 samples came from the EU

The country of origin on the packaging does not necessarily indicate where the milk was from. It may be where the cheese was made or where it was packed for consumer purchase.

Residues found

- 25 samples contained no residues from those sought
- 23 samples contained residues above the reporting level
- 19 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

4 samples contained residues of more than one pesticide

- 4 samples contained 2 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 19 residues above the MRL in cheese

- 4 samples from Italy contained a residue of chlorate, 3 of the samples has a residue at 0.03 mg/kg and one had a residue at 0.6 mg/kg. The MRL is 0.01* mg/kg.
- 8 samples from France contained a residue of chlorate at 0.02 mg/kg, 0.03 mg/kg, 0.04 mg/kg, 0.05 mg/kg, 0.1 mg/kg and 3 at 0.2 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from The Netherlands contained a residue of chlorate at 0.02 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from the UK contained a residue of chlorate at 0.06 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from France contained a residue of DDAC at 0.2 mg/kg. The MRL is 0.1 mg/kg.
- 4 samples from the UK contained a residue of BAC at 0.2 mg/kg, 1 mg/kg, 1.1 mg/kg and 3.3 mg/kg. The MRL is 0.1 mg/kg.

We do not think that the findings of chlorate should be treated as breaches of the legislation – see our summary statement above.

Risk assessments

Number of risk assessments

The laboratory detected 3 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

Fish (predator) results

Introduction

This is the first time we have done a specific predator fish survey, however the types of fish included in the survey have been sampled in other surveys such as oily fish in 2011. This survey can include varieties such as barracuda, billfish, bonito, mahi mahi, marlin, shark, swordfish, trevally and tuna. Tuna was the predominate fish sampled.

Survey design

These results are for the entire survey and cover samples collected between July and September 2016.

A market research company bought the predator fish samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 11 at page 107
Suppliers details are in the Brand Name Annex

Summary statement

No residues were detected at or above the reporting limit.

Results

When samples were taken

Between July and September 2016

Number of samples

48 samples were tested for up to 35 pesticide residues

Origin of samples

Swordfish

- 4 samples were imported from outside the EU

Tuna

- 3 samples came from the UK
- 40 samples were imported from outside the EU
- 1 sample came from the EU

The country of origin on the packaging does not necessarily indicate where the fish was caught. It may be where it was processed or where it was packed for consumer purchase.

Residues found

- 48 samples contained no residues from those sought
- None of the samples contained residues above the reporting level
- None of the samples were labelled as organic.

Risk assessments

Number of risk assessments

The laboratory did not detect any residues, so we did not do a risk assessment

Fish (sea) results

Introduction

This is the first time we have done a specific sea fish survey, however the types of fish included in the survey have been sampled in other surveys such as the white fish in 2014. This survey can include any wild or farmed varieties such as bass, cod, coley, haddock, hake, halibut, monkfish, plaice, seabream and whiting.

Survey design

We are sampling and reporting sea fish in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought the sea fish samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 12 at page 108. Suppliers details are in the Brand Name Annex.

Summary statement

No residues were detected at or above the reporting limit.

Results

When samples were taken

Between July and September 2016

Number of samples

30 samples were tested for up to 35 pesticide residues

Origin of samples

Cod

- 2 samples came from the UK
- 13 samples were imported from outside the EU
- 1 sample came from the EU

Haddock

- 1 sample came from the UK
- 4 samples were imported from outside the EU

Hake

- 2 samples were imported from outside the EU

Monk fish

- 1 sample came from the UK

Plaice

- 2 samples were imported from outside the EU

Pollock

- 1 sample was imported from outside the EU

Sea bass

- 1 sample was imported from outside the EU
- 1 sample came from the EU

Sea bream

- 1 sample was imported from outside the EU

The country of origin on the packaging does not necessarily indicate where the fish was caught. It may be where it was processed or where it was packed for consumer purchase.

Residues found

- 30 samples contained no residues from those sought
- None of the samples contained residues above the reporting level
- None of the samples were labelled as organic.

Risk assessments

Number of risk assessments

The laboratory did not detect any residues, so we did not do a risk assessment

Grape results

Introduction

We have been surveying grapes every year since 2001. We continue to monitor grapes as a large number of pesticides are used on the crop.

In 2015, 58 samples contained a residue of ethephon, 3 of those samples were above the MRL. Ethephon is used to ripen red grapes on the vine.

Survey design

We are sampling and reporting grapes in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

The grape samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

We are publishing results for this survey on our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 13 at page 110. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

28 samples were tested for up to 372 pesticide residues

Origin of samples

12 samples were imported from outside the EU

16 samples came from the EU

Residues found

- All samples contained residues
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

25 samples contained residues of more than one pesticide

- 8 samples contained 2 residues
- 5 samples contained 3 residues
- 4 samples contained 4 residues
- 2 samples contained 5 residues
- 3 samples contained 6 residues
- 1 sample contained 7 residues
- 2 samples contained 8 residues

Risk assessments

Number of risk assessments

The laboratory detected 37 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Infant food (fruit & vegetable based) results

Introduction

Fruit and vegetable based infant food was last surveyed in 2013. This year infant food is being surveyed across the EU as part of a small EU co-ordinated multi-annual control programme.

Survey design

These results are for the entire survey and cover samples collected between July and September 2016.

A market research company bought all the fruit and vegetable based infant food from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 14 at page 118
Suppliers details are in the Brand Name Annex

Summary statement

No residues were detected at or above the reporting limit.

Results

When samples were taken

Between July and September 2016

Number of samples

66 samples were tested for up to 376 pesticide residues

Origin of samples

7 samples came from the UK

59 samples came from the EU

The country of origin on the packaging does not necessarily indicate where the ingredients were from. It may be where the food was processed or where it was packed for consumer purchase.

Residues found

- 66 samples contained no residues from those sought
- None of the samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 34 samples were labelled as organic. None contained residues from those sought

Risk assessments

Number of risk assessments

The laboratory did not detect any residues, so we did not do a risk assessment

Jam results

Introduction

This is the second time jam has been surveyed for pesticide residues, we last surveyed jam in 2009. This survey includes any variety or flavour of fruit jam.

Survey design

These results are for the entire survey and cover samples collected between July and September 2016.

A market research company bought all the jam samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 15 at page 121
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between June and August 2016

Number of samples

48 samples were tested for up to 368 pesticide residues

Origin of samples

- 45 samples came from the UK
- 3 samples came from the EU

The country of origin on the packaging does not necessarily indicate where the fruit was grown. It may be where the jam was made or where it was packed for consumer purchase.

Residues found

- 22 samples contained no residues from those sought
- 26 samples contained residues above the reporting level
- 1 sample contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

14 samples contained residues of more than one pesticide

- 5 samples contained 2 residues
- 4 samples contained 4 residues
- 4 samples contained 5 residues
- 1 sample contained 6 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 1 residue above the MRL in jam

- 1 sample from UK contained a residue of BAC at 0.8 mg/kg. The MRL is 0.1 mg/kg.

Risk assessments

Number of risk assessments

The laboratory detected 16 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the

Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

Leek results

Introduction

Leeks were last surveyed in 2013. This year they are being surveyed across the EU as part of the EU co-ordinated monitoring programme. The survey covers both leeks and mini or baby leeks.

Survey design

We are sampling and reporting leeks in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought all the leek samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 16 at page 126
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

23 samples were tested for up to 360 pesticide residues

Origin of samples

18 samples came from the UK
5 samples came from the EU

Residues found

- 15 samples contained no residues from those sought
- 8 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 4 samples were labelled as organic. None contained residues from those sought

Multiple residues

3 samples contained residues of more than one pesticide

- 2 samples contained 2 residues
- 1 sample contained 3 residues

Risk assessments

Number of risk assessments

The laboratory detected 7 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Further investigation: suspected illegal use

We have passed details of 1 sample from the UK that contained a residue of cypermethrin which is not approved for use on crop in the UK to HSE. HSE's investigation concluded that the leeks were grown in the EU, they were trimmed and packed in the UK.

Lettuce results

Introduction

We have surveyed lettuce every year since 1990s when residues of unapproved pesticides were detected in the UK grown lettuces. This issue was subsequently resolved, we continue to monitor lettuces as a large number of pesticides are used on the crop. The survey covers both UK grown and imported lettuces.

This year lettuce is being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

Survey design

We are sampling and reporting lettuce in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought the lettuce samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 17 at page 130 Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

16 samples were tested for up to 368 pesticide residues

Origin of samples

Iceberg

- 10 samples came from the UK
- 1 sample came from the EU

Little Gem

- 2 samples came from the UK

Other

- 2 samples came from the UK

Romaine

- 1 sample came from the UK

Residues found

- 15 samples contained no residues from those sought
- 1 sample contained residues above the reporting level
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

None of the samples contained residues of more than one pesticide

Risk assessments

Number of risk assessments

The laboratory detected 1 pesticide residue. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Milk results

Introduction

We have surveyed milk every year since 2000. The survey includes cow's milk, goat's milk and ewe's milk. This year milk is being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

The survey covers full fat and semi skimmed milk only. Skimmed milk is not included due to its low fat content (around 0.1%). Some pesticides are fat soluble and therefore not likely to be found in milk with such a low fat content, these are also the pesticides most commonly detected in animal products

Survey design

We are sampling and reporting milk in quarters one, three and four in 2016. This is the second part of the survey and covers samples collected between July and September.

A market research company bought all the milk samples from retail outlets across the UK.

We are publishing results for this survey on our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 18 at page 135
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

108 samples were tested for up to 87 pesticide residues

Origin of samples

Cows milk

- 96 samples came from the UK

Goats milk

- 12 samples came from the UK

Residues found

- 106 samples contained no residues from those sought
- 2 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 30 samples were labelled as organic. None contained residues from those sought

Multiple residues

None of the samples contained residues of more than one pesticide

Risk assessments

Number of risk assessments

The laboratory detected 1 pesticide residue. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Okra results

Introduction

We have surveyed okra every year since 2012 due to a high rate of non-compliance incidents.

Due to a high incidence of non-compliance, under EU regulation 885/2014 every shipment of fresh okra from India in to the EU is required to be pre-notified to port authorities and be accompanied by results of sampling and analysis done by the Indian authorities, or from any other country the okra had been shipped through. While the samples in this report were collected there were also increased import controls for okra from Vietnam which was subject to 50% import controls.

Survey design

We are sampling and reporting okra in quarters one, three and four of 2016. This is the second part of the survey and covers samples collected between July and September.

The okra samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

We are publishing results for this survey on our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 19 at page 138

Risk assessments carried out by HSE are at page 59

Suppliers details are in the Brand Name Annex

Summary statement

Dimethoate (sum)

One sample of okra contained a residue of dimethoate (sum) at a level where the effect on health needed to be considered in more detail. The highest level detected was 1.8 mg/kg. HSE undertook a risk assessment and concluded that any effect on health would be minor, short-lived and reversible.

Results

When samples were taken

Between July and September 2016

Number of samples

45 samples were tested for up to 368 pesticide residues

Origin of samples

Fresh

- 25 samples were imported from outside the EU
- 7 samples came from the EU

Frozen

- 13 samples were imported from outside the EU

Residues found

- 20 samples contained no residues from those sought
- 25 samples contained residues above the reporting level
- 17 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

10 samples contained residues of more than one pesticide

- 7 samples contained 2 residues

- 3 samples contained 3 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 19 pesticide residues above the MRL in okra

- 5 samples from Jordan contained a residue of abamectin at 0.02 mg/kg, 0.02 mg/kg, 0.03 mg/kg, 0.05 mg/kg and 0.09 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from Jordan contained a residue of myclobutanil at 0.04 mg/kg. The MRL is 0.02* mg/kg.
- 1 sample from Jordan contained a residue of dimethoate (sum) at 1.8 mg/kg. The MRL is 0.02* mg/kg.
- 1 sample from Jordan contained a residue of flonicamid at 0.1 mg/kg. The MRL is 0.05* mg/kg.
- 1 sample from Jordan contained a residue of oxamyl at 0.05 mg/kg. The MRL is 0.01* mg/kg.
- 1 sample from Jordan contained residues of
 - Abamectin at 0.1 mg/kg, the MRL is 0.01* mg/kg;
 - Acetamiprid at 0.5 mg/kg, the MRL is 0.2 mg/kg; and
 - Oxamyl at 0.07 mg/kg, the MRL is 0.01* mg/kg.
- 5 samples from India contained a residue of flonicamid at 0.2 mg/kg. The MRL is 0.05* mg/kg.
- 2 samples from India contained a residue of flonicamid at 0.3 mg/kg. The MRL is 0.05* mg/kg.

Risk assessments (see Section II on page 54 for full risk assessments)

Number of risk assessments

The laboratory detected 10 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment. One sample contained a residue of dimethoate at a level where the effect on health needed to be considered in more detail. The highest level detected was 4.3 mg/kg. HSE undertook a risk assessment and concluded that any effect on health would be minor, short-lived and reversible.

Dimethoate (sum) risk assessment

One sample contained a residue at level where we need to consider the effect on health in more detail. The highest level of dimethoate (sum) detected was 1.8 mg/kg. This was made up of 1.3 mg/kg of dimethoate, and 0.5 mg/kg of omethoate. In order to account for the different toxicity of these two components, the omethoate content is multiplied by 6 before the risk assessment is done. So for risk assessment purposes the level HSE considered was 4.3 mg/kg.

The intakes for infants, toddlers, 4-6 year olds, vegetarians, and 15-18 year olds exceeded the ARfD. The highest intake was for infants.

If infants ate large portions of okra containing dimethoate at 4.3 mg/kg their intake could be 215% of the Acute Reference Dose. This intake is 45 times lower than a dose which caused no observed adverse effects in a one day rat dietary study. The European Food Safety Authority used this study as the basis of the ARfD.

Toxicologists usually apply a factor of 100 to this dose to take into account the uncertainties caused by using animal data and possible differences in susceptibility between people. We consider the likelihood of an effect on health to be low, given the remaining factor of 45. This is because an adverse effect on health would rely on

- 1) a susceptible individual eating a large quantity of the product which in turn had the highest levels of residue; and
- 2) the actual difference in susceptibility between that individual and rats used to derive the critical NOAEL, being higher than the factor we are left with in this situation; and

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

- 3) the critical NOAEL being close to the actual doses needed to produce an adverse effect in the animals studied.

In conclusion we consider that some people might experience salivation or intestinal disturbances after eating large portions (97.5th percentile consumption) of okra containing the highest levels found in this report, but we consider the likelihood of an effect on health to be low. Such effects would be expected to be minor, short-lived and reversible.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. Some of these residues are from pesticides which belong to similar chemical groups, and may have similar toxicological effects. So the risk assessors needed to consider their possible impacts on human health, both on their own and in combination.

HSE carried out a combined risk assessment of the relevant samples. We would not expect any of these combinations to have an effect on health.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

RASFFs issued

The EU issued a notification for the following samples through the EC's Rapid Alert System for Food and Feed (RASFF) (see glossary for more details)

- 1 sample from Jordan containing dimethoate at 1.8 mg/kg.

Peaches & nectarines results

Introduction

We last surveyed peaches and nectarines in 2013. This year they are being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

Survey design

We are sampling and reporting peaches and nectarines in quarters one, three and four of 2016. This is the second part of the survey and covers samples collected between July and September.

The peaches and nectarine samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 20 at page 143 Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

46 samples were tested for up to 369 pesticide residues

Origin of samples

Nectarines

- 23 samples came from the EU

Peaches

- 23 samples came from the EU

Residues found

- 1 sample contained no residues from those sought
- 45 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 1 sample was labelled as organic. It didn't contain any residues from those sought

Multiple residues

36 samples contained residues of more than one pesticide

- 15 samples contained 2 residues
- 9 samples contained 3 residues
- 3 samples contained 4 residues
- 5 samples contained 5 residues
- 1 sample contained 6 residues
- 1 sample contained 7 residues
- 1 sample contained 8 residues
- 1 sample contained 9 residues

Risk assessments

Number of risk assessments

The laboratory detected 22 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Pear results

Introduction

We have surveyed pears every year since 2002 as they are widely consumed.

Survey design

We are sampling and reporting pears in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

The pear samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesale markets, retail depots, ports and import points) or they were bought by a market research company from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 21 at page 150. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

24 samples were tested for up to 369 pesticide residues

Origin of samples

- 8 samples were imported from outside the EU
- 16 samples came from the EU

Residues found

- 4 samples contained no residues from those sought
- 20 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 4 samples were labelled as organic. None contained residues from those sought

Multiple residues

17 samples contained residues of more than one pesticide

- 5 samples contained 2 residues
- 2 samples contained 3 residues
- 4 samples contained 4 residues
- 4 samples contained 5 residues
- 1 sample contained 6 residues
- 1 sample contained 7 residues

Risk assessments

Number of risk assessments

The laboratory detected 12 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Pepper results

Introduction

We have surveyed peppers every year since 2006 as there used to be a high non-compliance rate in UK surveys. Although the current compliance rate is high in the UK, results from other EU countries still find issues.

The survey can include sweet peppers, bell peppers and capsicum. It does not include chilli peppers.

Survey design

We are sampling and reporting peppers in quarters one, three and four of 2016. This is the second part of the survey and covers samples collected between July and September.

A market research company bought the pepper samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 22 at page 155
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

30 samples were tested for up to 369 pesticide residues

Origin of samples

Fresh

- 4 samples came from the UK
- 1 sample was imported from outside the EU
- 25 samples came from the EU

Residues found

- 16 samples contained no residues from those sought
- 14 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 6 samples were labelled as organic. 1 contained residues from those sought

Multiple residues

5 samples contained residues of more than one pesticide

- 1 sample contained 2 residues
- 4 samples contained 3 residues

Risk assessments

Number of risk assessments

The laboratory detected 11 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Organic sample with residue of pesticide

The Secretariat has written to the supplier of the sample of organic food with a residue of spiromesifen which is not permitted in organic food production. Defra's Organic Farming branch and the organic certification organisation were also informed.

- 1 sample from UK containing spiromesifen at 0.02 mg/kg

Pork results

Introduction

We last surveyed pork in 2013 as part of a survey of pork and gammon. This year pork is being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

The survey includes raw joints, shoulders, roasts, chops, fillets, slices or steaks of pork.

Survey design

We are sampling and reporting pork in quarters three and four of 2016. This is the first part of the survey and covers samples collected between July and September.

A market research company bought all the pork samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 23 at page 159. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

53 samples were tested for up to 86 pesticide residues

Origin of samples

- 38 samples came from the UK
- 1 sample was imported from outside the EU
- 14 samples came from the EU

The country of origin on the packaging does not necessarily indicate where the pig was raised. It may be where the meat was processed or where it was packed for consumer purchase.

Residues found

- 50 samples contained no residues from those sought
- 3 samples contained residues above the reporting level
- 1 sample contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

1 sample contained residues of more than one pesticide

- 1 sample contained 2 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 1 residue above the MRL in pork

- 1 sample from UK contained a residue of BAC at 0.3 mg/kg. The MRL is 0.1 mg/kg.

Risk assessments

Number of risk assessments

The laboratory detected 2 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

One sample contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the

Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

Potato results

Introduction

We monitor potatoes annually due to their importance as a staple part of the diet. The survey covers both maincrop (or ware) and new potatoes.

Survey design

We are sampling and reporting potatoes in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

The Animal and Plant Health Agency's Plant Health and Seed Inspectors collected the potato samples from a range of points in the supply chain (wholesalers, potato processors, ports and import points).

We are publishing results for this survey in our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 24 at page 162. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between June and September 2016

Number of samples

18 samples were tested for up to 369 pesticide residues

Origin of samples

Maincrop

- 17 samples came from the UK

New

- 1 sample came from the UK

Residues found

- 10 samples contained no residues from those sought
- 8 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

4 samples contained residues of more than one pesticide

- 2 samples contained 2 residues
- 2 samples contained 3 residues

Risk assessments

Number of risk assessments

The laboratory detected 6 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Prepared fresh fruit results

Introduction

We started surveying prepared fresh fruit in 2015. The survey can include any single fruit or mixed fruit that has been pre-prepared, for example fruit salad, sliced melon, pineapple cubes. The samples must all be fresh fruit and cannot include any tinned or jarred products.

This survey is being carried out as a follow-up from previous results from 2015 which found a high number of samples containing BAC & DDAC residues from their use as disinfectants, therefore, we are only testing the samples in this survey for BAC, DDAC and Chlorate.

Survey design

We are sampling and reporting prepared fresh fruit in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought all the prepared fresh fruit samples from retail outlets across the UK.

We are publishing results for this survey on our website as part of the rolling reporting programme. The results in this report may have already been published.

Further details

Full details of pesticides we looked for and the residues we found are in Table 25 at page 167
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected the by laboratory would be expected to have an effect on health.

Chlorate

We found chlorate over the default MRL in 3 samples. However we do not think that these findings should be treated as breaches of the legislation, and we have not highlighted them as such in the brand name annex.

We are testing a limited number of foods for chlorate for the first time in 2016, to provide evidence on consumer safety and confirm that it is necessary to review the existing default MRL in order to take account of non-pesticide sources. In particular chlorine-based treatments of drinking and irrigation water as well as chlorine-based surface disinfectants are widely used to ensure microbiological safety. We agree with HSE and the FSA that the current MRL does not take account of these often unavoidable sources.

This adds to a growing body of evidence, from both official monitoring across the EU and from the food and farming industries.

Following the HSE's risk assessment, we do not expect any of the residues we found to have an effect on health. The residues are more likely to come from key microbiological safety practices rather than pesticide use, so we do not think any change in production practice by the brand-owners or manufacturers is needed in response to these findings. More information on chlorate is available on page 7.

Results

When samples were taken

Between July and September 2016

Number of samples

24 samples were tested for up to 3 pesticide residues

Origin of samples

Blueberry

- 1 sample came from the EU

Mango

- 1 sample came from the UK

Melon

- 5 samples came from the UK

Mixed

- 6 samples came from the UK

Pineapple

- 9 samples came from the UK
- 1 sample was imported from outside the EU

Watermelon

- 1 sample came from the UK

The country of origin on the packaging does not necessarily indicate where the fruit was grown. It may be where the fruit was prepared or where it was packed for consumer purchase.

Residues found

- 19 samples contained no residues from those sought
- 5 samples contained residues above the reporting level
- 3 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

None of the samples contained residues of more than one pesticide

Residues measured above the MRL (see Appendix B)

The laboratory detected 3 residues above the MRL in prepared fresh fruit

- 3 samples from UK contained a residue of chlorate at 0.02 mg/kg, 0.03 mg/kg and 0.03 mg/kg. The MRL is 0.01* mg/kg.

We do not think that the findings of chlorate should be treated as breaches of the legislation – see our summary statement above.

Risk assessments

Number of risk assessments

The laboratory detected 2 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

Speciality vegetables results

Introduction

We first introduced speciality vegetables in the monitoring programme in 2009. The aim of the survey is to look at vegetables that otherwise may not be sampled. We have continued to survey them due to a high incidence of findings.

This year we have decided to look at leafy speciality vegetables, varieties can include chard, Chinese leaves, choy sum, methi, mitsuba, mustard greens, pan, pandanus leaf and vine leaves.

Survey design

We are sampling and reporting speciality vegetables in quarters three and four of 2016. This is the first part of the survey and covers samples bought between July and September.

The speciality vegetable samples were either collected by the Rural Payment Agency's Horticultural Marketing Inspectors from a range of points in the supply chain (wholesalers, retail depots, port and import points) or bought by a market research company from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 26 at page 170

Risk assessments carried out by HSE are at page 60

Suppliers details are in the Brand Name Annex

Summary statement

Based on the Health and Safety Executive's risk assessment of the residues detected we consider an effect on health to be unlikely (see risk assessments in Section II).

Results

When samples were taken

Between July and September 2016

Number of samples

39 samples were tested for up to 367 pesticide residues

Origin of samples

Banana Leaf

- 1 sample was imported from outside the EU

Callaloo

- 1 sample came from the EU

Chard

- 2 samples came from the UK

Chicory

- 2 samples came from the EU

Chinese Cabbage

- 1 sample came from the EU

Chinese Leaf

- 10 samples came from the UK
- 1 sample was imported from outside the EU

Choy sum

- 3 samples came from the UK

Gai Choy

- 1 sample came from the UK

Pak Choi

- 13 samples came from the UK
- 2 samples came from the EU

Pan

- 1 sample was imported from outside the EU

Saag

- 1 sample came from the UK

Residues found

- 12 samples contained no residues from those sought
- 27 samples contained residues above the reporting level
- 2 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

10 samples contained residues of more than one pesticide

- 7 samples contained 2 residues
- 3 samples contained 3 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 2 residues above the MRL in speciality vegetables

- 1 sample of Chinese cabbage from Poland contained a residue of dimethoate at 0.07 mg/kg. The MRL is 0.02* mg/kg.
- 1 sample of pak choi from UK contained a residue of oxadixyl at 0.02 mg/kg. The MRL is 0.01* mg/kg.

Risk assessments (see Section II on page 54 for full risk assessments)

Number of risk assessments

The laboratory detected 15 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we expect an effect on health to be unlikely.

Lambda-cyhalothrin risk assessment

One sample contained a pesticide at a level where we need to consider the effect on health in more detail. The highest level detected was 0.2 mg/kg

The intakes for 4-6 year olds, 7-10 year olds, infants and toddlers exceeded the ARfD. The highest intake was for 4-6 year old children.

If 4-6 year old children ate large portions of choi sum containing lambda- cyhalothrin at 0.2 mg/kg, their intake of lambda-cyhalothrin could be 138% of the Acute Reference Dose. This intake is 72 times lower than a dose which caused no observed adverse effect in a 1 year oral toxicity study in dogs. The European Food Safety Authority used this study as the basis of the ARfD.

Toxicologists usually apply a factor of 100 to this dose to take into account uncertainties caused by using animal data and possible differences in susceptibility between people. We consider the reduced factor of 72 still enough to make an effect on health unlikely.

(From 1 January 2017, the new MRL for lambda-cyhalothrin in choi sum is 0.1 mg/kg. Residues at or under this new MRL will not lead to intakes over the ARfD.)

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

Any comments received are at Appendix D.

Further investigation: suspected illegal use

We have passed details of 1 sample of pak choi from the UK that contained a residues of oxadixyl and propyzamide which are not approved for use on crop in the UK to HSE. HSE is investigating; brand name details will not be published until the investigations are complete.

Spices (cumin) results

Introduction

This is the first time we have done a specific cumin survey, however it was included in the spices survey in 2012. This survey included any type of powdered or ground cumin.

Survey design

These results are for the entire survey and cover samples collected between July and September 2016.

A market research company bought all the cumin samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 27 at page 177
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

However there is a high rate of non-compliance and the PRiF asked that the trade be contacted to find out why this is happening and why some sources of supply do not have this problem.

Results

When samples were taken

Between May and August 2016

Number of samples

24 samples were tested for up to 357 pesticide residues

Origin of samples

Cumin

- 22 samples came from the UK
- 2 samples came from the EU

The country of origin on the packaging does not necessarily indicate where the cumin was grown. It may be where it was processed or where it was packed for consumer purchase.

Residues found

- 6 samples contained no residues from those sought
- 18 samples contained residues above the reporting level
- 12 samples contained residues above the MRL
- None of the samples were labelled as organic.

Multiple residues

18 samples contained residues of more than one pesticide

- 5 samples contained 2 residues
- 1 samples contained 3 residues
- 1 samples contained 6 residues
- 1 samples contained 14 residues
- 1 samples contained 15 residues
- 2 samples contained 16 residues
- 1 samples contained 17 residues
- 4 samples contained 19 residues
- 1 samples contained 20 residues
- 1 samples contained 23 residues

Residues measured above the MRL (see Appendix B)

The laboratory detected 114 residues above the MRL in cumin

- 1 sample from UK contained residues of
 - acetamiprid at 0.06 mg/kg, the MRL is 0.05* mg/kg;
 - clothianidin at 0.09 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 0.07 mg/kg, the MRL is 0.05* mg/kg and;
 - thiamethoxam at 0.1 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.5 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 1 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.2 mg/kg, the MRL is 0.1* mg/kg;
 - kresoxim-methyl at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 1.4 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 0.6 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - triazophos at 0.03 mg/kg, the MRL is 0.02* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 1.1 mg/kg, the MRL is 0.05* mg/kg;
 - carbofuran at 0.08 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 0.7 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.08 mg/kg, the MRL is 0.05* mg/kg;
 - imidacloprid at 0.2 mg/kg, the MRL is 0.05* mg/kg;
 - propiconazole at 0.3 mg/kg, the MRL is 0.1* mg/kg;
 - profenofos at 0.5 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 0.4 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - triazophos at 0.09 mg/kg, the MRL is 0.02* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.8 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 4 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.09 mg/kg, the MRL is 0.05* mg/kg;
 - chlorantraniliprole at 0.03 mg/kg, the MRL is 0.02* mg/kg;
 - cypermethrin at 0.3 mg/kg, the MRL is 0.1* mg/kg;
 - imidacloprid at 0.1 mg/kg, the MRL is 0.05*;
 - profenofos at 1.1 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 1 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.1 mg/kg, the MRL is 0.05* mg/kg and;
 - triazophos at 0.07 mg/kg, the MRL is 0.02* mg/kg.
- 1 sample from the UK contained residues of
 - acetamiprid at 0.5 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 0.9 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.3 mg/kg, the MRL is 0.1* mg/kg;
 - kresoxim-methyl at 0.07 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 1.4 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 0.4 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - triazophos at 0.05 mg/kg, the MRL is 0.02* mg/kg.
- 1 sample from the UK contained residues of
 - acetamiprid at 0.5 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 1.5 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.2 mg/kg, the MRL is 0.1* mg/kg;
 - imidacloprid at 0.2, the MRL is 0.05* mg/kg;
 - kresoxim-methyl at 0.09 mg/kg, the MRL is 0.05* mg/kg;
 - propiconazole at 0.3, the MRL is 0.1*;
 - profenofos at 0.9 mg/kg, the MRL is 0.05* mg/kg;

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

- tricyclazole at 0.7 mg/kg, the MRL is 0.05* mg/kg;
- thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
- triazophos at 0.05 mg/kg, the MRL is 0.02* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 1 mg/kg, the MRL is 0.05*;
 - carbofuran at 0.09 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 4 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - chlorantraniliprole at 0.03 mg/kg, the MRL is 0.02* mg/kg;
 - cypermethrin at 0.4 mg/kg, the MRL is 0.1* mg/kg;
 - imidacloprid at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 1.4 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 1.1 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - trifloxystrobin at 0.1 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.5 mg/kg, the MRL is 0.05*;
 - carbendazim at 1.7 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.08 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.3 mg/kg, the MRL is 0.1* mg/kg;
 - fipronil at 0.009 mg/kg, the MRL is 0.005* mg/kg;
 - imidacloprid at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - kresoxim-methyl at 0.2 mg/kg, the MRL is 0.05* mg/kg;
 - propiconazole at 0.4 mg/kg, the MRL is 0.1* mg/kg;
 - profenofos at 1.2 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 1.1 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - trifloxystrobin at 0.09 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.7 mg/kg, the MRL is 0.05*;
 - carbofuran at 0.08 mg/kg, the MRL is 0.05* mg/kg;
 - carbendazim at 4.3 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.08 mg/kg, the MRL is 0.05* mg/kg;
 - chlorantraniliprole at 0.04 mg/kg, the MRL is 0.02* mg/kg;
 - cypermethrin at 0.5 mg/kg, the MRL is 0.1* mg/kg;
 - imidacloprid at 0.2 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 1 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 1 mg/kg, the MRL is 0.05* mg/kg and;
 - thiamethoxam at 0.1 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.6 mg/kg, the MRL is 0.05*;
 - carbendazim at 1.8 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.09 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.3 mg/kg, the MRL is 0.1* mg/kg;
 - fipronil at 0.008 mg/kg, the MRL is 0.005* mg/kg;
 - imidacloprid at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - kresoxim-methyl at 0.2 mg/kg, the MRL is 0.05* mg/kg;
 - propiconazole at 0.4 mg/kg, the MRL is 0.1* mg/kg;
 - profenofos at 1.1 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 1.2 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - trifloxystrobin at 0.09 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.4 mg/kg, the MRL is 0.05*;
 - carbendazim at 0.5 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

- imidacloprid at 0.06 mg/kg, the MRL is 0.05* mg/kg;
- profenofos at 0.5 mg/kg, the MRL is 0.05* mg/kg;
- tricyclazole at 0.4 mg/kg, the MRL is 0.05* mg/kg and;
- thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg.
- 1 sample from UK contained residues of
 - acetamiprid at 0.5 mg/kg, the MRL is 0.05*;
 - carbendazim at 0.9 mg/kg, the MRL is 0.1* mg/kg;
 - clothianidin at 0.1 mg/kg, the MRL is 0.05* mg/kg;
 - cypermethrin at 0.2 mg/kg, the MRL is 0.1* mg/kg;
 - kresoxim-methyl at 0.06 mg/kg, the MRL is 0.05* mg/kg;
 - profenofos at 1.4 mg/kg, the MRL is 0.05* mg/kg;
 - tricyclazole at 0.4 mg/kg, the MRL is 0.05* mg/kg;
 - thiamethoxam at 0.2 mg/kg, the MRL is 0.05* mg/kg and;
 - trifloxystrobin at 0.05 mg/kg, the MRL is 0.05* mg/kg.

Risk assessments

Number of risk assessments

The laboratory detected 28 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Follow up action

Letters sent

The Secretariat has written to the suppliers of the samples with residues above the MRL.

Any comments received are at Appendix D.

* **Maximum Residue Levels set at the LOD (LOD MRL):** These MRLs are set at a default level, i.e. at the limit of determination (LOD) as specified in EC Regulation 396/2005.

Spring onion results

Introduction

Spring onions, also known as salad onion, are sampled every few years as part of the rolling programme of commodities.

They were last surveyed in 2011.

Survey design

These results are for the entire survey and cover samples collected between July and September 2016.

A market research company bought all the spring onion samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 28 at page 183. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

48 samples were tested for up to 360 pesticide residues

Origin of samples

- 39 samples came from the UK
- 4 samples were imported from outside the EU
- 5 samples came from the EU

Residues found

- 20 samples contained no residues from those sought
- 28 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 8 samples were labelled as organic. None contained residues from those sought

Multiple residues

12 samples contained residues of more than one pesticide

- 8 samples contained 2 residues
- 1 sample contained 3 residues
- 2 samples contained 4 residues
- 1 sample contained 5 residues

Risk assessments

Number of risk assessments

The laboratory detected 13 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Strawberry results

Introduction

We last surveyed strawberries in 2013. This year strawberries are being surveyed across the EU as part of the EU co-ordinated multi-annual control programme.

Survey design

We are sampling and reporting strawberries in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought all the strawberry samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 29 at page 188
Suppliers details are in the Brand Name Annex

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and September 2016

Number of samples

24 samples were tested for up to 360 pesticide residues

Origin of samples

- 23 samples came from the UK
- 1 sample came from the EU

Residues found

- 1 sample contained no residues from those sought
- 23 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 1 sample was labelled as organic. It didn't contained any residues from those sought

Multiple residues

21 samples contained residues of more than one pesticide

- 3 samples contained 2 residues
- 2 samples contained 3 residues
- 3 samples contained 5 residues
- 2 samples contained 6 residues
- 5 samples contained 7 residues
- 2 samples contained 8 residues
- 3 samples contained 9 residues
- 1 sample contained 16 residues

Risk assessments

Number of risk assessments

The laboratory detected 20 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Tomato results

Introduction

We last surveyed tomatoes in 2013. This year they are being surveyed across the EU as part of the EU co-ordinated multi-annual control programme. The survey can include beefsteak, plum, round, salad and tomatoes sold on the vine.

Survey design

We are sampling and reporting tomatoes in every quarter of 2016. This is the third part of the survey and covers samples collected between July and September.

A market research company bought all the tomato samples from retail outlets across the UK.

Further details

Full details of pesticides we looked for and the residues we found are in Table 30 at page 194. Suppliers details are in the Brand Name Annex.

Summary statement

None of the residues detected by the laboratory would be expected to have an effect on health.

Results

When samples were taken

Between July and August 2016

Number of samples

18 samples were tested for up to 370 pesticide residues

Origin of samples

Plum

- 2 samples came from the UK
- 1 sample came from the EU

Round

- 2 samples came from the UK
- 5 samples came from the EU

Vine

- 5 samples came from the UK
- 3 samples came from the EU

Residues found

- 8 samples contained no residues from those sought
- 10 samples contained residues above the reporting level
- None of the samples contained residues above the MRL
- 3 samples were labelled as organic. None contained residues from those sought

Multiple residues

2 samples contained residues of more than one pesticide

- 2 samples contained 3 residues

Risk assessments

Number of risk assessments

The laboratory detected 9 different pesticide residues. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health.

Combined risk assessments (see page 56 for more information on the methodology used)

Some samples contained residues of more than one pesticide. The pesticide residues found are not chemically related to each other and do not have the same toxicological effects. Following the Health and Safety Executive (HSE)'s risk assessment, we do not expect these residues to have an effect on health, either separately or in combination.

Supplier Details

Introduction

The following information is available on each sample collected this quarter:

- Date and place of collection
- Description (e.g. 'runner bean', organic milk);
- Country of origin or manufacture;
- Brand name and packer/manufacturer; and
- Residues detected (results shown in green indicate residues above the MRL).

The Government's 'brand naming' policy

The Government has decided that brand name information should be published as part of the Government food chemical surveillance programme. Brand names have been published for most pesticide residue surveys since 1998. Certain samples are excluded from the release of brand name information. These include samples taken as part of any pesticide residues enforcement programme and those taken as part of surveys to study individual people/farms. This policy was reviewed in 2000/1, when Ministers agreed to its continuation.

Where we find residues above an MRL or the presence of non-approved pesticides brand owners/retailers/ growers are notified of the result in advance of publication of reports and given four weeks to comment. Any responses we receive are included in Appendix D.

Interpreting brand name information

There is no ready definition of what constitutes a brand in all cases. For clearly branded produce like breakfast cereals or biscuits the "brand owner" is shown. In the case of "own brand" goods this may be one of the multiple retailers. For fruit and vegetables the retailer is generally shown. For meat, milk and most other animal products the retailer is also generally shown. Finally, for all commodities the country of origin is shown where this was displayed either on the produce or in the store.

Our programme takes samples of produce in approximate proportion to the market share of the main retailers. This has been done to ensure we obtain an accurate representation of a sector (e.g. fruit and vegetables).

Individual programmes are not capable of generating statistically valid information on residues in particular crops from particular retailers. This would require the collection of a much larger number of samples: either substantially increasing costs or greatly reducing the range of different foods sampled in any one year. Therefore, results from an individual survey cannot be taken as a fair representation of the residues status of any particular brand.

However, we do collect samples from a variety of outlets in a range of locations, over a period of years. Successive programmes should therefore help generate information on the typical residues profile of particular types of produce and on major trends in the incidence and levels of pesticides. It should be noted that this quarterly report is not intended to give a comprehensive comparison with previous surveys of the same commodities.

A particular issue arises in relation to the country of origin of fruit and vegetables. The origins included in the reports are those recorded either on the produce or in the store. However, it is not uncommon for mixing to occur on shop shelves. We have responded by increasing the proportion of pre-packed goods sampled. However, pre-packed samples are not available for some produce in some stores and it could also introduce bias to surveys if loose produce were not sampled. Loose produce is therefore sampled but the origin of the sample should be interpreted with a degree of caution.

Section II: HSE assessment of risk

The surveillance programme is designed to enable the regulatory authorities to check that:

- specified pesticide MRLs are being respected;
- users of pesticides are complying with conditions of use specified in the authorisation;
- Dietary intakes of residues are within acceptable limits.

This section details how risks from dietary intakes are assessed.

When assessments are carried out

A screening assessment is done for each residue and commodity combination to identify residue levels that would lead to intakes above the relevant reference doses. Further information on this screening approach is available on request from HSE. Detailed assessments are then produced for every case where the actual residue level found could lead to an intake by any group above the reference dose.

Assessing Dietary intakes

Assessing the acceptability of dietary intakes is complicated. Consumer risk assessments are carried out for both short-term (peak) and long-term intakes. These assessments use information on food consumption collected in UK dietary surveys in conjunction with the residue levels we find. Occasionally, additional pesticide specific information on the losses of residues that occur during preparation and/or cooking of food is also used.

How the assessment is carried out

Short-term intakes (also called NESTIs) are calculated using consumption data for high-level consumers, based on single-day consumption values and the highest residue found in a food commodity. The residue found is multiplied by a variability factor to take account of the fact that residues may vary between individual items that make up the sample analysed. The estimated intake is compared to the Acute Reference Dose (ARfD). This is done for ten consumer groups; adults, infants, toddlers, 4-6 year olds, 7-10 year olds, 11-14 year olds, 15-18 year olds, vegetarians, elderly living in residential homes and elderly living in their own homes.

Long-term intakes (NEDI) are also calculated for high-level consumers, but in this case the consumption data are high-level long-term values rather than peak single-day events, and similarly the residue values used reflect long-term average levels rather than occasional high values. Again these estimates are made for the ten consumer groups. In this case the estimated intake is compared to the Acceptable Daily Intake (ADI). More information on intake assessments is available on HSE's website: www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/pesticides-registration/data-requirements-handbook/consumer-intake-assessments-new-intake-calculation-models.

The reference doses (ADI, ARfD) are set by the Advisory Committee on Pesticides (ACP), or agreed within the EC (an increasing proportion of UK pesticide authorisations are now carried out in accordance with harmonised EU processes). However, where neither the UK nor the EC has set a reference dose, levels set by regulatory authorities in other countries may be used. For a small number of pesticides the reference doses used have been determined by HSE. These have not been independently peer-reviewed and should therefore be regarded as provisional. Reference dose values are available on the EU website: http://ec.europa.eu/sanco_pesticides/public/index.cfm?event=activesubstance.selection.

Although MRLs are not safety levels, an MRL would not be established if the residue concentrations measured in the supervised trials used to support the MRL would give rise to health concerns. In most cases residues present at the MRL result in intakes below the ARfD and the ADI. So even if the MRL is exceeded this does not always lead to an intake above the ARfD or ADI.

In addition, an estimated intake that exceeds the ADI or ARfD does not automatically result in concerns for consumer health, because a protective approach is used in setting the ADI and ARfD. In the unusual circumstance of an intake exceeding the ADI or ARfD, an evaluation of the toxicological data is made, and details of this assessment would be presented.

Most consumer intake assessments are for short-term exposure rather than chronic exposure. This is because in most cases the monitoring data show the majority of samples to contain residues below the reporting limit and so chronic exposure would not present a concern. Long-term risk assessments have been carried out on a case-by-case basis, but are not routinely reported. Long-term exposure assessments are done using median residue levels, rather than using the highest residues found. Therefore, long-term risk assessments would only need to be carried out where data indicated a high proportion of samples contained residues above the MRL (this would result in a higher median residue level than that previously assessed when setting the MRL), or where there is no MRL and acute toxicology is not considered relevant for the particular pesticide concerned.

Where intakes exceed a reference dose, it is necessary for the underlying toxicological studies (animal studies) to be considered to enable the significance of such an exceedance to be understood. Toxicological studies are conducted using different doses to determine the nature of any ill health effects as well as the levels at which such effects can be expected to occur.

Toxicological studies are conducted using test animals to identify the highest experimental dose that causes no detectable adverse effects (the NOAEL). Where there is more than one relevant toxicological study, the lowest appropriate NOAEL for the most sensitive adverse effect is typically used. There is some uncertainty in extrapolating between animals and people and it is therefore important to use a 'safety factor' to account for sources of variation. This safety factor is incorporated (by dividing the NOAEL by the safety factor) in deriving a reference dose, either an ADI or an ARfD, to which consumer intakes are compared. A safety factor therefore extrapolates from the animal testing to the general population. Factors in the order of x100 are commonly used, x 10 for animal to man, and x10 for within human population differences in sensitivity. However, toxicologists may propose different values (e.g. from 5 to 1000) based on scientific reasoning in accordance with study designs and the quality of the data that has been generated from the studies.

In order to ensure exposures to pesticides do not pose unacceptable risk to humans a wide range of investigations are performed. Most of these are performed on experimental animals because the only end-points that can be examined in human volunteers are those involving observation or blood and urine sampling. Human volunteer studies involving pesticides are not generated in current regulatory work. There is debate at the international level as to whether human studies that have been generated should be used for risk assessment purposes. In the EU, the policy is not to use these data in assessments; the JMPR chose to apply judgement in the appropriate use of these data if available. The HSE risk assessments will usually refer to test animal species, such as dog, rat, and rabbit. All toxicological work is undertaken based on principles of minimising animal distress. Where scientifically valid human data are available the risk assessments will refer to these as they reduce the uncertainty in the assessment. Therefore, human data is only referred to in more limited circumstances.

Acute (short term) toxicology is not a concern for all pesticides, as some are not acutely toxic. In terms of the pesticides that have been found in fruit and vegetables through the surveillance programme an acute risk assessment would not be necessary on the following: tecnazene, maleic hydrazide, diphenylamine, furalaxyl, iprodione, kresoxim-methyl, pendimethalin, propargite, propyzamide, quinterozone and tolclofos-methyl.

As the surveillance programme monitors residues in all types of food, from raw commodities (e.g. potatoes) to processed (e.g. wine), dried (e.g. dried fruit) and composite foods (e.g. fruit bread), consumer risk assessments are specifically tailored to address processed and mixed food products. MRLs are generally set for raw commodities, although when MRLs are established the assessment of dietary intakes takes into account the potential for residues to remain in processed foods

produced from the raw agricultural commodities. MRLs have been set for processed infant foods, and in future may be extended to other processed food products.

Residues are usually reduced during food processing and occasionally may concentrate. The alteration of residues can be considered in consumer risk assessments, for example, in oil seed rape a fat-soluble pesticide may result in higher residues in the oil compared to residues in the raw seed. Consumption data are available for many major processed food items such as boiled potatoes, crisps, fruit juice, sugar, bread, and wine. Where such consumption data are not available, the intake estimates are based on the total consumption of the raw commodity, which would represent the worst-case (for example, breakfast cereals consumption would be based on total cereal products consumption). In the case of composite products a suitable worst-case alternative would be used, for example total bread consumption for fruit bread consumption.

Probabilistic Modelling

The standard calculations of consumer exposure use realistic consumption data and residue levels. However, they tend to overestimate intakes in most circumstances. This is due to the assumptions used; fruit and vegetables would contain high levels of residue in an individual unit and that these would be consumed by high-level consumers. They do not take into account the possible range of residue levels and consumption distributions that may occur in reality. These possible combinations of residues and consumption levels can be taken into account using modelling/simulation techniques to produce probability distributions of residue intake levels to indicate the range of consumer intakes, presented as a probabilistic assessment of consumer exposure. These techniques are not yet routinely used to estimate dietary intakes of pesticide residues in the EC.

Multiple residues

The risk assessment process is not standing still. We are aware that some consumers are concerned by the 'cocktail effect'- the possible implications of residues of more than one chemical occurring in, say, a single portion of fruit or vegetables or the interaction between mixtures of pesticides and veterinary medicines at residue levels.

Where more than one pesticide residue is found in a sample, we produce a separate table which identifies each sample and what was found (see Appendix D). If more than one organophosphate/carbamate is found we will undertake an additional risk assessment. If the combination of pesticides found is either unusual or gives cause for concern then this will be detailed in the report.

The Food Standards Agency (FSA) asked the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment to assess these concerns. Their report "Risk Assessment of Mixtures of Pesticides and Veterinary Medicines" was published in 2002. The Committee concluded that the probability of any health hazard from exposures to mixtures is likely to be small. Nonetheless, it identified areas of uncertainty in the risk assessment process and made recommendations for further work. These fell under the broad headings of regulatory, surveillance, research and public information issues. An action plan to take forward the recommendations has been published on the FSA website at:

<http://www.food.gov.uk/safereating/chemsafe/pesticides/pestmixbranch/>. A number of research projects have been commissioned by the FSA to help progress the action plan; details can be found at <http://www.food.gov.uk/multimedia/pdfs/ressurprilistsep07> and <http://www.food.gov.uk/science/research/researchinfo/researchportfolio/>

Scientific methodologies have yet to be developed to deal with mixtures from groups of pesticides identified by the Committee. However, the Expert Committee on Pesticides (ECP) has developed an approach for the anticholinesterase compounds. They have also recommended an approach for assessing compounds that might have combined toxicity. This includes a consideration of the proportion of the respective reference doses taken up by the predicted exposures to each active substance. If this is only a small proportion (e.g. <50% if there are two components; <33% for 3 etc) then assuming simple additivity the risks would still be acceptable. However if exposures to each active substance represent a high proportion of the respective reference doses and the total exceeds 100% a more detailed consideration is needed

www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/pesticides-registration/data-requirements-handbook/toxicity-assessment-of-combinations-of-2-or-more-compounds-in-a-formulation).

We are keen to ensure our reports reflect consumer concerns. We therefore now regularly assess findings showing multiple residues of organophosphate and carbamate pesticides. Combined assessment is a new development in risk assessment, which is being taken forward at the international level, e.g. the European Food Safety Authority (EFSA) held a colloquium in 2006 and has set-up two working groups to help develop the methodology (<http://www.efsa.europa.eu/en/events/event/colloque061128.htm>; <http://www.efsa.europa.eu/en/supporting/pub/117e.htm>; <http://www.efsa.europa.eu/en/efsajournal/pub/705.htm>; <http://www.efsa.europa.eu/en/efsajournal/pub/1167.htm>). Further advances in risk assessment methodology will be taken into account in developing the approach to multiple risk assessments in the future.

Assessment of Risk to Human Health

Table 1: Short-term intake estimates

Screening assessments have been done for all acutely toxic and potentially acutely toxic pesticides to check that predicted intakes are within the ARfD (or ADI, as appropriate, where an ARfD is not available). An acute exposure assessment is not done for pesticides which are not acutely toxic where it has been established that an ARfD is not required. Toxicological endpoints can be found in the DG SANCO EU Pesticides database which is available at http://ec.europa.eu/food/plant/protection/evaluation/database_act_subs_en.htm

The screening assessment uses the internationally agreed approach to short-term (acute) consumer exposure assessment with UK food consumption data as detailed within the UK NESTI model which is available on the HSE website at <http://www.pesticides.gov.uk/approvals.asp?id=1687>.

A paper to explain the assessment of acute intakes can be found on our website:

<http://www.pesticides.gov.uk/Resources/CRD/PRiF/Documents/Other/2013/PRiF%20Intake%20Assessments%20290113.pdf>

For the Q3 (2016) assessments, the following approaches have been taken to refine the NESTI according to case-by-case issues and to ensure that appropriate consumption values are used for less frequently consumed commodities where available food consumption data may be limited:

- Data on beans with pods were used for okra.
- Data on cabbage were used for Chinese cabbage and Chinese leaf.
- Data on broccoli with a variability factor of 7 were used for choy sum, gai choy and pak choy.
- Data on spinach and cabbage were used for chard.
- Data on spinach were used for callaloo.
- Data on spinach, and additionally parsley were used for betel leaves.
- For all forms of pre-prepared fruits, data on apples without the use of a variability factor were used for screening purposes. As fruit pieces are small, a whole fruit consideration which takes account of unit to unit variability does not seem so relevant; the consumption values for a range of different fruits were considered and consumption values for apple are likely to be reasonably protective to cover the range of fruits consumed in this way.
- For potato/chlorpropham a variability factor of 3 was used, based on specific residues variability data for individual potato tubers.
- For pear/imazalil a variability factor of 1.5 was used based on specific residues variability data available, generated using imazalil in apples (EU MRL, 2007).
- Although a relatively low number of consumers for a few of the sub-groups for the spring onion consumption data, these data were used for the spring onion assessments as the use of these data was considered reasonable when considering other available EU data.

Monocrotophos residues

Monocrotophos was found in beans with pods (Guwar beans) at a level of 0.03 mg/kg. The highest residue gives a highest estimated short term intake of 0.00015 mg/kg bw/day for infants and toddlers. Authorisation for use in the EU were withdrawn in 2003 and EU reference values have not been set. The EFSA use JMPR reference values, set in 1995, to assess risks from monocrotophos residues. This intake is less than both the ARfD of 0.002 mg/kg bw/day and ADI of 0.0006 mg/kg bw/day. However, studies in laboratory animals at doses orders of magnitude higher which were toxic to the animals have indicated that monocrotophos can damage genetic material. It is not known if lower doses which are not toxic also have this effect. Monocrotophos did not increase cancer incidence in long term feeding studies in rats or mice or cause dominant lethal mutations in mice and these findings provide some reassurance that any risks from exposure are likely to be small. Nevertheless, because of uncertainty about the potential for genetic damage at low doses, on a precautionary basis any findings of monocrotophos in food are not desirable.

Okra risk assessment

| Crop | Pesticide | Highest residue (mg/kg) | Intake (mg/kg bw/day) | | ARfD (mg/kg bw/day) | Source |
|------|------------|-------------------------|-----------------------|---|---------------------|----------|
| | | | Adult | Critical group [†] | | |
| Okra | Dimethoate | 4.3‡ | 0.0099 | 0.022 (infants) 0.022 (toddlers) 0.016 (4-6 year olds) 0.012 (vegetarian) 0.012 (15-18 year olds) | 0.01 | EU, 2014 |

Comment on risk assessment

The intakes for infants, toddlers, 4-6 year olds, vegetarians, and 15-18 year olds exceeded the ARfD. The highest intake was for infants.

If infants ate large portions of okra containing dimethoate at 4.3 mg/kg their intake could be 215% of the Acute Reference Dose. This intake is 45 times lower than a dose which caused no observed adverse effects in a one day rat dietary study. The European Food Safety Authority used this study as the basis of the ARfD.

Toxicologists usually apply a factor of 100 to this dose to take into account the uncertainties caused by using animal data and possible differences in susceptibility between people. We consider the likelihood of an effect on health to be low, given the remaining factor of 45. This is because an adverse effect on health would rely on

- 1) a susceptible individual eating a large quantity of the product which in turn had the highest levels of residue; and
- 2) the actual difference in susceptibility between that individual and rats used to derive the critical NOAEL, being higher than the factor we are left with in this situation; and
- 3) the critical NOAEL being close to the actual doses needed to produce an adverse effect in the animals studied.

In conclusion we consider that some people might experience salivation or intestinal disturbances after eating large portions (97.5th percentile consumption) of okra containing the highest levels found in this report, but we consider the likelihood of an effect on health to be low. Such effects would be expected to be minor, short-lived and reversible.

Speciality vegetable risk assessment

| Crop | Pesticide | Highest residue (mg/kg) | Intake (mg/kg bw/day) | | ARfD (mg/kg bw/day) | Source |
|--|--------------------|-------------------------|-----------------------|--|---------------------|----------|
| | | | Adult | Critical group [†] | | |
| Choi Sum | Lambda-Cyhalothrin | 0.2 | 0.0036 | 0.0069 (4-6 year olds) 0.0063 (7-10 year olds) 0.0059 (toddlers) 0.0058 (infants) | 0.005 | EU, 2016 |
| <p>Comment on risk assessment</p> <p>The intakes for 4-6 year olds, 7-10 year olds, infants and toddlers exceeded the ARfD. The highest intake was for 4-6 year old children.</p> <p>If 4-6 year old children ate large portions of choi sum containing lambda- cyhalothrin at 0.2 mg/kg, their intake of lambda-cyhalothrin could be 138% of the Acute Reference Dose. This intake is 72 times lower than a dose which caused no observed adverse effect in a 1 year oral toxicity study in dogs. The European Food Safety Authority used this study as the basis of the ARfD.</p> <p>Toxicologists usually apply a factor of 100 to this dose to take into account uncertainties caused by using animal data and possible differences in susceptibility between people. We consider the reduced factor of 72 still enough to make an effect on health unlikely.</p> | | | | | | |

[†]Highest intake of all ten consumer groups, or intakes for all consumer groups that exceed the ARfD.

‡Total dimethoate residue is 1.3 mg/kg dimethoate + (0.5 mg/kg omethoate x 6 [conversion factor]) = 1.3 + 3.0 = 4.3 mg/kg.

Acute risk assessments for samples containing more than one organophosphorus/carbamate or captan/folpet or triazoles or carbendazim/thiophanate methyl following screening assessment.

Some samples contained residues of more than one pesticide. Whenever toxicologists expect these to add to each other's effect, (have the same toxicological mode of action), HSE carries out a risk assessment of the combined results. Where the sum of the individual intakes, expressed as a percentage of the respective ARfDs, is above 100% then the risk assessment is published in full.

The screening assessment of samples, which contained more than one pesticide from the above groups, did not indicate any exceedances of the ARfD

Index of Appendices

Appendix A - Summary of Results

Appendix B - Summary of Rapid Alerts Issued and Samples with Residues above the MRL

Appendix C - Pesticides Sought and Found in Individual Foodstuffs

Appendix D - Additional Action Taken

Appendix E - Pesticides Analysed as Multi-Component Analytes

Appendix A

Table 2: Summary of Results

| Food | Analysed | With residues at or below the MRL | With residues above the MRL | With residues of non-approved pesticides (UK only) | With multiple residues | Organic samples tested | Organic samples with residues |
|---------------------------------------|----------|-----------------------------------|-----------------------------|--|------------------------|------------------------|-------------------------------|
| Apples | 24 | 22 | 0 | 0 | 17 | 0 | 0 |
| Apricots | 30 | 29 | 0 | 0 | 26 | 0 | 0 |
| Beans with pods | 26 | 8 | 7 | 0 | 13 | 0 | 0 |
| Bread | 107 | 99 | 0 | 0 | 59 | 1 | 0 |
| Cabbage | 24 | 6 | 0 | 0 | 1 | 0 | 0 |
| Cheese (buffalo, ewe's and goat's) | 48 | 4 | 19 | 0 | 4 | 0 | 0 |
| Fish (predator) | 48 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fish (sea) | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grapes | 28 | 28 | 0 | 0 | 25 | 0 | 0 |
| Infant food (fruit & vegetable based) | 66 | 0 | 0 | 0 | 0 | 34 | 0 |
| Jam | 48 | 25 | 1 | 0 | 14 | 0 | 0 |
| Leeks | 23 | 8 | 0 | 1 | 3 | 4 | 0 |
| Lettuce | 16 | 1 | 0 | 0 | 0 | 0 | 0 |
| Milk | 108 | 2 | 0 | 0 | 0 | 30 | 0 |
| Okra | 45 | 8 | 17 | 0 | 10 | 0 | 0 |
| Peaches & nectarines | 46 | 45 | 0 | 0 | 36 | 2 | 1 |
| Pears | 24 | 20 | 0 | 0 | 17 | 4 | 0 |
| Peppers | 30 | 14 | 0 | 0 | 5 | 6 | 1 |
| Pork | 53 | 2 | 1 | 0 | 1 | 0 | 0 |
| Potatoes | 18 | 8 | 0 | 0 | 4 | 0 | 0 |

| Food | Analysed | With residues at or below the MRL | With residues above the MRL | With residues of non-approved pesticides (UK only) | With multiple residues | Organic samples tested | Organic samples with residues |
|-----------------------|-----------------|--|------------------------------------|---|-------------------------------|-------------------------------|--------------------------------------|
| Prepared fresh fruit | 24 | 2 | 3 | 0 | 0 | 0 | 0 |
| Speciality vegetables | 39 | 25 | 2 | 1 | 10 | 0 | 0 |
| Spices (cumin) | 24 | 6 | 12 | 0 | 18 | 0 | 0 |
| Spring onions | 48 | 28 | 0 | 0 | 12 | 8 | 0 |
| Strawberries | 24 | 23 | 0 | 0 | 21 | 1 | 0 |
| Tomatoes | 18 | 10 | 0 | 0 | 2 | 3 | 0 |

Appendix B

Table 3: Summary of Rapid Alerts Issued and samples with residues above the MRL

| Sample ID | Date of Sampling | Description | Country of Origin | Retail Outlet | Address | Brand Name | Packer / Manufacturer | Pesticide residues found in mg/kg (MRL) |
|-----------|------------------|-------------|-------------------|-----------------|---|-------------|--|---|
| 3768/2016 | 19/07/2016 | Okra | Jordan | MWW Markets Ltd | Unit 75 Birmingham Wholesale Market, Pershore Street, Birmingham B5 6UN | None stated | Qasem Salheb Est Dair Alla St, Jordan Valley, Balqa, Jordan | dimethoate (sum) 1.8 (MRL = 0.02*) |

Table 4: Summary of MRL Exceedances

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|---|------------------|-------------------|--------------------|--------------------------|-------------|---|
| Beans with pods | | | | | | |
| 3671/2016 | Speciality Beans | India | monocrotophos | 0.03 | 0.01* | Yes |
| 3769/2016 | Speciality Beans | Malaysia | chlorfenapyr | 0.02 | 0.01* | No |
| 3875/2016 | Speciality Beans | Malaysia | chlorfenapyr | 0.2 | 0.01* | Yes |
| | | | dithiocarbamates | 2 | 1 | No |
| 3876/2016 | Speciality Beans | Malaysia | chlorfenapyr | 0.2 | 0.01* | Yes |
| | | | dithiocarbamates | 4.8 | 1 | Yes |
| | | | emamectin benzoate | 0.02 | 0.01* | No |
| | | | dithiocarbamates | 1.7 | 1 | No |
| 4079/2016 | Speciality Beans | India | hexaconazole | 0.03 | 0.01* | Yes |
| | | | profenofos | 0.04 | 0.01* | Yes |
| | | | chlorfenapyr | 0.2 | 0.01* | Yes |
| 4090/2016 | Speciality Beans | Malaysia | dithiocarbamates | 3.3 | 1 | Yes |
| | | | lufenuron | 0.05 | 0.02* | Yes |
| 4112/2016 | Speciality Beans | Malaysia | fipronil (sum) | 0.006 | 0.005* | No |
| Cheese (buffalo, ewe's and goat's) | | | | | | |
| 0825/2016 | Buffalo | Italy | Chlorate | 0.03 | 0.01 | No |
| 0841/2016 | Buffalo | Italy | Chlorate | 0.03 | 0.01 | No |
| 0931/2016 | Buffalo | Italy | Chlorate | 0.03 | 0.01 | No |
| 2925/2016 | Buffalo | Italy | Chlorate | 0.6 | 0.01 | No |
| 0501/2016 | Goats | UK | Chlorate | 0.06 | 0.01 | No |
| 0502/2016 | Goats | France | DDAC (sum) | 0.2 | 0.1 | No |
| 0513/2016 | Goats | UK | BAC (sum) | 3.3 | 0.1 | Yes |
| 0558/2016 | Goats | UK | BAC (sum) | 1 | 0.1 | Yes |
| 0569/2016 | Goats | UK | BAC (sum) | 1.1 | 0.1 | Yes |
| 0604/2016 | Goats | France | Chlorate | 0.02 | 0.01 | No |
| 0605/2016 | Goats | UK | BAC (sum) | 0.2 | 0.1 | No |
| 0642/2016 | Goats | France | Chlorate | 0.04 | 0.01 | No |
| 0656/2016 | Goats | the Netherlands | Chlorate | 0.02 | 0.01 | No |
| 0772/2016 | Goats | France | Chlorate | 0.05 | 0.01 | No |
| 0774/2016 | Goats | France | Chlorate | 0.2 | 0.01 | No |
| 0970/2016 | Goats | France | Chlorate | 0.02 | 0.01 | No |
| 0971/2016 | Goats | France | Chlorate | 0.2 | 0.01 | No |
| 1949/2016 | Goats | France | Chlorate | 0.03 | 0.01 | No |
| 2039/2016 | Goats | France | Chlorate | 0.1 | 0.01 | No |

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|------------------------------|---------------------------------|-------------------|--------------------|--------------------------|-------------|---|
| Jam | | | | | | |
| 0744/2016 | Diabetic Raspberry Seedless Jam | UK | BAC (sum) | 0.8 | 0.1 | Yes |
| Okra | | | | | | |
| 1830/2016 | Fresh | Thailand | flonicamid (sum) | 0.1 | 0.05* | Yes |
| 3687/2016 | Fresh | Jordan | abamectin (sum) | 0.09 | 0.01* | Yes |
| 3697/2016 | Fresh | Jordan | oxamyl | 0.05 | 0.01* | Yes |
| 3747/2016 | Fresh | Jordan | abamectin (sum) | 0.05 | 0.01* | Yes |
| 3768/2016 | Fresh | Jordan | dimethoate (sum) | 1.8 | 0.02* | Yes |
| 3859/2016 | Fresh | Jordan | myclobutanil | 0.04 | 0.02* | Yes |
| 3942/2016 | Fresh | Jordan | abamectin (sum) | 0.03 | 0.01* | Yes |
| 4080/2016 | Fresh | Jordan | abamectin (sum) | 0.1 | 0.01* | Yes |
| | | | acetamiprid | 0.5 | 0.2 | Yes |
| | | | oxamyl | 0.07 | 0.01* | Yes |
| 4084/2016 | Fresh | Jordan | abamectin (sum) | 0.02 | 0.01* | Yes |
| 4093/2016 | Fresh | Jordan | abamectin (sum) | 0.02 | 0.01* | No |
| 0617/2016 | Frozen | India | flonicamid (sum) | 0.2 | 0.05* | Yes |
| 0618/2016 | Frozen | India | flonicamid (sum) | 0.2 | 0.05* | Yes |
| 0660/2016 | Frozen | India | flonicamid (sum) | 0.2 | 0.05* | Yes |
| 0661/2016 | Frozen | India | flonicamid (sum) | 0.3 | 0.05* | Yes |
| 1944/2016 | Frozen | India | flonicamid (sum) | 0.2 | 0.05* | Yes |
| 1945/2016 | Frozen | India | flonicamid (sum) | 0.3 | 0.05* | Yes |
| 2875/2016 | Frozen | India | flonicamid (sum) | 0.2 | 0.05* | Yes |
| Pork | | | | | | |
| 0677/2016 | Pork Leg Escalopes | UK | BAC (sum) | 0.3 | 0.1 | Yes |
| Prepared fresh fruit | | | | | | |
| 0767/2016 | Melon | UK | Chlorate | 0.03 | 0.01* | No |
| 2563/2016 | Mixed | UK | Chlorate | 0.03 | 0.01* | No |
| 2368/2016 | Pineapple | UK | Chlorate | 0.02 | 0.01* | No |
| Speciality vegetables | | | | | | |
| 3775/2016 | Chinese Cabbage | Poland | dimethoate (sum) | 0.07 | 0.02* | Yes |
| 3783/2016 | Pak Choi | UK | oxadixyl | 0.02 | 0.01* | No |

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|-----------------------|-------|-------------------|---------------------|--------------------------|-------------|---|
| Spices (cumin) | | | | | | |
| 2560/2016 | Cumin | UK | acetamiprid | 1 | 0.05* | Yes |
| | | | carbendazim | 4 | 0.1* | Yes |
| | | | carbofuran (sum) | 0.09 | 0.05* | No |
| | | | chlorantraniliprole | 0.03 | 0.02* | No |
| | | | clothianidin | 0.1 | 0.05* | Yes |
| | | | cypermethrin | 0.4 | 0.1* | Yes |
| | | | imidacloprid | 0.1 | 0.05* | Yes |
| | | | profenofos | 1.4 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | tricyclazole | 1.1 | 0.05* | Yes |
| | | | trifloxystrobin | 0.1 | 0.05* | Yes |
| 2561/2016 | Cumin | UK | acetamiprid | 0.5 | 0.05* | Yes |
| | | | carbendazim | 1.7 | 0.1* | Yes |
| | | | clothianidin | 0.08 | 0.05* | No |
| | | | cypermethrin | 0.3 | 0.1* | Yes |
| | | | fipronil (sum) | 0.009 | 0.005* | No |
| | | | imidacloprid | 0.1 | 0.05* | Yes |
| | | | kresoxim-methyl | 0.2 | 0.05* | Yes |
| | | | profenofos | 1.2 | 0.05* | Yes |
| | | | propiconazole | 0.4 | 0.1* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | triazophos | 0.09 | 0.02* | Yes |
| tricyclazole | 1.1 | 0.05* | Yes | | | |
| 2562/2016 | Cumin | UK | Acetamiprid | 0.7 | 0.05* | Yes |
| | | | carbendazim | 4.3 | 0.1* | Yes |
| | | | carbofuran (sum) | 0.08 | 0.05* | No |
| | | | chlorantraniliprole | 0.04 | 0.02* | No |
| | | | Clothianidin | 0.08 | 0.05* | No |
| | | | cypermethrin | 0.5 | 0.1* | Yes |
| | | | Imidacloprid | 0.2 | 0.05* | Yes |
| | | | Profenofos | 1 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.1 | 0.05* | Yes |
| | | | Tricyclazole | 1 | 0.05* | Yes |

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|--------------|-------|-------------------|--------------------|--------------------------|-------------|---|
| 2571/2016 | Cumin | UK | Acetamiprid | 0.5 | 0.05* | Yes |
| | | | carbendazim | 0.9 | 0.1* | Yes |
| | | | Clothianidin | 0.1 | 0.05* | Yes |
| | | | cypermethrin | 0.3 | 0.1* | Yes |
| | | | kresoxim-methyl | 0.07 | 0.05* | No |
| | | | profenofos | 1.4 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | triazophos | 0.05 | 0.02* | Yes |
| | | | tricyclazole | 0.4 | 0.05* | Yes |
| | | | acetamiprid | 0.6 | 0.05* | Yes |
| 2573/2016 | Cumin | UK | carbendazim | 1.8 | 0.1* | Yes |
| | | | clothianidin | 0.09 | 0.05* | No |
| | | | cypermethrin | 0.3 | 0.1* | Yes |
| | | | fipronil (sum) | 0.008 | 0.005* | No |
| | | | imidacloprid | 0.1 | 0.05* | Yes |
| | | | kresoxim-methyl | 0.2 | 0.05* | Yes |
| | | | profenofos | 1.1 | 0.05* | Yes |
| | | | propiconazole | 0.4 | 0.1* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | triazophos | 0.09 | 0.02* | Yes |
| tricyclazole | 1.2 | 0.05* | Yes | | | |
| 2691/2016 | Cumin | UK | acetamiprid | 0.5 | 0.05* | Yes |
| | | | carbendazim | 1.5 | 0.1* | Yes |
| | | | clothianidin | 0.1 | 0.05* | No |
| | | | cypermethrin | 0.2 | 0.1* | Yes |
| | | | imidacloprid | 0.2 | 0.05* | Yes |
| | | | kresoxim-methyl | 0.09 | 0.05* | No |
| | | | profenofos | 0.9 | 0.05* | Yes |
| | | | propiconazole | 0.3 | 0.1* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | triazophos | 0.05 | 0.02* | Yes |
| tricyclazole | 0.7 | 0.05* | Yes | | | |

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|---------------------------|------------|-------------------|---------------------------|--------------------------|--------------|---|
| 2884/2016 | Cumin | UK | acetamiprid | 0.06 | 0.05* | No |
| | | | clothianidin | 0.09 | 0.05* | No |
| | | | profenofos | 0.07 | 0.05* | No |
| | | | thiamethoxam (sum) | 0.1 | 0.05* | Yes |
| 2887/2016 | Cumin | UK | acetamiprid | 1.1 | 0.05* | Yes |
| | | | carbendazim | 0.7 | 0.1* | Yes |
| | | | carbofuran (sum) | 0.08 | 0.05* | No |
| | | | clothianidin | 0.08 | 0.05* | No |
| | | | imidacloprid | 0.2 | 0.05* | Yes |
| | | | profenofos | 0.5 | 0.05* | Yes |
| | | | propiconazole | 0.3 | 0.1* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | triazophos | 0.09 | 0.02* | Yes |
| | | | tricyclazole | 0.4 | 0.05* | Yes |
| | | | 2888/2016 | Cumin | UK | acetamiprid |
| carbendazim | 4 | 0.1* | | | | Yes |
| chlorantraniliprole | 0.03 | 0.02* | | | | No |
| clothianidin | 0.09 | 0.05* | | | | No |
| Cypermethrin | 0.3 | 0.1* | | | | Yes |
| Imidacloprid | 0.1 | 0.05* | | | | Yes |
| Profenofos | 1.1 | 0.05* | | | | Yes |
| thiamethoxam (sum) | 0.1 | 0.05* | | | | Yes |
| Tricyclazole | 1 | 0.05* | | | | Yes |
| Trifloxystrobin | 0.07 | 0.05* | No | | | |

| Sample ID | Food | Country of Origin | Pesticide Detected | Residue Detected (mg/kg) | MRL (mg/kg) | MRL exceedance after allowing for measurement uncertainty |
|------------|-------|-------------------|--------------------|--------------------------|-------------|---|
| 2889/2016 | Cumin | UK | acetamiprid | 0.4 | 0.05* | Yes |
| | | | carbendazim | 0.5 | 0.1* | Yes |
| | | | clothianidin | 0.1 | 0.05* | No |
| | | | imidacloprid | 0.06 | 0.05* | No |
| | | | profenofos | 0.5 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| | | | tricyclazole | 0.4 | 0.05* | Yes |
| 2891/2016 | Cumin | UK | acetamiprid | 0.5 | 0.05* | Yes |
| | | | carbendazim | 1 | 0.1* | Yes |
| | | | clothianidin | 0.1 | 0.05* | No |
| | | | cypermethrin | 0.2 | 0.1* | Yes |
| | | | kresoxim-methyl | 0.1 | 0.05* | No |
| | | | profenofos | 1.4 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| triazophos | 0.03 | 0.02* | No | | | |
| 2908/2016 | Cumin | UK | acetamiprid | 0.5 | 0.05* | Yes |
| | | | carbendazim | 0.9 | 0.1* | Yes |
| | | | clothianidin | 0.1 | 0.05* | Yes |
| | | | cypermethrin | 0.2 | 0.1* | Yes |
| | | | kresoxim-methyl | 0.06 | 0.05* | No |
| | | | profenofos | 1.4 | 0.05* | Yes |
| | | | thiamethoxam (sum) | 0.2 | 0.05* | Yes |
| triazophos | 0.05 | 0.02* | Yes | | | |
| | | | tricyclazole | 0.4 | 0.05* | Yes |

Appendix C: Pesticides Sought and Found in Individual Foodstuffs

Table 5a. APPLES: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| APPLES, COOKING UK: 12 samples analysed | | |
| boscalid (MRL = 2) | <0.01 (i.e. not found) 0.01 - 0.07 | 4 8 |
| captan and folpet (MRL = 3) | <0.02 (i.e. not found) 0.03, 0.1 | 10 2 |
| dithianon (MRL = 3) | <0.02 (i.e. not found) 0.02 - 0.1 | 8 4 |
| flonicamid (sum) (MRL = 0.2) | <0.01 (i.e. not found) 0.01 - 0.02 | 9 3 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.04 | 11 1 |
| indoxacarb (MRL = 0.5) | <0.01 (i.e. not found) 0.01 | 10 2 |
| methoxyfenozide (MRL = 2) | <0.01 (i.e. not found) 0.02, 0.06 | 10 2 |
| pirimicarb (sum) (MRL = 2) | <0.01 (i.e. not found) 0.01 | 11 1 |
| pyraclostrobin (MRL = 0.5) | <0.01 (i.e. not found) 0.01 - 0.04 | 5 7 |
| APPLES, EATING UK: 1 sample analysed | | |
| ethephon (MRL = 0.6) | <0.05 (i.e. not found) 0.1 | 0 1 |
| myclobutanil (MRL = 0.6) | <0.01 (i.e. not found) 0.02 | 0 1 |
| paclobutrazol (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 0 1 |
| APPLES, EATING Imported (Non-EC): 10 samples analysed | | |
| acetamiprid (MRL = 0.8) | <0.01 (i.e. not found) 0.01 - 0.03 | 7 3 |
| captan and folpet (MRL = 3) | <0.02 (i.e. not found) 0.03, 0.04 | 8 2 |
| carbendazim (MRL = 0.2) | <0.01 (i.e. not found) 0.04 | 9 1 |
| dithiocarbamates (MRL = 5) | <0.05 (i.e. not found) 0.06 - 0.2 | 7 3 |
| fludioxonil | <0.01 (i.e. not found) | 9 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--------------------------------|----------------------------|
| (MRL = 5) | 0.8 | 1 |
| pyrimethanil (MRL = 15) | <0.01 (i.e. not found) 3.8 | 9 1 |
| tebufenozide (MRL = 1) | <0.01 (i.e. not found) 0.05 | 9 1 |
| thiabendazole (MRL = 5) | <0.02 (i.e. not found) 0.4 | 9 1 |
| thiacloprid (MRL = 0.3) | <0.01 (i.e. not found) 0.02 | 7 3 |
| APPLES, EATING Imported (EC): 1 sample analysed | | |
| boscalid (MRL = 2) | <0.01 (i.e. not found) 0.1 | 0 1 |
| captan and folpet (MRL = 3) | <0.02 (i.e. not found) 0.03 | 0 1 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.03 | 0 1 |
| pyraclostrobin (MRL = 0.5) | <0.01 (i.e. not found) 0.05 | 0 1 |

Imported (EC) samples of apples were from Belgium (1).

Imported (Non-EC) samples of apples were from Chile (2), China (1), New Zealand (4), South Africa (3).

UK samples of apples (13).

Residues were distributed by country of origin, as follows:

| | |
|-------------------|---------------------------------------|
| acetamiprid | China (1), South Africa (2) |
| boscalid | Belgium (1), UK (8) |
| carbendazim | China (1) |
| captan and folpet | Belgium (1), New Zealand (2), UK (2) |
| dithiocarbamates | South Africa (3) |
| dithianon | UK (4) |
| ethephon | UK (1) |
| flonicamid (sum) | UK (3) |
| fludioxonil | Belgium (1), South Africa (1), UK (1) |
| indoxacarb | UK (2) |
| methoxyfenozide | UK (2) |
| myclobutanil | UK (1) |
| paclobutrazol | UK (1) |
| pirimicarb (sum) | UK (1) |
| pyraclostrobin | Belgium (1), UK (7) |
| pyrimethanil | Chile (1) |
| tebufenozide | New Zealand (1) |
| thiabendazole | Chile (1) |
| thiacloprid | South Africa (3) |

Residues were found in all of the 12 UK cooking samples

Residues were found in all of the 1 UK eating samples

No residues were found in 2 of the 10 Imported (Non-EC) eating samples

Residues were found in all of the 1 Imported (EC) eating samples

Table 5b. APPLES: Residues detected in retail samples purchased between July and September 2016

Residues (1-4 compounds) were found in 22 of the 24 samples as follows:

| Number of residues | Sample ID | Type of APPLES | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | Country of origin | |
|--------------------|-----------|----------------|------------------------|------|------|-------|------|------|-----|------|------|------|------|------|------|------|------|-----|------|-----|-------------------|--------------|
| | | | ACET | BOS | CBZ | CPFOL | DTC | DTN | ETH | FLC | FLUD | IDX | MXF | MYC | PAC | PIR | PYC | PYM | TBF | TBZ | | THC |
| (1) | 1723/2016 | COOKING | - | - | - | - | - | - | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - | UK |
| | 2776/2016 | COOKING | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | UK |
| | 2046/2016 | EATING | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3.8 | - | - | - | - | Chile |
| | 2881/2016 | EATING | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.4 | - | Chile |
| | 0623/2016 | EATING | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | New Zealand |
| (2) | 0586/2016 | COOKING | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | UK |
| | 1703/2016 | COOKING | - | - | - | 0.1 | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 1958/2016 | COOKING | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | UK |
| | 2607/2016 | COOKING | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | UK |
| | 2839/2016 | EATING | 0.01 | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | China |
| | 1815/2016 | EATING | - | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | 0.05 | - | - | New Zealand |
| | 2078/2016 | EATING | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | South Africa |
| (3) | 0230/2016 | COOKING | - | 0.05 | - | - | - | - | - | 0.02 | - | - | - | - | - | - | 0.03 | - | - | - | - | UK |
| | 0581/2016 | COOKING | - | 0.01 | - | - | - | 0.05 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | UK |
| | 1152/2016 | COOKING | - | - | - | - | - | 0.1 | - | - | 0.04 | 0.01 | - | - | - | - | - | - | - | - | - | UK |
| | 1968/2016 | COOKING | - | 0.03 | - | - | - | - | - | - | - | - | - | - | 0.01 | 0.01 | - | - | - | - | - | UK |
| | 2712/2016 | EATING | - | - | - | - | - | - | 0.1 | - | - | - | - | 0.02 | 0.02 | - | - | - | - | - | - | UK |
| | 2943/2016 | EATING | 0.01 | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | South Africa |
| (4) | 0695/2016 | COOKING | - | 0.03 | - | - | - | 0.03 | - | 0.01 | - | - | - | - | - | - | 0.01 | - | - | - | - | UK |
| | 1186/2016 | COOKING | - | 0.07 | - | 0.03 | - | - | - | 0.01 | - | - | - | - | - | - | 0.04 | - | - | - | - | UK |
| | 2652/2016 | EATING | 0.03 | - | - | - | 0.1 | - | - | - | 0.8 | - | - | - | - | - | - | - | - | - | 0.02 | South Africa |
| | 1912/2016 | EATING | - | 0.1 | - | 0.03 | - | - | - | - | 0.03 | - | - | - | - | - | 0.05 | - | - | - | - | Belgium |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-------|-------------------|-----|------------------|------|----------------|
| ACET | acetamiprid | BOS | boscalid | CBZ | carbendazim |
| CPFOL | captan and folpet | DTC | dithiocarbamates | DTN | dithianon |
| ETH | ethephon | FLC | flonicamid (sum) | FLUD | fludioxonil |
| IDX | indoxacarb | MXF | methoxyfenozide | MYC | myclobutanil |
| PAC | paclobutrazol | PIR | pirimicarb (sum) | PYC | pyraclostrobin |
| PYM | pyrimethanil | TBF | tebufenozide | TBZ | thiabendazole |
| THC | thiacloprid | | | | |

Table 5c. APPLES: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | EPTC (0.01) | napropamide (0.02) |
| 2,4-DB (0.01) | ethiofencarb (parent) (0.01) | nitenpyram (0.01) |
| 2-phenylphenol (0.02) | ethion (0.01) | nitrofen (0.02) |
| 6-benzyladenine (0.01) | ethirimol (0.01) | nitrothal-isopropyl (0.01) |
| abamectin (sum) (0.01) | ethofumesate (0.01) | Novaluron (0.01) |
| acephate (0.01) | ethoprophos (0.01) | nuarimol (0.01) |
| acetochlor (0.01) | etofenprox (0.01) | ofurace (0.01) |
| acibenzolar-s-methyl (0.01) | etoxazole (0.01) | Oxadiargyl (0.01) |
| aclonifen (0.02) | etridiazole (0.02) | oxadiazon (0.02) |
| acrinathrin (0.02) | etrimfos (0.01) | oxadixyl (0.01) |
| alachlor (0.01) | famoxadone (0.01) | oxamyl (0.01) |
| aldicarb (sum) (0.01) | fenamidone (0.01) | oxasulfuron (0.01) |
| aldrin and dieldrin (0.01) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| allethrin (0.02) | fenarimol (0.01) | oxyfluorfen (0.02) |
| alpha-HCH (0.01) | fenazaquin (0.01) | parathion (0.01) |
| ametoctradin (0.01) | fenbuconazole (0.01) | parathion-methyl (sum) (0.01) |
| amidosulfuron (0.01) | fenbutatin oxide (0.02) | penconazole (0.01) |
| amitraz (0.01) | fenhexamid (0.02) | pencycuron (0.01) |
| asulam (0.02) | fenitrothion (0.01) | pendimethalin (0.01) |
| atrazine (0.01) | fenoxycarb (0.01) | penflufen (0.01) |
| azinphos-ethyl (0.02) | fenpropathrin (0.01) | pentanochlor (0.01) |
| azinphos-methyl (0.02) | fenpropidin (0.01) | penthioopyrad (0.01) |
| azoxystrobin (0.01) | fenpropimorph (0.01) | permethrin (0.01) |
| BAC (sum) (0.05) | fenpyrazamine (0.01) | phenmedipham (0.02) |
| benalaxyl (0.01) | fenpyroximate (0.01) | phenthoate (0.01) |
| bendiocarb (0.01) | fensulfothion (sum) (0.01) | phorate (partial sum) (0.01) |
| benfuracarb (0.001) | fenthion (partial sum) (0.01) | phosalone (0.01) |
| benthiavalicarb (sum) (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosmet (sum) (0.01) |
| beta-HCH (0.01) | fipronil (sum) (0.005) | phosphamidon (0.01) |
| bifenox (0.02) | fluazifop-p-butyl (sum) (0.01) | phoxim (0.01) |
| bifenthrin (0.01) | fluazinam (0.01) | picolinafen (0.01) |
| biphenyl (0.01) | flubendiamide (0.01) | picoxystrobin (0.01) |
| bispyribac-sodium (0.01) | flucythrinate (0.01) | piperonyl butoxide (0.01) |
| bitertanol (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bixafen (0.01) | flufenoxuron (0.02) | pirimiphos-methyl (0.01) |
| bromophos-ethyl (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| bromopropylate (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bromoxynil (0.01) | fluopyram (0.01) | profenofos (0.01) |
| bromuconazole (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| bupirimate (0.01) | fluquinconazole (0.01) | prometryn (0.01) |
| buprofezin (0.01) | flurochloridone (0.02) | propachlor (0.01) |
| butachlor (0.01) | fluroxypyr (sum) (0.02) | propamocarb (0.01) |
| butocarboxim (parent) (0.01) | flusilazole (0.01) | propanil (0.02) |
| butoxycarboxim (0.01) | flutolanil (0.01) | propaquizafop (0.02) |
| cadusafos (0.01) | flutriafol (0.01) | propargite (0.01) |
| carbaryl (0.01) | fluxapyroxad (0.01) | propetamphos (0.01) |
| carbetamide (0.02) | fonofos (0.01) | propham (0.02) |
| carbofuran (sum) (0.001) | formetanate (0.01) | propiconazole (0.01) |
| carbosulfan (0.001) | fosthiazate (0.01) | propoxur (0.01) |
| carboxin (0.02) | furalaxyl (0.01) | propyzamide (0.01) |
| chlorantraniliprole (0.01) | furathiocarb (0.001) | proquinazid (0.01) |
| chlorbufam (0.01) | furmecyclox (0.01) | prosulfocarb (0.01) |
| chlordane (sum) (0.01) | halofenozide (0.01) | prosulfuron (0.01) |
| chlorfenapyr (0.01) | halosulfuron-methyl (0.01) | prothioconazole (0.01) |
| chlorfenvinphos (0.01) | haloxyfop (sum) (0.01) | prothiofos (0.01) |
| chloridazon (0.01) | Heptachlor (sum) (0.01) | pymetrozine (0.01) |
| chlorobenzilate (0.02) | heptenophos (0.01) | pyrazophos (0.01) |

| | | |
|-------------------------------|--|---|
| chlorothalonil (0.01) | hexachlorobenzene (0.01) | pyrethrins (0.01) |
| chlorpropham (sum) (0.01) | hexachlorocyclohexane (sum) (0.01) | pyridaben (0.01) |
| chlorpyrifos (0.01) | hexaconazole (0.01) | pyridalyl (0.01) |
| chlorpyrifos-methyl (0.01) | hexazinone (0.02) | pyridaphenthion (0.01) |
| chlorthal-dimethyl (0.01) | hexythiazox (0.01) | pyrifenox (0.02) |
| chlortoluron (0.01) | imazalil (0.02) | pyriproxifen (0.01) |
| chlozolinate (0.01) | imidacloprid (0.01) | quassia (0.01) |
| chromafenozide (0.01) | ioxynil (0.01) | quinalphos (0.01) |
| clethodim (0.02) | iprodione (0.01) | quinmerac (0.02) |
| clofentezine (0.01) | iprovalicarb (0.01) | Quinoclamine (0.01) |
| clomazone (0.01) | isazophos (0.01) | quinomethionate (0.02) |
| clothianidin (0.01) | isocarbophos (0.01) | quinoxifen (0.01) |
| coumaphos (0.01) | isofenphos (0.01) | quintozene (sum) (0.01) |
| cyanazine (0.02) | isofenphos-methyl (0.01) | resmethrin (0.02) |
| cyazofamid (0.01) | isoprocab (0.01) | rimsulfuron (0.01) |
| cycloate (0.01) | isoprothiolane (0.01) | rotenone (0.01) |
| cycloxydim (0.02) | isoproturon (0.01) | simazine (0.02) |
| cyflufenamid (0.01) | isopyrazam (0.01) | spinosad (0.01) |
| cyfluthrin (0.02) | isoxaben (0.01) | spirodiclofen (0.01) |
| cyhalofop-butyl (sum) (0.01) | isoxaflutole (0.01) | spiromesifen (0.01) |
| cymoxanil (0.01) | kresoxim-methyl (0.01) | spirotetramat (sum) (0.01) |
| cypermethrin (0.02) | lambda-cyhalothrin (0.02) | spiroxamine (0.01) |
| cyproconazole (0.01) | lenacil (0.01) | sulcotrione (0.02) |
| cyprodinil (0.02) | lindane (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyromazine (0.02) | linuron (0.01) | tau-fluvalinate (0.01) |
| DDAC (sum) (0.05) | lufenuron (0.02) | tebuconazole (0.01) |
| DDT (sum) (0.01) | malathion (0.01) | tebufenpyrad (0.01) |
| deltamethrin (0.02) | mandipropamid (0.01) | tebuthiuron (0.01) |
| demeton-S-methyl (0.01) | MCPA only (0.01) | tecnazene (0.01) |
| desmedipham (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | teflubenzuron (0.01) |
| diafenthiuron (0.02) | mecarbam (0.01) | tefluthrin (0.01) |
| diazinon (0.01) | mepanipyrim (sum) (0.01) | tepraloxymid (0.02) |
| dichlobenil (0.01) | mephosfolan (0.02) | terbufos (0.01) |
| dichlofluanid (0.01) | mepronil (0.01) | Terbufos (sum not defintion) (0.01) |
| dichlofluanid and DMSA (0.01) | mesosulfuron-methyl (0.01) | terbutylazine (0.02) |
| dichlorprop (0.01) | metaflumizone (0.02) | terbutryn (0.02) |
| dichlorvos (0.01) | metalaxyl (0.01) | tetrachlorvinphos (0.01) |
| diclobutrazol (0.01) | metamitron (0.01) | tetraconazole (0.01) |
| dicloran (0.01) | metazachlor (0.02) | tetradifon (0.01) |
| dicofol (sum) (0.01) | metconazole (0.01) | tetramethrin (0.01) |
| dicrotophos (0.01) | methabenzthiazuron (0.01) | thiamethoxam (sum) (0.01) |
| diethofencarb (0.01) | methacrifos (0.01) | thiophanate-methyl (0.01) |
| difenoconazole (0.01) | methamidophos (0.01) | tolclofos-methyl (0.01) |
| diflubenzuron (0.01) | methidathion (0.01) | tolfenpyrad (0.01) |
| diflufenican (0.01) | methiocarb (sum) (0.01) | tolyfluanid (sum) (0.01) |
| dimethenamid (0.01) | methomyl (sum) (0.01) | triadimefon & triadimenol (0.01) |
| dimethoate (sum) (0.01) | methoxychlor (0.01) | triallate (0.02) |
| dimethomorph (0.01) | metobromuron (0.01) | triasulfuron (0.02) |
| dimoxystrobin (0.01) | metolachlor (0.01) | triazamate (0.01) |
| diniconazole (0.01) | metolcarb (0.01) | triazophos (0.01) |
| dinotefuran (0.01) | metosulam (0.01) | triclopyr (0.02) |
| diphenylamine (0.02) | metoxuron (0.01) | tricyclazole (0.01) |
| disulfoton (sum) (0.01) | metrafenone (0.01) | trifloxystrobin (0.01) |
| diuron (0.01) | metribuzin (0.02) | triflumizole (0.01) |
| dodine (0.02) | metsulfuron-methyl (0.01) | triflumuron (0.01) |
| emamectin benzoate (0.01) | mevinphos (0.01) | trifluralin (0.01) |
| endosulfan (sum) (0.01) | molinate (0.01) | triforine (0.01) |
| endrin (0.02) | monocrotophos (0.01) | triconazole (0.01) |
| EPN (0.01) | monolinuron (0.01) | vinclozolin (sum) (0.01) |
| epoxiconazole (0.01) | Monuron (0.01) | zoxamide (0.01) |

Table 6a. APRICOTS: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| APRICOTS, UK: 5 samples analysed | | |
| boscalid (MRL = 3) | <0.01 (i.e. not found) 0.1 | 3 2 |
| cyprodinil (MRL = 2) | <0.02 (i.e. not found) 0.06 - 0.4 | 0 5 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.05 - 0.2 | 0 5 |
| indoxacarb (MRL = 1) | <0.01 (i.e. not found) 0.02 | 3 2 |
| myclobutanil (MRL = 0.3) | <0.01 (i.e. not found) 0.01 | 4 1 |
| pyraclostrobin (MRL = 1) | <0.01 (i.e. not found) 0.01 | 3 2 |
| spinosad (MRL = 0.6) | <0.01 (i.e. not found) 0.03 | 4 1 |
| APRICOTS, Imported (EC): 25 samples analysed | | |
| acetamiprid (MRL = 0.8) | <0.01 (i.e. not found) 0.01 | 24 1 |
| boscalid (MRL = 3) | <0.01 (i.e. not found) 0.04 - 2.2 | 21 4 |
| captan (MRL = 4) | <0.02 (i.e. not found) 0.02, 0.2 | 23 2 |
| chlorantraniliprole (MRL = 1) | <0.01 (i.e. not found) 0.01 | 24 1 |
| cypermethrin (MRL = 2) | <0.02 (i.e. not found) 0.09 | 24 1 |
| deltamethrin (MRL = 0.1) | <0.02 (i.e. not found) 0.02 - 0.04 | 16 9 |
| dithiocarbamates (MRL = 2) | <0.05 (i.e. not found) 0.08 - 0.5 | 17 8 |
| fenbuconazole (MRL = 1) | <0.01 (i.e. not found) 0.02 - 0.1 | 20 5 |
| fenvalerate & esfenvalerate (all isomers) (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 24 1 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.2 - 0.6 | 22 3 |
| fluopyram (MRL = 1) | <0.01 (i.e. not found) 0.08 - 0.7 | 15 10 |
| lambda-cyhalothrin | <0.02 (i.e. not found) | 23 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---------------------|-----------------------------|----------------------------|
| (MRL = 0.2) | 0.02, 0.03 | 2 |
| pirimicarb (sum) | <0.01 (i.e. not found) | 19 |
| (MRL = 3) | 0.01 - 0.2 | 6 |
| spinosad | <0.01 (i.e. not found) | 24 |
| (MRL = 0.6) | 0.01 | 1 |
| tebuconazole | <0.01 (i.e. not found) | 12 |
| (MRL = 0.6) | 0.01 - 0.1 | 13 |
| thiacloprid | <0.01 (i.e. not found) | 21 |
| (MRL = 0.5) | 0.01 - 0.02 | 4 |

Imported (EC) samples of apricots were from France (4), Spain (21).
UK samples of apricots (5).

Residues were distributed by country of origin, as follows:

| | |
|---|-------------------------------|
| acetamiprid | Spain (1) |
| boscalid | France (1), Spain (3), UK (2) |
| captan | France (1), Spain (1) |
| chlorantraniliprole | France (1) |
| cyprodinil | UK (5) |
| cypermethrin | Spain (1) |
| deltamethrin | Spain (9) |
| dithiocarbamates | France (2), Spain (6) |
| fenbuconazole | France (3), Spain (2) |
| fludioxonil | Spain (3), UK (5) |
| fenvalerate & esfenvalerate (all isomers) | Spain (1) |
| fluopyram | Spain (10) |
| indoxacarb | UK (2) |
| lambda-cyhalothrin | Spain (2) |
| myclobutanil | UK (1) |
| pirimicarb (sum) | Spain (6) |
| pyraclostrobin | UK (2) |
| spinosad | France (1), UK (1) |
| tebuconazole | Spain (13) |
| thiacloprid | France (1), Spain (3) |

Residues were found in all of the 5 UK samples

No residues were found in 1 of the 25 Imported (EC) samples

Table 6b. APRICOTS: Residues detected in samples obtained between July and September 2016

Residues (1-6 compounds) were found in 29 of the 30 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | | Country of origin |
|--------------------|-----------|------------------------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| | | ACET | BOS | CAP | CTP | CYD | CYP | DEL | DTC | FENB | FLUD | FNV | FPYM | IDX | LCY | MYC | PIR | PYC | SPN | TBC | THC | |
| (1) | 1900/2016 | - | - | - | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - | - | - | - | France |
| | 0915/2016 | - | 2.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 1923/2016 | - | - | - | - | - | - | - | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | Spain |
| (2) | 2229/2016 | - | - | - | - | 0.3 | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - | - | UK |
| | 2312/2016 | - | - | - | - | 0.4 | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - | - | UK |
| | 0288/2016 | - | - | - | - | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | 0.1 | - | Spain |
| | 0908/2016 | - | 2.2 | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | Spain |
| | 2582/2016 | - | 2.1 | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | Spain |
| | 2944/2016 | 0.01 | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | Spain |
| (3) | 2653/2016 | - | - | - | - | 0.06 | - | - | - | - | 0.05 | - | - | - | - | - | - | - | 0.03 | - | - | UK |
| | 0624/2016 | - | - | - | 0.01 | - | - | - | 0.4 | 0.02 | - | - | - | - | - | - | - | - | - | - | - | France |
| | 0783/2016 | - | - | 0.02 | - | - | - | - | - | 0.08 | - | - | - | - | - | - | - | - | 0.01 | - | - | France |
| | 0784/2016 | - | 0.04 | - | - | - | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | 0.01 | France |
| | 0229/2016 | - | - | - | - | - | - | 0.04 | 0.4 | - | 0.6 | - | - | - | - | - | - | - | - | - | - | Spain |
| | 1862/2016 | - | - | - | - | - | - | - | - | - | - | 0.5 | - | - | - | - | 0.2 | - | - | 0.03 | - | Spain |
| | 2069/2016 | - | - | - | - | - | - | - | - | - | - | 0.6 | - | - | - | - | 0.05 | - | - | 0.02 | - | Spain |
| | 2159/2016 | - | - | 0.2 | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | 0.01 | Spain |
| | 2609/2016 | - | - | - | - | - | - | 0.03 | - | - | - | - | 0.5 | - | - | - | - | - | - | 0.03 | - | Spain |
| | 2882/2016 | - | - | - | - | - | - | 0.03 | - | - | - | - | 0.3 | - | - | - | - | - | - | 0.02 | - | Spain |
| | 2985/2016 | - | - | - | - | - | - | - | - | - | - | - | 0.6 | - | - | - | 0.05 | - | - | 0.03 | - | Spain |
| (4) | 0587/2016 | - | - | - | - | - | 0.04 | 0.5 | - | 0.3 | - | - | - | - | - | - | - | - | 0.01 | - | - | Spain |
| | 0696/2016 | - | - | - | - | - | 0.02 | 0.08 | - | - | - | - | - | - | - | - | - | - | 0.1 | 0.02 | - | Spain |
| | 0863/2016 | - | - | - | - | - | 0.03 | - | - | - | - | 0.4 | - | - | - | 0.2 | - | - | 0.05 | - | - | Spain |
| | 2165/2016 | - | - | - | - | - | 0.02 | - | - | - | - | 0.7 | - | - | - | 0.05 | - | - | 0.09 | - | - | Spain |
| | 2248/2016 | - | - | - | - | - | 0.02 | - | - | - | - | 0.6 | - | - | - | 0.01 | - | - | 0.08 | - | - | Spain |
| (5) | 0582/2016 | - | 0.1 | - | - | 0.1 | - | - | - | - | 0.2 | - | - | 0.02 | - | - | - | 0.01 | - | - | - | UK |
| | 2021/2016 | - | - | - | - | - | 0.02 | 0.3 | - | 0.2 | - | - | - | - | - | - | - | - | 0.02 | 0.02 | - | Spain |
| | 2367/2016 | - | - | - | - | - | 0.09 | - | 0.1 | 0.06 | - | - | 0.2 | - | - | - | - | - | 0.04 | - | - | Spain |
| (6) | 1969/2016 | - | 0.1 | - | - | 0.2 | - | - | - | - | 0.2 | - | - | 0.02 | - | 0.01 | - | 0.01 | - | - | - | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | | | | | |
|------|--|------|----------------|-----|------------------|------|---------------------|------|--------------|
| ACET | acetamiprid | BOS | boscalid | CAP | captan | CTP | chlorantraniliprole | CYD | cyprodinil |
| CYP | cypermethrin | DEL | deltamethrin | DTC | dithiocarbamates | FENB | fenbuconazole | FLUD | fludioxonil |
| FNV | fenvalerate & esfenvalerate (all isomers) | FPYM | fluopyram | IDX | indoxacarb | LCY | lambda-cyhalothrin | MYC | myclobutanil |
| PIR | pirimicarb (sum) | PYC | pyraclostrobin | SPN | spinosad | TBC | tebuconazole | THC | thiacloprid |

Table 6c. APRICOTS: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-------------------------------|------------------------------------|---------------------------------|
| 2,4-D (sum) (0.01) | ethion (0.01) | nitrofen (0.02) |
| 2,4-DB (0.01) | ethirimol (0.01) | nitrothal-isopropyl (0.01) |
| 2-phenylphenol (0.02) | ethofumesate (0.01) | Novaluron (0.01) |
| 6-benzyladenine (0.01) | ethoprophos (0.01) | nuarimol (0.01) |
| abamectin (sum) (0.01) | etofenprox (0.01) | ofurace (0.01) |
| acephate (0.01) | etoxazole (0.01) | Oxadiazyl (0.01) |
| acetochlor (0.01) | etridiazole (0.02) | oxadiazon (0.02) |
| acibenzolar-s-methyl (0.01) | etrimfos (0.01) | oxadixyl (0.01) |
| aclonifen (0.02) | famoxadone (0.01) | oxamyl (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxasulfuron (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxyfluorfen (0.02) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | paclobutrazol (0.01) |
| allethrin (0.02) | fenbutatin oxide (0.02) | parathion (0.01) |
| alpha-HCH (0.01) | fenhexamid (0.02) | parathion-methyl (sum) (0.01) |
| ametoctradin (0.01) | fenitrothion (0.01) | penconazole (0.01) |
| amidosulfuron (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| amitraz (0.01) | fenpropathrin (0.01) | pendimethalin (0.01) |
| asulam (0.02) | fenpropidin (0.01) | penflufen (0.01) |
| atrazine (0.01) | fenpropimorph (0.01) | pentanochlor (0.01) |
| azinphos-ethyl (0.02) | fenpyrazamine (0.01) | penthiopyrad (0.01) |
| azinphos-methyl (0.02) | fenpyroximate (0.01) | permethrin (0.01) |
| azoxystrobin (0.01) | fensulfothion (sum) (0.01) | phenmedipham (0.02) |
| BAC (sum) (0.05) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| benalaxyl (0.01) | fipronil (sum) (0.005) | phorate (partial sum) (0.01) |
| bendiocarb (0.01) | flonicamid (sum) (0.01) | phosalone (0.01) |
| benfuracarb (0.001) | fluazifop-p-butyl (sum) (0.01) | phosmet (sum) (0.01) |
| benthiavaliacarb (sum) (0.01) | fluazinam (0.01) | phosphamidon (0.01) |
| beta-HCH (0.01) | flubendiamide (0.01) | phoxim (0.01) |
| bifenox (0.02) | flucythrinate (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flufenacet (0.01) | picoxystrobin (0.01) |
| biphenyl (0.01) | flufenoxuron (0.02) | piperonyl butoxide (0.01) |
| bispyribac-sodium (0.01) | fluometuron (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.01) | fluopicolide (0.01) | pirimiphos-methyl (0.01) |
| bixafen (0.01) | fluoxastrobin (0.01) | prochloraz (parent only) (0.01) |
| bromophos-ethyl (0.01) | fluquinconazole (0.01) | procymidone (0.01) |
| bromopropylate (0.01) | flurochloridone (0.02) | profenofos (0.01) |
| bromoxynil (0.01) | fluroxypyr (sum) (0.02) | promecarb (0.01) |
| bromuconazole (0.01) | flusilazole (0.01) | prometryn (0.01) |
| bupirimate (0.01) | flutolanil (0.01) | propachlor (0.01) |
| buprofezin (0.01) | flutriafol (0.01) | propamocarb (0.01) |
| butachlor (0.01) | fluxapyroxad (0.01) | propanil (0.02) |
| butocarboxim (parent) (0.01) | folpet (0.01) | propaquizafop (0.02) |
| butoxycarboxim (0.01) | fonofos (0.01) | propargite (0.01) |
| cadusafos (0.01) | formetanate (0.01) | propetamphos (0.01) |
| carbaryl (0.01) | fosthiazate (0.01) | propham (0.02) |
| carbendazim (0.01) | furalaxyl (0.01) | propiconazole (0.01) |
| carbetamide (0.02) | furathiocarb (0.001) | propoxur (0.01) |
| carbofuran (sum) (0.001) | furmecyclox (0.01) | propyzamide (0.01) |
| carbosulfan (0.001) | halofenozide (0.01) | proquinazid (0.01) |
| carboxin (0.02) | halosulfuron-methyl (0.01) | prosulfocarb (0.01) |
| chlorbufam (0.01) | haloxyfop (sum) (0.01) | prosulfuron (0.01) |
| chlordane (sum) (0.01) | Heptachlor (sum) (0.01) | prothioconazole (0.01) |
| chlorfenapyr (0.01) | heptenophos (0.01) | prothiofos (0.01) |
| chlorfenvinphos (0.01) | hexachlorobenzene (0.01) | pymetrozine (0.01) |
| chloridazon (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.02) | hexaconazole (0.01) | pyrethrins (0.01) |

| | | |
|-------------------------------|--|---|
| chlorothalonil (0.01) | hexazinone (0.02) | pyridaben (0.01) |
| chlorpropham (sum) (0.01) | hexythiazox (0.01) | pyridalyl (0.01) |
| chlorpyrifos (0.01) | imazalil (0.02) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | imidacloprid (0.01) | pyrifenox (0.02) |
| chlorthal-dimethyl (0.01) | ioxynil (0.01) | pyrimethanil (0.01) |
| chlortoluron (0.01) | iprodione (0.01) | pyriproxifen (0.01) |
| chlozolinate (0.01) | iprovalicarb (0.01) | quassia (0.01) |
| chromafenozide (0.01) | isazophos (0.01) | quinalphos (0.01) |
| clethodim (0.02) | isocarbophos (0.01) | quinmerac (0.02) |
| clofentezine (0.01) | isofenphos (0.01) | Quinoclamine (0.01) |
| clomazone (0.01) | isofenphos-methyl (0.01) | quinoxifen (0.01) |
| clothianidin (0.01) | isoproc carb (0.01) | quintozene (sum) (0.01) |
| coumaphos (0.01) | isoprothiolane (0.01) | resmethrin (0.02) |
| cyanazine (0.02) | isoproturon (0.01) | rimsulfuron (0.01) |
| cyazofamid (0.01) | isopyrazam (0.01) | rotenone (0.01) |
| cycloate (0.01) | isoxaben (0.01) | simazine (0.02) |
| cycloxydim (0.02) | isoxaflutole (0.01) | spirodiclofen (0.01) |
| cyflufenamid (0.01) | kresoxim-methyl (0.01) | spiromesifen (0.01) |
| cyfluthrin (0.02) | lenacil (0.01) | spirotetramat (sum) (0.01) |
| cyhalofop-butyl (sum) (0.01) | lindane (0.01) | spiroxamine (0.01) |
| cymoxanil (0.01) | linuron (0.01) | sulcotrione (0.02) |
| cyproconazole (0.01) | lufenuron (0.02) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyromazine (0.02) | malathion (0.01) | tau-fluvalinate (0.01) |
| DDAC (sum) (0.05) | mandipropamid (0.01) | tebufenozide (0.01) |
| DDT (sum) (0.01) | MCPA only (0.01) | tebufenpyrad (0.01) |
| demeton-S-methyl (0.01) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | tebuthiuron (0.01) |
| desmedipham (0.02) | mecarbam (0.01) | tecnazene (0.01) |
| diafenthion (0.02) | mepanipyrim (sum) (0.01) | teflubenzuron (0.01) |
| diazinon (0.01) | mephosfolan (0.02) | tefluthrin (0.01) |
| dichlobenil (0.01) | mepronil (0.01) | tepraloxymid (0.02) |
| dichlofluanid (0.01) | mesosulfuron-methyl (0.01) | terbufos (0.01) |
| dichlofluanid and DMSA (0.01) | metaflumizone (0.02) | Terbufos (sum not defintion) (0.01) |
| dichlorprop (0.01) | metalaxyl (0.01) | terbutylazine (0.02) |
| dichlorvos (0.01) | metamitron (0.01) | terbutryn (0.02) |
| diclobutrazol (0.01) | metazachlor (0.02) | tetrachlorvinphos (0.01) |
| dicloran (0.01) | metconazole (0.01) | tetraconazole (0.01) |
| dicofol (sum) (0.01) | methabenzthiazuron (0.01) | tetradifon (0.01) |
| dicrotophos (0.01) | methacrifos (0.01) | tetramethrin (0.01) |
| diethofencarb (0.01) | methamidophos (0.01) | thiabendazole (0.02) |
| difenoconazole (0.01) | methidathion (0.01) | thiamethoxam (sum) (0.01) |
| diflubenzuron (0.01) | methiocarb (sum) (0.01) | thiophanate-methyl (0.01) |
| diflufenican (0.01) | methomyl (sum) (0.01) | tolclofos-methyl (0.01) |
| dimethenamid (0.01) | methoxychlor (0.01) | tolfenpyrad (0.01) |
| dimethoate (sum) (0.01) | methoxyfenozide (0.01) | tolyfluanid (sum) (0.01) |
| dimethomorph (0.01) | metobromuron (0.01) | triadimefon & triadimenol (0.01) |
| dimoxystrobin (0.01) | metolachlor (0.01) | triallate (0.02) |
| diniconazole (0.01) | metolcarb (0.01) | triasulfuron (0.02) |
| dinotefuran (0.01) | metosulam (0.01) | triazamate (0.01) |
| diphenylamine (0.02) | metoxuron (0.01) | triazophos (0.01) |
| disulfoton (sum) (0.01) | metrafenone (0.01) | triclopyr (0.02) |
| diuron (0.01) | metribuzin (0.02) | tricyclazole (0.01) |
| dodine (0.02) | metsulfuron-methyl (0.01) | trifloxystrobin (0.01) |
| emamectin benzoate (0.01) | mevinphos (0.01) | triflumizole (0.01) |
| endosulfan (sum) (0.01) | molinate (0.01) | triflumuron (0.01) |
| endrin (0.02) | monocrotophos (0.01) | trifluralin (0.01) |
| EPN (0.01) | monolinuron (0.01) | triforine (0.01) |
| epoxiconazole (0.01) | Monuron (0.01) | triticonazole (0.01) |
| EPTC (0.01) | napropamide (0.02) | vinclozolin (sum) (0.01) |
| ethiofencarb (parent) (0.01) | nitenpyram (0.01) | zoxamide (0.01) |

Table 7a. BEANS WITH PODS: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| GREEN BEANS UK: 6 samples analysed | | |
| azoxystrobin (MRL = 3) | <0.01 (i.e. not found) 0.03, 0.04 | 4 2 |
| cyprodinil (MRL = 2) | <0.01 (i.e. not found) 0.02 | 5 1 |
| fludioxonil (MRL = 1) | <0.01 (i.e. not found) 0.01 | 5 1 |
| iprodione (MRL = 2) | <0.01 (i.e. not found) 0.02, 0.03 | 4 2 |
| GREEN BEANS Imported (Non-EC): 6 samples analysed | | |
| azoxystrobin (MRL = 3) | <0.01 (i.e. not found) 0.01 | 5 1 |
| BAC (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.03 | 5 1 |
| chlorantraniliprole (MRL = 0.8) | <0.01 (i.e. not found) 0.04 | 5 1 |
| fluopyram (MRL = 0.9) | <0.01 (i.e. not found) 0.04 | 5 1 |
| SPECIALITY BEANS Imported (Non-EC): 11 samples analysed | | |
| acetamiprid (MRL = 0.15) | <0.01 (i.e. not found) 0.03 | 9 2 |
| azoxystrobin (MRL = 3) | <0.01 (i.e. not found) 0.8 | 10 1 |
| captan and folpet (MRL = 2) | <0.01 (i.e. not found) 0.02 | 9 2 |
| carbendazim (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 10 1 |
| chlorantraniliprole (MRL = 0.8) | <0.01 (i.e. not found) 0.02 - 0.07 | 7 4 |
| chlorfenapyr (MRL = 0.01*) | <0.01 (i.e. not found) 0.02 - 0.2 | 7 4 |
| chlorothalonil (MRL = 5) | <0.01 (i.e. not found) 0.1 | 10 1 |
| chlorpyrifos (MRL = 0.05*) | <0.01 (i.e. not found) 0.01 | 10 1 |
| cypermethrin (MRL = 0.7) | <0.01 (i.e. not found) 0.01 - 0.04 | 7 4 |
| cyromazine (MRL = 5) | <0.01 (i.e. not found) 0.6, 0.9 | 9 2 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---|----------------------------|
| deltamethrin (MRL = 0.2) | <0.01 (i.e. not found) 0.07, 0.1 | 9 2 |
| difenoconazole (MRL = 1) | <0.01 (i.e. not found) 0.09 | 10 1 |
| dithiocarbamates (MRL = 1) | <0.05 (i.e. not found) 0.06 - 0.8 1.7 - 4.8 | 4 3 4 |
| emamectin benzoate (MRL = 0.01*) | <0.01 (i.e. not found) 0.02 | 10 1 |
| fipronil (sum) (MRL = 0.005*) | <0.005 (i.e. not found) 0.006 | 10 1 |
| hexaconazole (MRL = 0.01*) | <0.01 (i.e. not found) 0.03 | 10 1 |
| imidacloprid (MRL = 2) | <0.01 (i.e. not found) 0.01 | 10 1 |
| indoxacarb (MRL = 0.5) | <0.01 (i.e. not found) 0.2 | 10 1 |
| lambda-cyhalothrin (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 10 1 |
| lufenuron (MRL = 0.02*) | <0.01 (i.e. not found) 0.05 | 10 1 |
| monocrotophos (MRL = 0.01*) | <0.01 (i.e. not found) 0.03 | 10 1 |
| profenofos (MRL = 0.01*) | <0.01 (i.e. not found) 0.04 | 10 1 |
| SPECIALITY BEANS Imported (EC): 3 samples analysed | | |
| hexythiazox (MRL = 0.5) | <0.01 (i.e. not found) 0.05 | 2 1 |
| imidacloprid (MRL = 2) | <0.01 (i.e. not found) 0.04 | 2 1 |

NOTE: * Indicates MRL is set to the Limit of Determination.

Imported (EC) samples of beans with pods were from Italy (3).

Imported (Non-EC) samples of beans with pods were from Egypt (1), India (5), Kenya (4), Malaysia (5), Morocco (1), Uganda (1).

UK samples of beans with pods (6).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|--------------------------------------|
| acetamiprid | Malaysia (2) |
| azoxystrobin | Morocco (1), Uganda (1), UK (2) |
| BAC (sum) | Morocco (1) |
| carbendazim | India (1) |
| chlorfenapyr | Malaysia (4) |
| chlorothalonil | Malaysia (1) |
| chlorpyrifos | India (1) |
| captan and folpet | India (2) |
| chlorantraniliprole | India (1), Malaysia (3), Morocco (1) |
| cyprodinil | UK (1) |

| | |
|--------------------|-------------------------------------|
| cypermethrin | India (3), Malaysia (1) |
| cyromazine | Malaysia (2) |
| deltamethrin | Malaysia (2) |
| difenoconazole | Malaysia (1) |
| dithiocarbamates | India (1), Malaysia (5), Uganda (1) |
| emamectin benzoate | Malaysia (1) |
| fipronil (sum) | Malaysia (1) |
| fludioxonil | UK (1) |
| fluopyram | Morocco (1) |
| hexaconazole | India (1) |
| hexythiazox | Italy (1) |
| indoxacarb | Malaysia (1) |
| imidacloprid | Italy (1), Malaysia (1) |
| iprodione | UK (2) |
| lambda-cyhalothrin | Malaysia (1) |
| lufenuron | Malaysia (1) |
| monocrotophos | India (1) |
| profenofos | India (1) |

No residues were found in 3 of the 6 UK green beans samples

No residues were found in 5 of the 6 Imported (Non-EC) green beans samples

No residues were found in 1 of the 11 Imported (Non-EC) speciality beans samples

No residues were found in 2 of the 3 Imported (EC) speciality beans samples

Table 7b. BEANS WITH PODS: Residues detected in samples obtained between July and September 2016

Residues (1-8 compounds) were found in 15 of the 26 samples as follows:

| Number of residues | Sample ID | Type of beans with pods | Residues found (mg/kg) | | | | | | | | | | | | | | | | |
|--------------------|-----------|-------------------------|------------------------|------|-------|------|------|-----|------|-------|------|------|------|------|-----|------|------|-----|---|
| | | | ACET | AZOX | BACSM | CBZ | CFR | CLN | CPF | CPFOL | CTP | CYD | CYP | CYZ | DEL | DIFC | DTC | EMB | |
| (1) | 1970/2016 | green beans | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | |
| | 4088/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | |
| (2) | 0235/2016 | green beans | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 3695/2016 | speciality beans | - | - | - | - | - | - | - | 0.02 | - | - | 0.04 | - | - | - | - | - | |
| | 3881/2016 | speciality beans | - | 0.8 | - | - | - | - | - | - | - | - | - | - | - | - | 0.07 | - | |
| | 4086/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| (3) | 0682/2016 | green beans | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 3875/2016 | speciality beans | - | - | - | - | 0.2 | - | - | - | - | - | - | - | 0.1 | - | 2 | - | |
| (4) | 3671/2016 | speciality beans | - | - | - | - | - | - | 0.01 | 0.02 | - | - | 0.01 | - | - | - | - | - | |
| | 2693/2016 | green beans | - | 0.01 | 0.03 | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | |
| (5) | 4079/2016 | speciality beans | - | - | - | 0.02 | - | - | - | - | - | 0.03 | - | - | - | - | 1.7 | - | |
| | 3876/2016 | speciality beans | - | - | - | - | 0.2 | - | - | - | 0.02 | - | - | 0.07 | - | 4.8 | 0.02 | - | |
| | 4112/2016 | speciality beans | 0.03 | - | - | - | - | - | - | - | - | - | 0.01 | 0.6 | - | - | 0.06 | - | |
| (6) | 3769/2016 | speciality beans | 0.03 | - | - | - | 0.02 | - | - | - | - | 0.07 | - | - | 0.9 | - | 0.09 | 0.8 | - |
| (8) | 4090/2016 | speciality beans | - | - | - | - | 0.2 | 0.1 | - | - | - | 0.05 | - | - | - | - | - | 3.3 | - |

| Number of residues | Sample ID | Type of beans with pods | Residues found (mg/kg) | | | | | | | | | | | Country of origin | | |
|--------------------|-----------|-------------------------|------------------------|------|------|-----|------|-----|------|------|-----|-----|-----|-------------------|----------|-------|
| | | | FIP | FLUD | FPYM | HCN | HEX | IDX | IMI | IPR | LCY | LFN | MON | | PFS | |
| (1) | 1970/2016 | green beans | - | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 4088/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | - | India |
| (2) | 0235/2016 | green beans | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | UK |
| | 3695/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | India | |
| | 3881/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | Uganda | |
| | 4086/2016 | speciality beans | - | - | - | - | 0.05 | - | 0.04 | - | - | - | - | - | Italy | |
| (3) | 0682/2016 | green beans | - | 0.01 | - | - | - | - | - | 0.03 | - | - | - | - | UK | |
| | 3875/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | Malaysia | |

| Number of residues | Sample ID | Type of beans with pods | Residues found (mg/kg) | | | | | | | | | | | | Country of origin | |
|--------------------|-----------|-------------------------|------------------------|------|------|------|-----|-----|------|-----|------|------|-----|------|-------------------|----------|
| | | | FIP | FLUD | FPYM | HCN | HEX | IDX | IMI | IPR | LCY | LFN | MON | PFS | | |
| (4) | 3671/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | India |
| | 2693/2016 | green beans | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | Morocco |
| (5) | 4079/2016 | speciality beans | - | - | - | 0.03 | - | - | - | - | - | - | - | - | 0.04 | India |
| | 3876/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | - | Malaysia |
| | 4112/2016 | speciality beans | 0.006 | - | - | - | - | - | - | - | - | - | - | - | - | Malaysia |
| (6) | 3769/2016 | speciality beans | - | - | - | - | - | - | - | - | - | - | - | - | - | Malaysia |
| (8) | 4090/2016 | speciality beans | - | - | - | - | - | 0.2 | 0.01 | - | 0.02 | 0.05 | - | - | - | Malaysia |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|--------------------|-------|-------------------|-------|---------------------|
| ACET | acetamiprid | AZOX | azoxystrobin | BACSM | BAC (sum) |
| CBZ | carbendazim | CFR | chlorfenapyr | CLN | chlorothalonil |
| CPF | chlorpyrifos | CPFOL | captan and folpet | CTP | chlorantraniliprole |
| CYD | cyprodinil | CYP | cypermethrin | CYZ | cyromazine |
| DEL | deltamethrin | DIFC | difenoconazole | DTC | dithiocarbamates |
| EMB | emamectin benzoate | FIP | fipronil (sum) | FLUD | fludioxonil |
| FPYM | fluopyram | HCN | hexaconazole | HEX | hexythiazox |
| IDX | indoxacarb | IMI | imidacloprid | IPR | iprodione |
| LCY | lambda-cyhalothrin | LFN | lufenuron | MON | monocrotophos |
| PFS | profenofos | | | | |

Table 7c. BEANS WITH PODS: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.02) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| 2,4-DB (0.01) | fenarimol (0.01) | oxyfluorfen (0.01) |
| 2-phenylphenol (0.01) | fenazaquin (0.01) | paclobutrazol (0.01) |
| abamectin (sum) (0.01) | fenbuconazole (0.01) | parathion (0.01) |
| acephate (0.01) | fenbutatin oxide (0.01) | parathion-methyl (sum) (0.01) |
| acetochlor (0.01) | fenhexamid (0.01) | penconazole (0.01) |
| acibenzolar-s-methyl (0.01) | fenitrothion (0.01) | pencycuron (0.01) |
| aclonifen (0.01) | fenoxycarb (0.01) | pendimethalin (0.01) |
| acrinathrin (0.01) | fenpropathrin (0.01) | penflufen (0.01) |
| alachlor (0.01) | fenpropidin (0.01) | pen thiopyrad (0.01) |
| aldicarb (sum) (0.01) | fenpropimorph (0.01) | permethrin (0.01) |
| aldrin and dieldrin (0.01) | fenpyrazamine (0.01) | phenmedipham (0.01) |
| allethrin (0.01) | fenpyroximate (0.01) | phenthoate (0.01) |
| alpha-HCH (0.01) | fensulfothion (sum) (0.01) | phorate (sum) (0.02) |
| ametoctradin (0.01) | fenthion (partial sum) (0.01) | phosalone (0.01) |
| aminocarb (0.01) | fenthion (sum) (0.01) | phosmet (sum) (0.01) |
| amitraz (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosphamidon (0.01) |
| atrazine (0.01) | flonicamid (sum) (0.01) | phoxim (0.01) |
| azinphos-ethyl (0.01) | fluazifop-p-butyl (sum) (0.01) | picolinafen (0.01) |
| azinphos-methyl (0.01) | fluazinam (0.01) | picoxystrobin (0.01) |
| benalaxyl (0.01) | flubendiamide (0.01) | piperonyl butoxide (0.01) |
| bendiocarb (0.01) | flucythrinate (0.01) | pirimicarb (sum) (0.01) |
| benthiavalicarb (sum) (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| beta-HCH (0.01) | flufenoxuron (0.01) | pirimiphos-methyl (0.01) |
| bifenthrin (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| biphenyl (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bispyribac-sodium (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| biteranol (0.05) | fluquinconazole (0.01) | prometryn (0.01) |
| boscalid (0.01) | flusilazole (0.01) | propamocarb (0.01) |
| bromopropylate (0.01) | flutolanil (0.01) | propanil (0.01) |
| bromoxynil (0.01) | flutriafol (0.01) | propaquizafop (0.01) |
| bromuconazole (0.01) | fluxapyroxad (0.01) | propargite (0.01) |
| bupirimate (0.01) | fonofos (0.01) | propetamphos (0.01) |
| buprofezin (0.01) | formetanate (0.01) | propham (0.01) |
| butocarboxim (parent) (0.01) | formothion (0.01) | propiconazole (0.01) |
| butoxycarboxim (0.01) | fosthiazate (0.01) | propoxur (0.01) |
| cadusafos (0.01) | fuberidazole (0.01) | propyzamide (0.01) |
| carbaryl (0.01) | furalaxyl (0.01) | proquinazid (0.01) |
| carbetamide (0.01) | furathiocarb (0.001) | prosulfocarb (0.01) |
| carbofuran (sum) (0.01) | halofenozide (0.01) | prosulfuron (0.01) |
| carboxin (0.01) | halosulfuron-methyl (0.01) | prothioconazole (0.01) |
| chlorbufam (0.01) | haloxyfop (sum) (0.01) | prothiofos (0.01) |
| chlordane (sum) (0.01) | Haloxfop-R methyl (0.01) | pymetrozine (0.01) |
| chlorfenvinphos (0.01) | Heptachlor (sum) (0.01) | pyraclostrobin (0.01) |
| chlorfluazuron (0.01) | heptenophos (0.01) | pyrazophos (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.01) | pyrethrins (0.01) |
| chlorobenzilate (0.01) | hexachlorocyclohexane (sum) (0.01) | pyridaben (0.01) |
| chlorotoluron (0.01) | hexaflumuron (0.01) | pyridaphenthion (0.01) |
| chlorpropham (sum) (0.05) | hexazinone (0.01) | pyrifenoxy (0.01) |
| chlorpyrifos-methyl (0.01) | imazalil (0.01) | pyrimethanil (0.01) |
| chlorthal-dimethyl (0.01) | ioxynil (0.01) | pyriproxifen (0.01) |
| chlozolinate (0.01) | iprovalicarb (0.01) | pyroxsulam (0.01) |
| chromafenozide (0.01) | isazophos (0.01) | quassia (0.01) |
| cinidon-ethyl (0.01) | isocarbophos (0.01) | quinalphos (0.01) |
| clethodim (0.01) | isofenphos (0.01) | quinmerac (0.01) |
| clofentezine (0.01) | isofenphos-methyl (0.01) | Quinoclamine (0.01) |

| | | |
|------------------------------|----------------------------|---|
| clomazone (0.01) | isoprocarb (0.01) | quinoxifen (0.01) |
| clothianidin (0.01) | isoprothiolane (0.01) | quintozene (sum) (0.01) |
| coumaphos (0.01) | isoproturon (0.01) | Quizalofop, incl. quizalofop-P (0.01) |
| crufomate (0.01) | isopyrazam (0.01) | rotenone (0.01) |
| cyanazine (0.01) | isoxaben (0.01) | simazine (0.01) |
| cyazofamid (0.01) | isoxaflutole (0.01) | spinosad (0.01) |
| cycloate (0.01) | kresoxim-methyl (0.01) | spirodiclofen (0.01) |
| cycloxydim (0.01) | lenacil (0.01) | spiromesifen (0.01) |
| cyflufenamid (0.01) | lindane (0.01) | spirotetramat (sum) (0.01) |
| cyfluthrin (0.01) | linuron (0.01) | spiroxamine (0.01) |
| cyhalofop-butyl (sum) (0.01) | malathion (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cymoxanil (0.01) | mandipropamid (0.01) | tau-fluvalinate (0.01) |
| cyproconazole (0.01) | MCPA (sum) (0.01) | tebuconazole (0.01) |
| DDAC (sum) (0.01) | MCPA only (0.01) | tebufenozide (0.01) |
| DDT (sum) (0.01) | mecarbam (0.01) | tebufenpyrad (0.01) |
| desmedipham (0.01) | mepanipyrim (sum) (0.01) | tebuthiuron (0.01) |
| desmetryn (0.01) | mepronil (0.01) | tecnazene (0.01) |
| diafenthiuron (0.01) | mesosulfuron-methyl (0.01) | teflubenzuron (0.01) |
| diazinon (0.01) | metaflumizone (0.01) | tefluthrin (0.01) |
| dichlofluanid (0.01) | metalaxyl (0.01) | terbacil (0.01) |
| dichlorprop (0.01) | metamitron (0.01) | terbufos (0.01) |
| dichlorvos (0.01) | metazachlor (0.01) | Terbufos (sum not defintion) (0.01) |
| diclobutrazol (0.01) | metconazole (0.02) | terbumeton (0.01) |
| dicloran (0.01) | methabenzthiazuron (0.01) | terbutylazine (0.01) |
| dicofol (sum) (0.02) | methacrifos (0.01) | terbutryn (0.01) |
| dicrotophos (0.01) | methamidophos (0.01) | tetrachlorvinphos (0.01) |
| diethofencarb (0.01) | methidathion (0.01) | tetraconazole (0.01) |
| diflubenzuron (0.01) | methiocarb (sum) (0.01) | tetradifon (0.01) |
| diflufenican (0.01) | methomyl (sum) (0.01) | tetramethrin (0.01) |
| dimethoate (sum) (0.01) | methoxychlor (0.01) | thiabendazole (0.01) |
| dimethomorph (0.01) | methoxyfenozide (0.01) | thiacloprid (0.01) |
| dimoxystrobin (0.01) | metobromuron (0.01) | thiamethoxam (sum) (0.01) |
| diniconazole (0.01) | metolachlor (0.01) | thiophanate-methyl (0.01) |
| dinocap (0.01) | metolcarb (0.01) | tolclofos-methyl (0.01) |
| dinotefuran (0.01) | metosulam (0.01) | tolfenpyrad (0.01) |
| dioxathion (0.01) | metoxuron (0.01) | tolyfluanid (sum) (0.01) |
| diphenylamine (0.05) | metrafenone (0.01) | triadimefon & triadimenol (0.01) |
| disulfoton (sum) (0.01) | metribuzin (0.01) | triallate (0.01) |
| diuron (0.01) | metsulfuron-methyl (0.01) | triasulfuron (0.01) |
| dodine (0.05) | mevinphos (0.01) | triazamate (0.01) |
| endosulfan (sum) (0.01) | molinate (0.01) | triazamate (acid) (0.01) |
| endrin (0.01) | monolinuron (0.01) | triazamate (ester) (0.01) |
| EPN (0.01) | Monuron (0.01) | triazophos (0.01) |
| epoxiconazole (0.01) | myclobutanil (0.01) | trichlorfon (0.01) |
| EPTC (0.01) | napropamide (0.01) | triclopyr (0.05) |
| ethiofencarb (parent) (0.01) | neburon (0.01) | tricyclazole (0.01) |
| ethion (0.01) | nitenpyram (0.01) | trifloxystrobin (0.01) |
| ethirimol (0.01) | nitrothal-isopropyl (0.01) | triflumuron (0.01) |
| ethofumesate (0.01) | nuarimol (0.01) | trifluralin (0.01) |
| ethoprophos (0.01) | ofurace (0.01) | triforine (0.05) |
| etofenprox (0.01) | Oxadiargyl (0.01) | triticonazole (0.01) |
| etoxazole (0.01) | oxadiazon (0.01) | tritosulfuron (0.01) |
| etrimfos (0.01) | oxadixyl (0.01) | vamidothion (0.01) |
| famoxadone (0.01) | oxamyl (0.01) | vinclozolin (sum) (0.01) |
| fenamidone (0.01) | oxasulfuron (0.01) | zoxamide (0.01) |

Table 8a. BREAD: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| ORDINARY BREAD: OTHER UK: 12 samples analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.02 - 0.08 | 0 12 |
| deltamethrin (No MRL) | <0.02 (i.e. not found) 0.04, 0.09 | 10 2 |
| glyphosate (MRL = 1.05) | <0.1 (i.e. not found) 0.1 - 0.3 | 6 6 |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.02, 0.03 | 10 2 |
| ORDINARY BREAD: WHITE UK: 44 samples analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.02 - 0.1 | 10 34 |
| chlorpyrifos (No MRL) | <0.01 (i.e. not found) 0.03 | 43 1 |
| flonicamid (sum) (No MRL) | <0.01 (i.e. not found) 0.06 | 43 1 |
| glyphosate (MRL = 1.05) | <0.1 (i.e. not found) 0.1 - 0.2 | 38 6 |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.01 - 0.02 | 41 3 |
| ORDINARY BREAD: WHOLEMEAL UK: 15 samples analysed | | |
| chlormequat (MRL = 2) | <0.02 (i.e. not found) 0.05 - 0.2 | 2 13 |
| glyphosate (MRL = 4.6) | <0.1 (i.e. not found) 0.1 - 0.5 | 12 3 |
| SPECIALITY BREAD: CHAPATTIS UK: 1 sample analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.08 | 0 1 |
| SPECIALITY BREAD: NAAN UK: 8 samples analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.02 - 0.04 | 0 8 |
| mandipropamid (No MRL) | <0.01 (i.e. not found) 0.05, 0.07 | 6 2 |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.02, 0.05 | 6 2 |
| SPECIALITY BREAD: PITTA UK: 8 samples analysed | | |
| BAC (sum) (No MRL) | <0.05 (i.e. not found) 0.06 | 7 1 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| chlormequat (MRL = 2) | <0.02 (i.e. not found) 0.02 - 0.1 | 0 8 |
| chlorpyrifos-methyl (MRL = 3.15) | <0.01 (i.e. not found) 0.02 | 7 1 |
| flonicamid (sum) (No MRL) | <0.01 (i.e. not found) 0.09 | 7 1 |
| pirimiphos-methyl (MRL = 3.8) | <0.01 (i.e. not found) 0.2, 0.4 | 6 2 |
| SPECIALITY BREAD: RYE UK: 1 sample analysed | | |
| BAC (sum) (No MRL) | <0.05 (i.e. not found) 0.1 | 0 1 |
| chlormequat (MRL = 0.99) | <0.02 (i.e. not found) 0.03 | 0 1 |
| deltamethrin (No MRL) | <0.02 (i.e. not found) 0.07 | 0 1 |
| SPECIALITY BREAD: SODA UK: 3 samples analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.02 - 0.08 | 0 3 |
| SPECIALITY BREAD: WRAPS UK: 12 samples analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.02 - 0.05 | 0 12 |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.01 | 11 1 |
| SPECIALITY BREAD: BRIOCHE Imported (EC): 1 sample analysed | | |
| chlorpyrifos-methyl (MRL = 0.72) | <0.01 (i.e. not found) 0.02 | 0 1 |
| cypermethrin (No MRL) | <0.02 (i.e. not found) 0.03 | 0 1 |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.05 | 0 1 |
| SPECIALITY BREAD: CIABATTA Imported (EC): 1 sample analysed | | |
| chlormequat (MRL = 0.6) | <0.02 (i.e. not found) 0.04 | 0 1 |
| chlorpyrifos-methyl (MRL = 0.72) | <0.01 (i.e. not found) 0.01 | 0 1 |
| flonicamid (sum) (No MRL) | <0.01 (i.e. not found) 0.02 | 0 1 |
| SPECIALITY BREAD: WRAPS Imported (EC): 1 sample analysed | | |
| pirimiphos-methyl (MRL = 0.38) | <0.01 (i.e. not found) 0.2 | 0 1 |

Imported (EC) samples of bread were from France (2), Spain (1).
UK samples of bread (104).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|--------------------------------|
| BAC (sum) | UK (2) |
| chlormequat | France (1), UK (92) |
| chlorpyrifos | UK (1) |
| chlorpyrifos-methyl | France (2), UK (1) |
| cypermethrin | France (1) |
| deltamethrin | UK (3) |
| flonicamid (sum) | France (1), UK (2) |
| glyphosate | UK (15) |
| mandipropamid | UK (2) |
| pirimiphos-methyl | France (1), Spain (1), UK (10) |

Residues were found in all of the 12 UK ordinary bread: other samples

No residues were found in 9 of the 44 UK ordinary bread: white samples

No residues were found in 2 of the 15 UK ordinary bread: wholemeal samples

Residues were found in all of the 1 UK speciality bread: chapattis samples

Residues were found in all of the 8 UK speciality bread: naan samples

Residues were found in all of the 8 UK speciality bread: pitta samples

Residues were found in all of the 1 UK speciality bread: rye samples

Residues were found in all of the 3 UK speciality bread: soda samples

Residues were found in all of the 12 UK speciality bread: wraps samples

Residues were found in all of the 1 Imported (EC) speciality bread: brioche samples

Residues were found in all of the 1 Imported (EC) speciality bread: ciabatta samples

Residues were found in all of the 1 Imported (EC) speciality bread: wraps samples

Table 8b. BREAD: Residues detected in retail samples purchased between July and September 2016

Residues (1-4 compounds) were found in 96 of the 107 samples as follows:

| Number of residues | Sample ID | Type of BREAD | Residues found (mg/kg) | | | | | | | | | | Country of origin | |
|--------------------|------------------------------|------------------------------|------------------------|------|-----|-------|-----|-----|-----|-----|-----|-----|-------------------|----|
| | | | BACSM | CLQ | CPF | CPFME | CYP | DEL | FLC | GLY | MDI | PIM | | |
| (1) | 0172/2016 | ordinary bread: white | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 0173/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 0239/2016 | ordinary bread: other | - | 0.08 | - | - | - | - | - | - | - | - | - | UK |
| | 0241/2016 | speciality bread: pitta | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0511/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0512/2016 | speciality bread: wraps | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0549/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 0571/2016 | ordinary bread: white | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0572/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 0576/2016 | ordinary bread: white | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0600/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 0601/2016 | ordinary bread: white | - | 0.06 | - | - | - | - | - | - | - | - | - | UK |
| | 0603/2016 | speciality bread: soda | - | 0.06 | - | - | - | - | - | - | - | - | - | UK |
| | 0639/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0640/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 0666/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 0667/2016 | ordinary bread: other | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0669/2016 | speciality bread: pitta | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 0757/2016 | speciality bread: pitta | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0758/2016 | speciality bread: wraps | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 0835/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 0839/2016 | ordinary bread: white | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 0861/2016 | speciality bread: wraps | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0912/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0913/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 0927/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0928/2016 | ordinary bread: white | - | 0.06 | - | - | - | - | - | - | - | - | - | UK |
| | 0967/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 0969/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 1347/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 1863/2016 | ordinary bread: white | - | 0.07 | - | - | - | - | - | - | - | - | - | UK |
| | 1864/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 1913/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 1926/2016 | speciality bread: pitta | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 1983/2016 | ordinary bread: wholemeal | - | 0.07 | - | - | - | - | - | - | - | - | - | UK |
| | 2037/2016 | speciality bread: naan | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| 2047/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | - | UK | |
| 2072/2016 | ordinary bread: wholemeal | - | 0.08 | - | - | - | - | - | - | - | - | - | UK | |
| 2131/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK | |
| 2144/2016 | speciality bread: wraps | - | 0.02 | - | - | - | - | - | - | - | - | - | UK | |
| 2190/2016 | ordinary bread: wholemeal | - | 0.2 | - | - | - | - | - | - | - | - | - | UK | |
| 2200/2016 | speciality bread: soda | - | 0.08 | - | - | - | - | - | - | - | - | - | UK | |
| 2235/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK | |

| Number of residues | Sample ID | Type of BREAD | Residues found (mg/kg) | | | | | | | | | | Country of origin | |
|--------------------|-----------|-----------------------------|------------------------|------|------|-------|-----|-----|------|-----|------|-----|-------------------|-------|
| | | | BACSM | CLQ | CPF | CPFME | CYP | DEL | FLC | GLY | MDI | PIM | | |
| | 2252/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | - | UK |
| | 2253/2016 | speciality bread: naan | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2349/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 2350/2016 | speciality bread: wraps | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 2351/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 2361/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 2363/2016 | speciality bread: soda | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 2364/2016 | speciality bread: naan | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2578/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2580/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 2612/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | - | - | - | - | UK |
| | 2613/2016 | ordinary bread: other | - | 0.04 | - | - | - | - | - | - | - | - | - | UK |
| | 2617/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 2857/2016 | ordinary bread: white | - | - | - | - | - | - | 0.06 | - | - | - | - | UK |
| | 2867/2016 | speciality bread: wraps | - | 0.02 | - | - | - | - | - | - | - | - | - | UK |
| | 2868/2016 | speciality bread: chapattis | - | 0.08 | - | - | - | - | - | - | - | - | - | UK |
| | 2923/2016 | speciality bread: pitta | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2924/2016 | speciality bread: naan | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2989/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2802/2016 | speciality bread: wraps | - | - | - | - | - | - | - | - | - | - | 0.2 | Spain |
| (2) | 0238/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | 0.01 | UK |
| | 0602/2016 | ordinary bread: white | - | 0.02 | 0.03 | - | - | - | - | - | - | - | - | UK |
| | 0641/2016 | speciality bread: naan | - | 0.04 | - | - | - | - | - | - | - | - | 0.05 | UK |
| | 0668/2016 | ordinary bread: other | - | 0.02 | - | - | - | - | - | 0.2 | - | - | - | UK |
| | 0763/2016 | ordinary bread: wholemeal | - | 0.05 | - | - | - | - | - | 0.5 | - | - | - | UK |
| | 0764/2016 | ordinary bread: other | - | 0.02 | - | - | - | - | - | 0.3 | - | - | - | UK |
| | 0838/2016 | ordinary bread: white | - | 0.06 | - | - | - | - | - | - | - | - | 0.01 | UK |
| | 0910/2016 | speciality bread: wraps | - | 0.03 | - | - | - | - | - | - | - | - | 0.01 | UK |
| | 0911/2016 | ordinary bread: other | - | 0.05 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 0968/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 1346/2016 | ordinary bread: other | - | 0.05 | - | - | - | - | - | - | - | - | 0.03 | UK |
| | 2035/2016 | ordinary bread: other | - | 0.07 | - | - | - | - | - | 0.2 | - | - | - | UK |
| | 2036/2016 | ordinary bread: white | - | 0.04 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 2073/2016 | ordinary bread: white | - | 0.05 | - | - | - | - | - | - | - | - | 0.02 | UK |
| | 2130/2016 | ordinary bread: wholemeal | - | 0.1 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 2192/2016 | speciality bread: naan | - | 0.03 | - | - | - | - | - | - | 0.05 | - | - | UK |
| | 2236/2016 | ordinary bread: white | - | 0.02 | - | - | - | - | - | 0.2 | - | - | - | UK |
| | 2362/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 2611/2016 | speciality bread: naan | - | 0.04 | - | - | - | - | - | - | - | - | 0.02 | UK |
| | 2665/2016 | ordinary bread: white | - | 0.03 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 2683/2016 | ordinary bread: wholemeal | - | 0.07 | - | - | - | - | - | 0.2 | - | - | - | UK |
| | 2801/2016 | speciality bread: pitta | 0.06 | 0.03 | - | - | - | - | - | - | - | - | - | UK |
| | 2831/2016 | speciality bread: pitta | - | 0.07 | - | - | - | - | - | - | - | - | 0.2 | UK |
| | 2832/2016 | speciality bread: naan | - | 0.02 | - | - | - | - | - | - | 0.07 | - | - | UK |
| | 2866/2016 | ordinary bread: other | - | 0.04 | - | - | - | - | - | 0.2 | - | - | - | UK |
| | 2921/2016 | ordinary bread: other | - | 0.05 | - | - | - | - | 0.09 | - | - | - | - | UK |
| | 2986/2016 | ordinary bread: white | - | 0.06 | - | - | - | - | - | 0.1 | - | - | - | UK |
| | 2988/2016 | ordinary bread: other | - | 0.05 | - | - | - | - | - | 0.1 | - | - | - | UK |

| Number of residues | Sample ID | Type of BREAD | Residues found (mg/kg) | | | | | | | | | | Country of origin |
|--------------------|-----------|----------------------------|------------------------|------|-----|-------|------|------|------|-----|-----|------|-------------------|
| | | | BACSM | CLQ | CPF | CPFME | CYP | DEL | FLC | GLY | MDI | PIM | |
| (3) | 2856/2016 | speciality bread: rye | 0.1 | 0.03 | - | - | - | 0.07 | - | - | - | - | UK |
| | 2922/2016 | ordinary bread: other | - | 0.06 | - | - | - | 0.04 | - | - | - | 0.02 | UK |
| | 0836/2016 | speciality bread: brioche | - | - | - | 0.02 | 0.03 | - | - | - | - | 0.05 | France |
| | 1865/2016 | speciality bread: ciabatta | - | 0.04 | - | 0.01 | - | - | 0.02 | - | - | - | France |
| (4) | 2666/2016 | speciality bread: pitta | - | 0.05 | - | 0.02 | - | - | 0.09 | - | - | 0.4 | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-------|---------------------|-----|--------------|-----|---------------|
| BACSM | BAC (sum) | CLQ | chlormequat | CPF | chlorpyrifos |
| CPFME | chlorpyrifos-methyl | CYP | cypermethrin | DEL | deltamethrin |
| FLC | flonicamid (sum) | GLY | glyphosate | MDI | mandipropamid |
| PIM | pirimiphos-methyl | | | | |

Table 8c. BREAD: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethoprophos (0.01) | nitrofen (0.02) |
| 2,4-DB (0.01) | etofenprox (0.01) | nitrothal-isopropyl (0.01) |
| 2-phenylphenol (0.02) | etoxazole (0.01) | Novaluron (0.01) |
| 6-benzyladenine (0.01) | etridiazole (0.02) | nuarimol (0.01) |
| abamectin (sum) (0.01) | etrimfos (0.01) | ofurace (0.01) |
| acephate (0.01) | famoxadone (0.01) | Oxadiargyl (0.01) |
| acetamiprid (0.01) | fenamidone (0.01) | oxadiazon (0.02) |
| acetochlor (0.01) | fenamiphos (sum) (0.01) | oxadixyl (0.01) |
| acibenzolar-s-methyl (0.01) | fenarimol (0.01) | oxamyl (0.01) |
| aclonifen (0.02) | fenazaquin (0.01) | oxasulfuron (0.01) |
| acrinathrin (0.02) | fenbuconazole (0.01) | oxydemeton-methyl (sum) (0.01) |
| alachlor (0.01) | fenbutatin oxide (0.02) | oxyfluorfen (0.02) |
| aldicarb (sum) (0.01) | fenhexamid (0.02) | paclobutrazol (0.01) |
| aldrin and dieldrin (0.01) | fenitrothion (0.01) | parathion (0.01) |
| allethrin (0.02) | fenoxycarb (0.01) | parathion-methyl (sum) (0.01) |
| alpha-HCH (0.01) | fenpropathrin (0.01) | penconazole (0.01) |
| ametoctradin (0.01) | fenpropidin (0.01) | pencycuron (0.01) |
| amidosulfuron (0.01) | fenpropimorph (0.01) | pendimethalin (0.01) |
| amitraz (0.01) | fenpyrazamine (0.01) | penflufen (0.01) |
| asulam (0.02) | fenpyroximate (0.01) | pentanochlor (0.01) |
| atrazine (0.01) | fensulfothion (sum) (0.01) | penthioopyrad (0.01) |
| azinphos-ethyl (0.02) | fenthion (partial sum) (0.01) | permethrin (0.01) |
| azinphos-methyl (0.02) | fenvalerate & esfenvalerate (all isomers) (0.01) | phenmedipham (0.02) |
| azoxystrobin (0.01) | fipronil (sum) (0.005) | phenthoate (0.01) |
| benalaxyl (0.01) | fluazifop-p-butyl (sum) (0.01) | phorate (partial sum) (0.01) |
| bendiocarb (0.01) | fluazinam (0.01) | phosalone (0.01) |
| benfuracarb (0.001) | flubendiamide (0.01) | phosmet (sum) (0.01) |
| benthiavalicarb (sum) (0.01) | flucythrinate (0.01) | phosphamidon (0.01) |
| beta-HCH (0.01) | fluidoxonil (0.01) | phoxim (0.01) |
| bifenox (0.02) | flufenacet (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flufenoxuron (0.02) | picoxystrobin (0.01) |
| biphenyl (0.01) | fluometuron (0.01) | pirimicarb (sum) (0.01) |
| bispyribac-sodium (0.01) | fluopicolide (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.01) | fluopyram (0.01) | prochloraz (parent only) (0.01) |
| bixafen (0.01) | fluoxastrobin (0.01) | procymidone (0.01) |
| boscalid (0.01) | fluquinconazole (0.01) | profenofos (0.01) |
| bromophos-ethyl (0.01) | flurochloridone (0.02) | promecarb (0.01) |
| bromopropylate (0.01) | fluroxypyr (sum) (0.02) | prometryn (0.01) |
| bromoxynil (0.01) | flusilazole (0.01) | propachlor (0.01) |
| bromuconazole (0.01) | flutolanil (0.01) | propamocarb (0.01) |
| bupirimate (0.01) | flutriafol (0.01) | propanil (0.02) |
| buprofezin (0.01) | fluxapyroxad (0.01) | propaquizafoxop (0.02) |
| butachlor (0.01) | folpet (0.01) | propargite (0.01) |
| butocarboxim (parent) (0.01) | fonofos (0.01) | propetamphos (0.01) |
| butoxycarboxim (0.01) | formetanate (0.01) | propham (0.02) |
| cadusafos (0.01) | fosthiazate (0.01) | propiconazole (0.01) |
| carbaryl (0.01) | furalaxyl (0.01) | propoxur (0.01) |
| carbendazim (0.01) | furathiocarb (0.001) | propyzamide (0.01) |
| carbetamide (0.02) | furmecyclox (0.01) | proquinazid (0.01) |
| carbofuran (sum) (0.001) | halofenozide (0.01) | prosulfocarb (0.01) |
| carbosulfan (0.001) | halosulfuron-methyl (0.01) | prosulfuron (0.01) |
| carboxin (0.02) | haloxyfop (sum) (0.01) | prothioconazole (0.01) |
| chlorantraniliprole (0.01) | Heptachlor (sum) (0.01) | prothiofos (0.01) |
| chlorbufam (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chlordane (sum) (0.01) | hexachlorobenzene (0.01) | pyraclostrobin (0.01) |
| chlorfenapyr (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chlorfenvinphos (0.01) | hexaconazole (0.01) | pyrethrins (0.01) |

chloridazon (0.01)
 chlorobenzilate (0.02)
 chlorpropham (sum) (0.01)
 chlorthal-dimethyl (0.01)
 chlortoluron (0.01)
 chlozolinate (0.01)
 chromafenozide (0.01)
 clethodim (0.02)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 cyanazine (0.02)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.02)
 cyflufenamid (0.01)
 cyfluthrin (0.02)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)
 cyproconazole (0.01)
 cyprodinil (0.02)
 cyromazine (0.02)

DDAC (sum) (0.05)
 DDT (sum) (0.01)
 demeton-S-methyl (0.01)
 desmedipham (0.02)

diafenthiuron (0.02)
 diazinon (0.01)
 dichlobenil (0.01)
 dichlofluanid (0.01)
 dichlofluanid and DMSA (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.01)
 dicrotophos (0.01)
 diethofencarb (0.01)
 difenoconazole (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethenamid (0.01)
 dimethoate (sum) (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinotefuran (0.01)
 diphenylamine (0.02)
 disulfoton (sum) (0.01)
 diuron (0.01)
 dodine (0.02)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.02)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)
 ethion (0.01)
 ethirimol (0.01)
 ethofumesate (0.01)

hexazinone (0.02)
 hexythiazox (0.01)
 imazalil (0.02)
 imidacloprid (0.01)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprodione (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocab (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)
 lambda-cyhalothrin (0.02)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)

lufenuron (0.02)
 malathion (0.01)
 MCPA only (0.01)
 MCPA, MCPB and MCPA thioethyl
 expressed (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mephosfolan (0.02)
 mepiquat (0.02)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.02)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.02)
 metconazole (0.01)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.02)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 napropamide (0.02)
 nitenpyram (0.01)

pyridaben (0.01)
 pyridalyl (0.01)
 pyridaphenthion (0.01)
 pyrifenox (0.02)
 pyrimethanil (0.01)
 pyriproxifen (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.02)
 Quinoclamine (0.01)
 quinoxifen (0.01)
 quintozone (sum) (0.01)
 resmethrin (0.02)
 rimsulfuron (0.01)
 rotenone (0.01)
 simazine (0.02)
 spinosad (0.01)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sulcotrione (0.02)
 sum of butocarboxim and
 butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)

tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 tepraloxymid (0.02)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbuthylazine (0.02)
 terbutryn (0.02)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.02)
 thiacloprid (0.01)
 thiamethoxam (sum) (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.02)
 triasulfuron (0.02)
 triazamate (0.01)
 triazophos (0.01)
 triclopyr (0.02)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumizole (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.01)
 triticonazole (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 8d. BREAD: Processing factors and MRLs used for bread

| Bread type | Pesticide | Processing factor | MRL for unprocessed grain (mg/kg) | Bread MRL (mg/kg) |
|-----------------------|---------------------|-------------------|-----------------------------------|-------------------|
| Wholemeal wheat bread | Chlormequat | 0.5 | 2 | 1 |
| | Chlorpyrifos-methyl | 0.47 | 3 | 1.4 |
| | Deltamethrin | 0.84 | 2 | 1.68 |
| | Glyphosate | 0.36 | 10 | 3.6 |
| | Pirimiphos methyl | 0.43 | 5 | 2.15 |
| Other wheat bread | Chlormequat | 0.3 | 2 | 0.6 |
| | Chlorpyrifos-methyl | 0.05 | 3 | 0.15 |
| | Deltamethrin | 0.14 | 2 | 0.28 |
| | Glyphosate | 0.105 ‡ | 10 | 1.05 |
| | Pirimiphos methyl | 0.12 | 2 | 1.9 |
| Wholemeal rye bread | Chlormequat | 0.3 | 2 | 0.6 |
| | Pirimiphos methyl | None found | 2 | 2 |
| Other rye bread | Chlormequat | 0.99 | 2 | 2 |
| | Pirimiphos methyl | None found | 5 | 5 |

‡ This factor is for milling (flour production) only, used because no baking (bread production) factor was available.

Processing factors are taken from a compendium of publically available, authoritative processing factors published by the German regulatory authority for pesticides⁴.

About processing factors

In nearly all cases the EU MRL is set for the food in its raw, unprocessed form (these foods are listed in Annex I of Regulation 396/2005), but is then applied to processed foods using appropriate processing factors. Processing factors take account of the effect of processing on the food as traded. Different forms of processing may remove, concentrate, or dilute residues, and the effect may vary depending on the food and the pesticide concerned.

Put another way, the use of processing factors enables checks that the original ingredient was compliant with MRLs. Food manufacturers should have information on the composition of their product - for instance, whether water is added/removed – that may assist in identifying appropriate processing factors and also have information on the compliance of the raw ingredients employed (in this case wheat or rye).

Suppliers and manufacturers must ensure that the raw materials and ingredients they supply or use to make processed food comply with MRLs *before processing*. It is an offence to use non-compliant food as a processed food ingredient. Processing cannot be used to make food compliant, and the compliance of processed foods should be checked using MRLs and relevant processing factors. Where processing affects residues, it is not appropriate to check results against unadjusted MRLs.

⁴ BfR compilation on processing factors for pesticide residues, dated 20.10.2011
Downloaded from <http://www.bfr.bund.de/en/pesticides-579.html> on 7 January 2014

Table 9a. CABBAGE: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--|----------------------------|
| CABBAGE, UK: 24 samples analysed | | |
| boscalid (MRL = 5) | <0.01 (i.e. not found) 0.01 | 23 1 |
| indoxacarb (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 23 1 |
| iprodione (MRL = 15) | <0.01 (i.e. not found) 0.03 | 23 1 |
| pirimicarb (sum) (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 23 1 |
| thiamethoxam (sum) (MRL = 0.02*) (MRL = 5) | <0.01 (i.e. not found) 0.01, 0.02 0.01 | 21 2 1 |

NOTE: * Indicates MRL is set to the Limit of Determination.

UK samples of cabbage (24).

Residues were distributed by country of origin, as follows:

| | |
|--------------------|--------|
| boscalid | UK (1) |
| indoxacarb | UK (1) |
| iprodione | UK (1) |
| pirimicarb (sum) | UK (1) |
| thiamethoxam (sum) | UK (3) |

No residues were found in 18 of the 24 UK samples

Table 9b. CABBAGE: Residues detected in retail samples purchased between July and September 2016

Residues (1-2 compounds) were found in 6 of the 24 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | Country of origin |
|--------------------|-----------|------------------------|------|------|------|-------|-------------------|
| | | BOS | IDX | IPR | PIR | THMSM | |
| (1) | 0234/2016 | - | 0.02 | - | - | - | UK |
| | 2050/2016 | - | - | - | - | 0.02 | UK |
| | 2051/2016 | - | - | - | - | 0.01 | UK |
| | 2620/2016 | - | - | - | - | 0.01 | UK |
| | 2774/2016 | - | - | 0.03 | - | - | UK |
| (2) | 2993/2016 | 0.01 | - | - | 0.02 | - | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-----|------------------|-------|--------------------|-----|-----------|
| BOS | boscalid | IDX | indoxacarb | IPR | iprodione |
| PIR | pirimicarb (sum) | THMSM | thiamethoxam (sum) | | |

Table 9c. CABBAGE: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.02) | etofenprox (0.01) | nitrothal-isopropyl (0.01) |
| 2,4-DB (0.01) | etoxazole (0.01) | nuarimol (0.01) |
| 2-phenylphenol (0.01) | etrimfos (0.01) | ofurace (0.01) |
| abamectin (sum) (0.01) | famoxadone (0.01) | Oxadiargyl (0.01) |
| acephate (0.01) | fenamidone (0.01) | oxadiazon (0.01) |
| acetamiprid (0.01) | fenamiphos (sum) (0.01) | oxadixyl (0.01) |
| acetochlor (0.01) | fenarimol (0.01) | oxamyl (0.01) |
| acibenzolar-s-methyl (0.01) | fenazaquin (0.01) | oxasulfuron (0.01) |
| aclonifen (0.01) | fenbuconazole (0.01) | oxydemeton-methyl (sum) (0.01) |
| acrinathrin (0.01) | fenbutatin oxide (0.01) | oxyfluorfen (0.01) |
| alachlor (0.01) | fenhexamid (0.01) | paclobutrazol (0.01) |
| aldicarb (sum) (0.01) | fenitrothion (0.01) | parathion (0.01) |
| aldrin and dieldrin (0.01) | fenoxycarb (0.01) | parathion-methyl (sum) (0.01) |
| allethrin (0.01) | fenpropathrin (0.01) | penconazole (0.01) |
| alpha-HCH (0.01) | fenpropidin (0.01) | pencycuron (0.01) |
| ametoctradin (0.01) | fenpropimorph (0.01) | pendimethalin (0.01) |
| aminocarb (0.01) | fenpyrazamine (0.01) | penflufen (0.01) |
| amitraz (0.01) | fenpyroximate (0.01) | penthiopyrad (0.01) |
| atrazine (0.01) | fensulfothion (sum) (0.01) | permethrin (0.01) |
| azinphos-ethyl (0.01) | fenthion (partial sum) (0.01) | phenmedipham (0.01) |
| azinphos-methyl (0.01) | fenthion (sum) (0.01) | phenthoate (0.01) |
| azoxystrobin (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (sum) (0.02) |
| BAC (sum) (0.01) | fipronil (sum) (0.01) | phosalone (0.01) |
| benalaxyl (0.01) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| bendiocarb (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| benthiavalicarb (sum) (0.01) | fluazinam (0.01) | phoxim (0.01) |
| beta-HCH (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| biphenyl (0.01) | fludioxonil (0.01) | piperonyl butoxide (0.01) |
| bispyribac-sodium (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.05) | flufenoxuron (0.01) | pirimiphos-methyl (0.01) |
| bromopropylate (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| bromoxynil (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bromuconazole (0.01) | fluopyram (0.01) | profenofos (0.01) |
| bupirimate (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| buprofezin (0.01) | fluquinconazole (0.01) | prometryn (0.01) |
| butocarboxim (parent) (0.01) | flusilazole (0.01) | propamocarb (0.01) |
| butoxycarboxim (0.01) | flutolanil (0.01) | propanil (0.01) |
| cadusafos (0.01) | flutriafol (0.01) | propaquizafop (0.01) |
| captan (0.01) | fluxapyroxad (0.01) | propargite (0.01) |
| carbaryl (0.01) | folpet (0.01) | propetamphos (0.01) |
| carbendazim (0.01) | fonofos (0.01) | propham (0.01) |
| carbetamide (0.01) | formetanate (0.01) | propiconazole (0.01) |
| carbofuran (sum) (0.01) | formothion (0.01) | propoxur (0.01) |
| carboxin (0.01) | fosthiazate (0.01) | propyzamide (0.01) |
| chlorantraniliprole (0.01) | fuberidazole (0.01) | proquinazid (0.01) |
| chlorbufam (0.01) | furalaxyl (0.01) | prosulfocarb (0.01) |
| chlordan (sum) (0.01) | furathiocarb (0.001) | prosulfuron (0.01) |
| chlorfenapyr (0.01) | halofenozide (0.01) | prothioconazole (0.01) |
| chlorfenvinphos (0.01) | halosulfuron-methyl (0.01) | prothiofos (0.01) |
| chlorfluazuron (0.01) | haloxyfop (sum) (0.01) | pymetrozine (0.01) |
| chloridazon (0.01) | Haloxyfop-R methyl (0.01) | pyraclostrobin (0.01) |
| chlorobenzilate (0.01) | Heptachlor (sum) (0.01) | pyrazophos (0.01) |
| chlorothalonil (0.01) | heptenophos (0.01) | pyrethrins (0.01) |
| chlorotoluron (0.01) | hexachlorobenzene (0.01) | pyridaben (0.01) |
| chlorpropham (sum) (0.05) | hexachlorocyclohexane (sum) (0.01) | pyridaphenthion (0.01) |
| chlorpyrifos (0.01) | hexaconazole (0.01) | pyrifenox (0.01) |

chlorpyrifos-methyl (0.01)
 chlorthal-dimethyl (0.01)
 chlozolinate (0.01)
 chromafenozide (0.01)
 cinidon-ethyl (0.01)
 clethodim (0.01)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 crufomate (0.01)
 cyanazine (0.01)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.01)
 cyflufenamid (0.01)
 cyfluthrin (0.01)
 cyhalofop-butyl (sum) (0.01)

 cymoxanil (0.01)
 cypermethrin (0.01)
 cyproconazole (0.01)
 cyprodinil (0.01)
 cyromazine (0.01)
 DDAC (sum) (0.01)
 DDT (sum) (0.01)
 deltamethrin (0.01)
 desmedipham (0.01)
 desmetryn (0.01)
 diazinon (0.01)
 dichlofluanid (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.02)
 dicrotophos (0.01)
 diethofencarb (0.01)
 difenoconazole (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethoate (sum) (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinocap (0.01)
 dinotefuran (0.01)
 dioxathion (0.01)
 diphenylamine (0.05)
 disulfoton (sum) (0.01)
 diuron (0.01)
 dodine (0.05)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.01)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)
 ethion (0.01)
 ethirimol (0.01)
 ethofumesate (0.01)
 ethoprophos (0.01)

 hexaflumuron (0.01)
 hexazinone (0.01)
 hexythiazox (0.01)
 imazalil (0.01)
 imidacloprid (0.01)
 ioxynil (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocab (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)

 lambda-cyhalothrin (0.01)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)
 lufenuron (0.01)
 malathion (0.01)
 mandipropamid (0.01)
 MCPA (sum) (0.01)
 MCPA only (0.01)
 mecarbam (0.01)
 mepanipirim (sum) (0.01)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.01)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.01)
 metconazole (0.02)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.01)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 napropamide (0.01)
 neburon (0.01)
 nitenpyram (0.01)

 primethanil (0.01)
 pyriproxifen (0.01)
 pyroxsulam (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.01)
 Quinoclamine (0.01)
 quinoxyfen (0.01)
 quintozene (sum) (0.01)
 Quizalofop, incl. quizalofop-P (0.01)
 rotenone (0.01)
 simazine (0.01)
 spinosad (0.01)
 spiroidiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sum of butocarboxim and
 butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)
 tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 terbacil (0.01)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbumeton (0.01)
 terbuthylazine (0.01)
 terbutryn (0.01)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.01)
 thiachloprid (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.01)
 triasulfuron (0.01)
 triazamate (0.01)
 triazamate (acid) (0.01)
 triazamate (ester) (0.01)
 triazophos (0.01)
 trichlorfon (0.01)
 triclopyr (0.05)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.05)
 triticonazole (0.01)
 tritosulfuron (0.01)
 vamidothion (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 10a. CHEESE: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|-----------------------------|----------------------------|
| GOATS UK: 22 samples analysed | | |
| BAC (sum) (MRL = 0.1) | <0.05 (i.e. not found) | 17 |
| | 0.1 | 1 |
| | 0.2 - 3.3 | 4 |
| Chlorate (MRL = 0.01) | <0.01 (i.e. not found) | 20 |
| | 0.01 | 1 |
| | 0.06 | 1 |
| DDAC (sum) (MRL = 0.1) | <0.05 (i.e. not found) | 21 |
| | 0.1 | 1 |
| SHEEP UK: 2 samples analysed | | |
| None found | - | 2 |
| BUFFALO Imported (EC): 4 samples analysed | | |
| Chlorate (MRL = 0.01) | <0.01 (i.e. not found) | 0 |
| | 0.03 - 0.6 | 4 |
| GOATS Imported (EC): 18 samples analysed | | |
| Chlorate (MRL = 0.01) | <0.01 (i.e. not found) | 9 |
| | 0.02 - 0.2 | 9 |
| DDAC (sum) (MRL = 0.1) | <0.05 (i.e. not found) | 12 |
| | 0.05 - 0.1 | 5 |
| | 0.2 | 1 |
| SHEEP Imported (EC): 2 samples analysed | | |
| None found | - | 2 |

Imported (EC) samples of cheese were from France (15), Greece (1), Italy (4), Spain (1), the Netherlands (3). UK samples of cheese (24).

Residues were distributed by country of origin, as follows:

| | |
|------------|--|
| BAC (sum) | UK (5) |
| Chlorate | France (8), Italy (4), the Netherlands (1), UK (2) |
| DDAC (sum) | France (6), UK (1) |

No residues were found in 14 of the 22 UK goats samples

No residues were found in any of the UK sheep samples

Residues were found in all of the 4 Imported (EC) buffalo samples

No residues were found in 7 of the 18 Imported (EC) goats samples

No residues were found in any of the Imported (EC) sheep samples

Table 10b. CHEESE: Residues detected in retail samples purchased between July and September 2016

Residues (1-2 compounds) were found in 23 of the 48 samples as follows:

| Number of residues | Sample ID | Type of CHEESE | Residues found (mg/kg) | | | Country of origin |
|--------------------|-----------|----------------|------------------------|------|------|-------------------|
| | | | BACSM | CLOR | DDAC | |
| (1) | 0501/2016 | GOATS | - | 0.06 | - | UK |
| | 0513/2016 | GOATS | 3.3 | - | - | UK |
| | 0558/2016 | GOATS | 1 | - | - | UK |
| | 0569/2016 | GOATS | 1.1 | - | - | UK |
| | 0605/2016 | GOATS | 0.2 | - | - | UK |
| | 1896/2016 | GOATS | 0.1 | - | - | UK |
| | 2834/2016 | GOATS | - | 0.01 | - | UK |
| | 2861/2016 | GOATS | - | - | 0.1 | UK |
| | 0502/2016 | GOATS | - | - | 0.2 | France |
| | 0642/2016 | GOATS | - | 0.04 | - | France |
| | 0772/2016 | GOATS | - | 0.05 | - | France |
| | 0774/2016 | GOATS | - | 0.2 | - | France |
| | 0971/2016 | GOATS | - | 0.2 | - | France |
| | 2870/2016 | GOATS | - | - | 0.05 | France |
| | 0825/2016 | BUFFALO | - | 0.03 | - | Italy |
| | 0841/2016 | BUFFALO | - | 0.03 | - | Italy |
| | 0931/2016 | BUFFALO | - | 0.03 | - | Italy |
| | 2925/2016 | BUFFALO | - | 0.6 | - | Italy |
| | 0656/2016 | GOATS | - | 0.02 | - | the Netherlands |
| | (2) | 0604/2016 | GOATS | - | 0.02 | 0.06 |
| 0970/2016 | | GOATS | - | 0.02 | 0.1 | France |
| 1949/2016 | | GOATS | - | 0.03 | 0.08 | France |
| 2039/2016 | | GOATS | - | 0.1 | 0.05 | France |

The abbreviations used for the pesticide names are as follows:

BACSM BAC (sum) CLOR Chlorate DDAC DDAC (sum)

Table 10c. CHEESE: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-----------------------------|---|---------------------------------|
| abamectin (sum) (0.01) | diazinon (0.002) | methidathion (0.002) |
| acephate (0.01) | dichlorvos (0.01) | methoxychlor (0.002) |
| aldrin and dieldrin (0.002) | diflubenzuron (0.01) | nitrofen (0.01) |
| alpha-HCH (0.002) | endosulfan (sum) (0.002) | parathion (0.005) |
| azamethiphos (0.01) | endrin (0.002) | parathion-methyl (sum) (0.002) |
| azinphos-ethyl (0.005) | epoxiconazole (0.01) | pendimethalin (0.005) |
| benfuracarb (0.002) | ethoprophos (0.002) | permethrin (0.005) |
| beta-HCH (0.002) | etofenprox (0.01) | phoxim (0.01) |
| bifenthrin (0.005) | famoxadone (0.01) | pirimicarb (sum) (0.002) |
| boscalid (0.01) | fenitrothion (0.002) | pirimiphos-methyl (0.002) |
| bromophos-ethyl (0.002) | fenpropimorph (0.01) | prochloraz (parent only) (0.01) |
| cadusafos (0.002) | fenthion (partial sum) (0.01) | profenofos (0.01) |
| carbaryl (0.002) | fenvalerate & esfenvalerate (all isomers) (0.002) | propetamphos (0.005) |
| carbendazim (0.01) | fluazifop-p-butyl (sum) (0.01) | propoxur (0.002) |
| carbofuran (sum) (0.002) | fluquinconazole (0.01) | prothioconazole (0.01) |
| carbosulfan (0.002) | flusilazole (0.01) | pyrazophos (0.002) |
| chlordane (sum) (0.002) | haloxyfop (sum) (0.01) | quintozene (sum) (0.002) |
| chlorfenvinphos (0.002) | Heptachlor (sum) (0.002) | resmethrin (0.01) |
| chlorobenzilate (0.002) | hexachlorobenzene (0.002) | spinosad (0.01) |
| chlorpropham (sum) (0.005) | hexachlorocyclohexane (sum) (0.002) | tau-fluvalinate (0.01) |
| chlorpyrifos (0.002) | indoxacarb (0.01) | tebuconazole (0.01) |
| chlorpyrifos-methyl (0.002) | lambda-cyhalothrin (0.005) | tecnazene (0.002) |
| coumaphos (0.002) | lindane (0.002) | teflubenzuron (0.01) |
| cyfluthrin (0.002) | malathion (0.01) | tetrachlorvinphos (0.002) |
| cypermethrin (0.005) | metaflumizone (0.01) | tetraconazole (0.01) |
| cyproconazole (0.01) | metazachlor (0.002) | thiacloprid (0.01) |
| DDT (sum) (0.002) | methacrifos (0.002) | triazophos (0.002) |
| deltamethrin (0.005) | methamidophos (0.01) | vinclozolin (sum) (0.002) |

Table 11a. FISH (PREDATOR): Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|-----------------------------|----------------------------|
| TUNA UK: 3 samples analysed | | |
| None found | - | 3 |
| SWORDFISH Imported (Non-EC): 4 samples analysed | | |
| None found | - | 4 |
| TUNA Imported (Non-EC): 40 samples analysed | | |
| None found | - | 40 |
| TUNA Imported (EC): 1 sample analysed | | |
| None found | - | 1 |

Imported (EC) samples of fish (predator) were from Spain (1).
 Imported (Non-EC) samples of fish (predator) were from China (7), Indian Ocean (16), Indonesia (3), Pacific (2), Pacific Ocean (11), Sri Lanka (1), Thailand (1), Vietnam (3).
 UK samples of fish (predator) (3).

No residues were found in any of the UK tuna samples
 No residues were found in any of the Imported (Non-EC) swordfish samples
 No residues were found in any of the Imported (Non-EC) tuna samples
 No residues were found in any of the Imported (EC) tuna samples

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-------------------------------------|---|--------------------------------|
| aldrin and dieldrin (0.002) | DDT (sum) (0.002) | nitrofen (0.002) |
| alpha-HCH (0.002) | deltamethrin (0.005) | parathion (0.002) |
| azinphos-ethyl (0.002) | diazinon (0.002) | parathion-methyl (sum) (0.002) |
| beta-HCH (0.002) | endosulfan (sum) (0.002) | permethrin (0.005) |
| bifenthrin (0.005) | endrin (0.002) | pirimiphos-methyl (0.002) |
| chlordane (animal products) (0.002) | fenvalerate & esfenvalerate (all isomers) (0.005) | profenofos (0.002) |
| chlorfenvinphos (0.002) | Heptachlor (sum) (0.002) | pyrazophos (0.002) |
| chlorobenzilate (0.002) | hexachlorobenzene (0.002) | quintozene (sum) (0.002) |
| chlorpyrifos (0.002) | lindane (0.002) | resmethrin (0.005) |
| chlorpyrifos-methyl (0.002) | methacrifos (0.002) | tecnazene (0.002) |
| cyfluthrin (0.005) | methidathion (0.002) | triazophos (0.002) |
| cypermethrin (0.005) | methoxychlor (0.002) | |

Table 12a. FISH (SEA): Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|-----------------------------|----------------------------|
| COD UK: 2 samples analysed | | |
| None found | - | 2 |
| HADDOCK UK: 1 sample analysed | | |
| None found | - | 1 |
| MONK FISH UK: 1 sample analysed | | |
| None found | - | 1 |
| COD Imported (Non-EC): 13 samples analysed | | |
| None found | - | 13 |
| HADDOCK Imported (Non-EC): 4 samples analysed | | |
| None found | - | 4 |
| HAKE Imported (Non-EC): 2 samples analysed | | |
| None found | - | 2 |
| PLAICE Imported (Non-EC): 2 samples analysed | | |
| None found | - | 2 |
| POLLOCK Imported (Non-EC): 1 sample analysed | | |
| None found | - | 1 |
| SEA BASS Imported (Non-EC): 1 sample analysed | | |
| None found | - | 1 |
| SEA BREAM Imported (Non-EC): 1 sample analysed | | |
| None found | - | 1 |
| COD Imported (EC): 1 sample analysed | | |
| None found | - | 1 |
| SEA BASS Imported (EC): 1 sample analysed | | |
| None found | - | 1 |

Imported (EC) samples of sea fish were from Aegean Sea (1), Poland (1).
 Imported (Non-EC) samples of sea fish were from Baltic Sea (1), China (3), North East Atlantic (14), Norwegian Sea (3), Pacific Ocean (1), Turkey (2).
 UK samples of sea fish (4).

No residues were found in any of the UK cod samples
 No residues were found in any of the UK haddock samples
 No residues were found in any of the UK monk fish samples
 No residues were found in any of the Imported (Non-EC) cod samples

No residues were found in any of the Imported (Non-EC) haddock samples
 No residues were found in any of the Imported (Non-EC) hake samples
 No residues were found in any of the Imported (Non-EC) plaice samples
 No residues were found in any of the Imported (Non-EC) pollock samples
 No residues were found in any of the Imported (Non-EC) sea bass samples
 No residues were found in any of the Imported (Non-EC) sea bream samples
 No residues were found in any of the Imported (EC) cod samples
 No residues were found in any of the Imported (EC) sea bass samples

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|--|---|--------------------------------|
| aldrin and dieldrin (0.002) | DDT (sum) (0.002) | nitrofen (0.002) |
| alpha-HCH (0.002) | deltamethrin (0.005) | parathion (0.002) |
| azinphos-ethyl (0.002) | diazinon (0.002) | parathion-methyl (sum) (0.002) |
| beta-HCH (0.002) | endosulfan (sum) (0.002) | permethrin (0.005) |
| bifenthrin (0.005) | endrin (0.002) | pirimiphos-methyl (0.002) |
| chlordane (animal products) (0.002) | fenvalerate & esfenvalerate (all isomers (0.005) | profenofos (0.002) |
| chlorfenvinphos (0.002) | Heptachlor (sum) (0.002) | pyrazophos (0.002) |
| chlorobenzilate (0.002) | hexachlorobenzene (0.002) | quintozene (sum) (0.002) |
| chlorpyrifos (0.002) | lindane (0.002) | resmethrin (0.005) |
| chlorpyrifos-methyl (0.002) | methacrifos (0.002) | tecnazene (0.002) |
| cyfluthrin (0.005) | methidathion (0.002) | triazophos (0.002) |
| cypermethrin (0.005) | methoxychlor (0.002) | |

Table 13a. GRAPES: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---------------------------------------|----------------------------|
| GRAPES, Imported (Non-EC): 12 samples analysed | | |
| acetamiprid (MRL = 0.5) | <0.01 (i.e. not found) 0.01 | 11 1 |
| azoxystrobin (MRL = 2) | <0.01 (i.e. not found) 0.02 - 0.07 | 9 3 |
| boscalid (MRL = 5) | <0.01 (i.e. not found) 0.01 - 0.06 | 9 3 |
| buprofezin (MRL = 1) | <0.01 (i.e. not found) 0.03 | 11 1 |
| cypermethrin (MRL = 0.5) | <0.02 (i.e. not found) 0.2 | 11 1 |
| cyprodinil (MRL = 3) | <0.02 (i.e. not found) 0.03 - 0.2 | 9 3 |
| difenoconazole (MRL = 3) | <0.01 (i.e. not found) 0.02, 0.04 | 10 2 |
| dimethomorph (MRL = 3) | <0.01 (i.e. not found) 0.04 | 11 1 |
| ethephon (MRL = 1) | <0.05 (i.e. not found) 0.2 - 0.7 | 4 8 |
| famoxadone (MRL = 2) | <0.01 (i.e. not found) 0.01 | 11 1 |
| fenhexamid (MRL = 15) | <0.02 (i.e. not found) 0.04, 0.1 | 10 2 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.05, 0.1 | 10 2 |
| fluopicolide (MRL = 2) | <0.01 (i.e. not found) 0.05 | 11 1 |
| imidacloprid (MRL = 1) | <0.01 (i.e. not found) 0.01 - 0.06 | 9 3 |
| iprodione (MRL = 20) | <0.01 (i.e. not found) 0.04, 0.1 | 10 2 |
| lambda-cyhalothrin (MRL = 0.2) | <0.02 (i.e. not found) 0.03, 0.05 | 10 2 |
| metalaxyl (MRL = 2) | <0.01 (i.e. not found) 0.01 | 11 1 |
| myclobutanil (MRL = 1) | <0.01 (i.e. not found) 0.09 | 11 1 |
| pyraclostrobin (MRL = 1) | <0.01 (i.e. not found) 0.03 | 11 1 |
| GRAPES, Imported (EC): 16 samples analysed | | |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|----------------------------------|---------------------------------------|----------------------------|
| boscalid (MRL = 5) | <0.01 (i.e. not found) 0.03 - 0.6 | 12 4 |
| chlorantraniliprole (MRL = 1) | <0.01 (i.e. not found) 0.02 - 0.06 | 13 3 |
| cyflufenamid (MRL = 0.15) | <0.01 (i.e. not found) 0.02 | 15 1 |
| cyfluthrin (MRL = 0.3) | <0.02 (i.e. not found) 0.03 | 15 1 |
| cypermethrin (MRL = 0.5) | <0.02 (i.e. not found) 0.02 - 0.07 | 13 3 |
| cyprodinil (MRL = 3) | <0.02 (i.e. not found) 0.3 | 15 1 |
| dimethomorph (MRL = 3) | <0.01 (i.e. not found) 0.01 - 0.5 | 13 3 |
| ethephon (MRL = 1) | <0.05 (i.e. not found) 0.3 | 15 1 |
| etofenprox (MRL = 5) | <0.01 (i.e. not found) 0.06, 0.07 | 14 2 |
| famoxadone (MRL = 2) | <0.01 (i.e. not found) 0.01 | 15 1 |
| fenhexamid (MRL = 15) | <0.02 (i.e. not found) 0.02 | 15 1 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.3 | 15 1 |
| indoxacarb (MRL = 2) | <0.01 (i.e. not found) 0.02, 0.08 | 14 2 |
| mandipropamid (MRL = 2) | <0.01 (i.e. not found) 0.2 | 15 1 |
| metrafenone (MRL = 7) | <0.01 (i.e. not found) 0.01 - 0.4 | 11 5 |
| myclobutanil (MRL = 1) | <0.01 (i.e. not found) 0.01 | 15 1 |
| penconazole (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 14 2 |
| proquinazid (MRL = 0.5) | <0.01 (i.e. not found) 0.03 | 15 1 |
| pyrimethanil (MRL = 5) | <0.01 (i.e. not found) 0.03 | 15 1 |
| spinosad (MRL = 0.5) | <0.01 (i.e. not found) 0.01, 0.03 | 14 2 |
| spirotetramat (sum) (MRL = 2) | <0.01 (i.e. not found) 0.01 - 0.08 | 9 7 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|-----------------------------------|---------------------------------------|----------------------------|
| spiroxamine (MRL = 1) | <0.01 (i.e. not found) 0.02 - 0.03 | 13 3 |
| tebuconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.01, 0.02 | 14 2 |
| tetraconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.03 | 15 1 |
| thiamethoxam (sum) (MRL = 0.4) | <0.01 (i.e. not found) 0.02 - 0.05 | 13 3 |
| trifloxystrobin (MRL = 3) | <0.01 (i.e. not found) 0.02 - 0.2 | 10 6 |
| zoxamide (MRL = 5) | <0.01 (i.e. not found) 0.02 - 0.1 | 13 3 |

Imported (EC) samples of grapes were from Greece (6), Italy (2), Spain (8).
Imported (Non-EC) samples of grapes were from Egypt (8), India (2), Morocco (2).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|--|
| acetamiprid | India (1) |
| azoxystrobin | Egypt (3) |
| boscalid | Egypt (2), Greece (2), India (1), Italy (1), Spain (1) |
| buprofezin | India (1) |
| cyflufenamid | Spain (1) |
| chlorantraniliprole | Greece (3) |
| cyprodinil | Egypt (3), Greece (1) |
| cyfluthrin | Greece (1) |
| cypermethrin | Egypt (1), Greece (2), Spain (1) |
| difenoconazole | Egypt (2) |
| dimethomorph | Egypt (1), Greece (1), Italy (2) |
| etofenprox | Greece (2) |
| ethephon | Egypt (8), Spain (1) |
| famoxadone | Greece (1), Morocco (1) |
| fludioxonil | Egypt (2), Italy (1) |
| fenhexamid | Morocco (2), Spain (1) |
| fluopicolide | Morocco (1) |
| indoxacarb | Greece (1), Spain (1) |
| imidacloprid | Egypt (2), Morocco (1) |
| iprodione | Egypt (2) |
| lambda-cyhalothrin | Egypt (2) |
| mandipropamid | Italy (1) |
| metrafenone | Greece (1), Italy (2), Spain (2) |
| metalaxyl | Egypt (1) |
| myclobutanil | Egypt (1), Greece (1) |
| penconazole | Spain (2) |
| proquinazid | Greece (1) |
| pyraclostrobin | India (1) |
| pyrimethanil | Spain (1) |
| spiroxamine | Greece (3) |
| spinosad | Spain (2) |
| spirotetramat (sum) | Greece (5), Spain (2) |
| tebuconazole | Greece (1), Spain (1) |
| thiamethoxam (sum) | Greece (3) |
| trifloxystrobin | Spain (6) |
| tetraconazole | Greece (1) |
| zoxamide | Italy (1), Spain (2) |

Residues were found in all of the 12 Imported (Non-EC) samples
Residues were found in all of the 16 Imported (EC) samples

Table 13b. GRAPES: Residues detected in samples obtained between July and September 2016

Residues (1-8 compounds) were found in 28 of the 28 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | | |
|--------------------|-----------|------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|------|
| | | ACET | AZOX | BOS | BUF | CFF | CTP | CYD | CYF | CYP | DIFC | DMR | EFX | ETH | FAX | FLUD | FNHX | FPC | IDX | IMI | IPR | LCY |
| (1) | 3935/2016 | - | - | - | - | - | - | - | - | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - |
| | 4052/2016 | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3826/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (2) | 3572/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | 0.7 | - | - | - | - | - | - | - | - |
| | 3632/2016 | - | - | - | - | - | - | - | - | - | - | - | - | 0.2 | - | - | - | - | - | - | - | 0.04 |
| | 3680/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.1 | 0.05 | - | - | - | - |
| | 3684/2016 | - | - | - | - | - | - | - | - | - | - | 0.5 | - | - | - | - | - | - | - | - | - | - |
| | 3631/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3776/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3817/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3937/2016 | - | - | 0.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (3) | 3634/2016 | - | - | - | - | - | - | - | - | - | - | - | - | 0.4 | - | - | - | - | - | 0.06 | - | - |
| | 4015/2016 | 0.01 | - | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3822/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | 0.04 | - | - | 0.01 | - | - |
| | 3700/2016 | - | - | - | - | - | - | - | 0.07 | - | - | - | - | - | - | - | - | - | - | 0.08 | - | - |
| | 3797/2016 | - | - | - | - | - | - | - | - | - | - | - | - | 0.3 | - | - | - | - | - | - | - | - |
| (4) | 3841/2016 | - | 0.02 | - | - | - | - | 0.03 | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - |
| | 3959/2016 | - | - | - | - | - | - | 0.08 | - | - | - | 0.04 | - | 0.4 | - | 0.05 | - | - | - | - | - | - |
| | 3573/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3808/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - |
| (5) | 4548/2016 | - | - | 0.03 | - | - | 0.02 | - | - | - | 0.01 | 0.07 | - | - | - | - | - | - | - | - | - | - |
| | 4712/2016 | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - |
| (6) | 3627/2016 | - | 0.04 | - | - | - | - | - | 0.2 | 0.02 | - | - | 0.4 | - | - | - | - | - | - | - | 0.1 | 0.03 |
| | 3655/2016 | - | - | 0.08 | - | - | - | - | - | - | 0.03 | - | - | - | - | 0.3 | - | - | - | - | - | - |
| | 3974/2016 | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (7) | 3654/2016 | - | - | 0.04 | - | - | 0.06 | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - |
| (8) | 4003/2016 | - | 0.07 | 0.03 | - | - | - | 0.2 | - | - | 0.04 | - | - | 0.4 | - | 0.1 | - | - | - | 0.01 | - | 0.05 |
| | 3648/2016 | - | - | - | - | - | 0.03 | 0.3 | 0.03 | - | - | - | 0.06 | - | 0.01 | - | - | - | - | - | - | - |

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | |
|--------------------|-----------|------------------------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|------|-----|-----|-----|
| | | ACET | AZOX | BOS | BUF | CFE | CTP | CYD | CYF | CYP | DIFC | DMR | EFX | ETH | FAX | FLUD | FNHX | FPC | IDX | IMI |

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | Country of origin | | | | | | | |
|--------------------|-----------|------------------------|------|------|------|------|------|------|------|------|------|-------|-----|-------|------|-------------------|------|-----|---|---|-----|-------|---------|
| | | MDI | MTF | MTX | MYC | PNZ | PPQ | PYC | PYM | SPI | SPN | STTPS | TBC | THMSM | TRFL | | TTZ | ZOX | | | | | |
| (1) | 3935/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt | |
| | 4052/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | India |
| | 3826/2016 | - | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | Greece |
| (2) | 3572/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3632/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3680/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Morocco |
| | 3684/2016 | - | 0.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Italy |
| | 3631/2016 | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | 0.09 | - | - | - | - | - | - | - | Spain |
| | 3776/2016 | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | Spain |
| | 3817/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.2 | - | 0.03 | - | - | - | - | - | Spain |
| | 3937/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | Spain |
| (3) | 3634/2016 | - | - | - | 0.09 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 4015/2016 | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | India |
| | 3822/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Morocco |
| | 3700/2016 | - | - | - | - | - | - | - | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | - | Spain |
| | 3797/2016 | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | 0.03 | - | - | - | - | - | - | - | Spain |
| (4) | 3841/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3959/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3573/2016 | - | 0.02 | - | - | - | - | - | - | 0.03 | - | 0.01 | - | 0.05 | - | - | - | - | - | - | - | - | Greece |
| | 3808/2016 | - | 0.01 | - | - | 0.02 | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | Spain |
| (5) | 4548/2016 | - | - | - | - | - | - | - | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - | Greece |
| | 4712/2016 | - | - | - | 0.01 | - | - | - | - | - | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - | - | Greece |
| (6) | 3627/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3655/2016 | 0.2 | 0.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.1 | - | Italy |
| | 3974/2016 | - | 0.06 | - | - | 0.02 | - | - | - | - | 0.01 | - | - | - | 0.2 | - | 0.02 | - | - | - | - | - | Spain |
| (7) | 3654/2016 | - | - | - | - | - | 0.03 | - | - | 0.02 | - | 0.06 | - | 0.02 | - | - | - | - | - | - | - | - | Greece |

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | Country of origin |
|--------------------|-----------|------------------------|-----|-----|-----|-----|-----|-----|-----|------|-----|-------|-----|-------|------|-----|------|-------------------|
| | | MDI | MTF | MTX | MYC | PNZ | PPQ | PYC | PYM | SPI | SPN | STTPS | TBC | THMSM | TRFL | TTZ | ZOX | |
| (8) | 4003/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Egypt |
| | 3648/2016 | - | - | - | - | - | - | - | - | 0.03 | - | 0.04 | - | - | - | - | 0.03 | Greece |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-------|--------------------|-------|---------------------|------|---------------------|
| ACET | acetamiprid | AZOX | azoxystrobin | BOS | boscalid |
| BUF | buprofezin | CFF | cyflufenamid | CTP | chlorantraniliprole |
| CYD | cyprodinil | CYF | cyfluthrin | CYP | cypermethrin |
| DIFC | difenoconazole | DMR | dimethomorph | EFX | etofenprox |
| ETH | ethephon | FAX | famoxadone | FLUD | fludioxonil |
| FNHX | fenhexamid | FPC | fluopicolide | IDX | indoxacarb |
| IMI | imidacloprid | IPR | iprodione | LCY | lambda-cyhalothrin |
| MDI | mandipropamid | MTF | metrafenone | MTX | metalaxyl |
| MYC | myclobutanil | PNZ | penconazole | PPQ | proquinazid |
| PYC | pyraclostrobin | PYM | pyrimethanil | SPI | spiroxamine |
| SPN | spinosad | STTPS | spirotetramat (sum) | TBC | tebuconazole |
| THMSM | thiamethoxam (sum) | TRFL | trifloxystrobin | TTZ | tetraconazole |
| ZOX | zoxamide | | | | |

Table 13c. GRAPES: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | EPTC (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethiofencarb (parent) (0.01) | nitrofen (0.02) |
| 2-phenylphenol (0.02) | ethion (0.01) | nitrothal-isopropyl (0.01) |
| 6-benzyladenine (0.01) | ethirimol (0.01) | Novaluron (0.01) |
| abamectin (sum) (0.01) | ethofumesate (0.01) | nuarimol (0.01) |
| acephate (0.01) | ethoprophos (0.01) | ofurace (0.01) |
| acetochlor (0.01) | etoxazole (0.01) | Oxadiargyl (0.01) |
| acibenzolar-s-methyl (0.01) | etridiazole (0.02) | oxadiazon (0.02) |
| aclonifen (0.02) | etrimfos (0.01) | oxadixyl (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxamyl (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxasulfuron (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | oxyfluorfen (0.02) |
| allethrin (0.02) | fenbuconazole (0.01) | paclobutrazol (0.01) |
| alpha-HCH (0.01) | fenbutatin oxide (0.02) | parathion (0.01) |
| ametoctradin (0.01) | fenitrothion (0.01) | parathion-methyl (sum) (0.01) |
| amidosulfuron (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| amitraz (0.01) | fenpropathrin (0.01) | pendimethalin (0.01) |
| asulam (0.02) | fenpropidin (0.01) | penflufen (0.01) |
| atrazine (0.01) | fenpropimorph (0.01) | pentanochlor (0.01) |
| azinphos-ethyl (0.02) | fenpyrazamine (0.01) | penthioopyrad (0.01) |
| azinphos-methyl (0.02) | fenpyroximate (0.01) | permethrin (0.01) |
| BAC (sum) (0.05) | fensulfthion (sum) (0.01) | phenmedipham (0.02) |
| benalaxyl (0.01) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| bendiocarb (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (partial sum) (0.01) |
| benfuracarb (0.001) | fipronil (sum) (0.005) | phosalone (0.01) |
| benthiavaliacarb (sum) (0.01) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| beta-HCH (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| bifenox (0.02) | fluazinam (0.01) | phoxim (0.01) |
| bifenthrin (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| biphenyl (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bispyribac-sodium (0.01) | flufenacet (0.01) | piperonyl butoxide (0.01) |
| bitertanol (0.01) | flufenoxuron (0.02) | pirimicarb (sum) (0.01) |
| bixafen (0.01) | fluometuron (0.01) | pirimiphos-ethyl (0.01) |
| bromophos-ethyl (0.01) | fluopyram (0.01) | pirimiphos-methyl (0.01) |
| bromopropylate (0.01) | fluoxastrobin (0.01) | prochloraz (parent only) (0.01) |
| bromoxynil (0.01) | fluquinconazole (0.01) | procymidone (0.01) |
| bromuconazole (0.01) | flurochloridone (0.02) | profenofos (0.01) |
| bupirimate (0.01) | fluroxypyr (sum) (0.02) | promecarb (0.01) |
| butachlor (0.01) | flusilazole (0.01) | prometryn (0.01) |
| butocarboxim (parent) (0.01) | flutolanil (0.01) | propachlor (0.01) |
| butoxycarboxim (0.01) | flutriafol (0.01) | propamocarb (0.01) |
| cadusafos (0.01) | fluxapyroxad (0.01) | propanil (0.02) |
| captan (0.02) | folpet (0.01) | propaquizafop (0.02) |
| carbaryl (0.01) | fonofos (0.01) | propargite (0.01) |
| carbendazim (0.01) | formetanate (0.01) | propetamphos (0.01) |
| carbetamide (0.02) | fosthiazate (0.01) | propham (0.02) |
| carbofuran (sum) (0.001) | furalaxyl (0.01) | propiconazole (0.01) |
| carbosulfan (0.001) | furathiocarb (0.001) | propoxur (0.01) |
| carboxin (0.02) | furmecyclox (0.01) | propyzamide (0.01) |
| chlorbufam (0.01) | halofenozide (0.01) | prosulfocarb (0.01) |
| chlordane (sum) (0.01) | halosulfuron-methyl (0.01) | prosulfuron (0.01) |
| chlorfenapyr (0.01) | haloxyfop (sum) (0.01) | prothioconazole (0.01) |
| chlorfenvinphos (0.01) | Heptachlor (sum) (0.01) | prothiofos (0.01) |
| chloridazon (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chlormequat (0.02) | hexachlorobenzene (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.02) | hexachlorocyclohexane (sum) | pyrethrins (0.01) |

| | | |
|-------------------------------|---|--|
| chlorothalonil (0.01) | (0.01) | pyridaben (0.01) |
| chlorpropham (sum) (0.01) | hexaconazole (0.01) | pyridalyl (0.01) |
| chlorpyrifos (0.01) | hexazinone (0.02) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | hexythiazox (0.01) | pyrifenox (0.02) |
| chlorthal-dimethyl (0.01) | imazalil (0.02) | pyriproxifen (0.01) |
| chlortoluron (0.01) | ioxynil (0.01) | quassia (0.01) |
| chlozolinate (0.01) | iprovalicarb (0.01) | quinalphos (0.01) |
| chromafenozide (0.01) | isazophos (0.01) | quinmerac (0.02) |
| clethodim (0.02) | isocarbophos (0.01) | Quinoclamine (0.01) |
| clofentezine (0.01) | isofenphos (0.01) | quinomethionate (0.02) |
| clomazone (0.01) | isofenphos-methyl (0.01) | quinoxifen (0.01) |
| clothianidin (0.01) | isoprocab (0.01) | quintozene (sum) (0.01) |
| coumaphos (0.01) | isoprothiolane (0.01) | resmethrin (0.02) |
| cyanazine (0.02) | isoproturon (0.01) | rimsulfuron (0.01) |
| cyazofamid (0.01) | isopyrazam (0.01) | rotenone (0.01) |
| cycloate (0.01) | isoxaben (0.01) | simazine (0.02) |
| cycloxydim (0.02) | isoxaflutole (0.01) | spirodiclofen (0.01) |
| cyhalofop-butyl (sum) (0.01) | kresoxim-methyl (0.01) | spiromesifen (0.01) |
| cymoxanil (0.01) | lenacil (0.01) | sulcotrione (0.02) |
| cyproconazole (0.01) | linuron (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyromazine (0.02) | lufenuron (0.02) | tau-fluvalinate (0.01) |
| DDAC (sum) (0.05) | malathion (0.01) | tebufenozide (0.01) |
| DDT (sum) (0.01) | MCPA only (0.01) | tebufenpyrad (0.01) |
| deltamethrin (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | tebuthiuron (0.01) |
| demeton-S-methyl (0.01) | mecarbam (0.01) | tecnazene (0.01) |
| desmedipham (0.02) | mepanipyrim (sum) (0.01) | teflubenzuron (0.01) |
| diafenthion (0.02) | mephosfolan (0.02) | tefluthrin (0.01) |
| diazinon (0.01) | mepiquat (0.02) | tepraloxym (0.02) |
| dichlobenil (0.01) | mepronil (0.01) | terbufos (0.01) |
| dichlofluanid (0.01) | mesosulfuron-methyl (0.01) | Terbufos (sum not defintion) (0.01) |
| dichlofluanid and DMSA (0.01) | metaflumizone (0.02) | terbutylazine (0.02) |
| dichlorprop (0.01) | metamitron (0.01) | terbutryn (0.02) |
| dichlorvos (0.01) | metazachlor (0.02) | tetrachlorvinphos (0.01) |
| diclobutrazol (0.01) | metconazole (0.01) | tetradifon (0.01) |
| dicloran (0.01) | methabenzthiazuron (0.01) | tetramethrin (0.01) |
| dicofol (sum) (0.01) | methacrifos (0.01) | thiabendazole (0.02) |
| dicrotophos (0.01) | methamidophos (0.01) | thiacloprid (0.01) |
| diethofencarb (0.01) | methidathion (0.01) | thiophanate-methyl (0.01) |
| diflubenzuron (0.01) | methiocarb (sum) (0.01) | tolclofos-methyl (0.01) |
| diflufenican (0.01) | methomyl (sum) (0.01) | tolfenpyrad (0.01) |
| dimethenamid (0.01) | methoxychlor (0.01) | tolyfluanid (sum) (0.01) |
| dimethoate (sum) (0.01) | methoxyfenozide (0.01) | triadimefon & triadimenol (0.01) |
| dimoxystrobin (0.01) | metobromuron (0.01) | triallate (0.02) |
| diniconazole (0.01) | metolachlor (0.01) | triasulfuron (0.02) |
| dinotefuran (0.01) | metolcarb (0.01) | triazamate (0.01) |
| diphenylamine (0.02) | metosulam (0.01) | triazophos (0.01) |
| disulfoton (sum) (0.01) | metoxuron (0.01) | triclopyr (0.02) |
| dithiocarbamates (0.05) | metribuzin (0.02) | tricyclazole (0.01) |
| diuron (0.01) | metsulfuron-methyl (0.01) | triflumizole (0.01) |
| dodine (0.02) | mevinphos (0.01) | triflumuron (0.01) |
| emamectin benzoate (0.01) | molinate (0.01) | trifluralin (0.01) |
| endosulfan (sum) (0.01) | monocrotophos (0.01) | triforine (0.01) |
| endrin (0.02) | monolinuron (0.01) | triticonazole (0.01) |
| EPN (0.01) | Monuron (0.01) | vinclozolin (sum) (0.01) |
| epoxiconazole (0.01) | napropamide (0.02) | |

Table 14a. INFANT FOOD (FRUIT & VEGETABLE BASED): Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|-----------------------------|----------------------------|
| INFANT FOOD (FRUIT OR VEG BASED), UK: 7 samples analysed | | |
| None found | - | 7 |
| INFANT FOOD (FRUIT OR VEG BASED), Imported (EC): 59 samples analysed | | |
| None found | - | 59 |

Imported (EC) samples of infant food (fruit or veg based) were from Austria (3), EU (23), France (8), Germany (20), Hungary (1), Ireland (3), Poland (1).

UK samples of infant food (fruit or veg based) (7).

No residues were found in any of the UK samples

No residues were found in any of the Imported (EC) samples

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethion (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethirimol (0.01) | nitrofen (0.003) |
| 2-phenylphenol (0.02) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| 6-benzyladenine (0.01) | ethoprophos (0.008) | Novaluron (0.01) |
| abamectin (sum) (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acephate (0.01) | etoxazole (0.01) | ofurace (0.01) |
| acetamiprid (0.01) | etridiazole (0.02) | omethoate (only) (0.003) |
| acetochlor (0.01) | etrimfos (0.01) | Oxadiazon (0.01) |
| acibenzolar-s-methyl (0.01) | ETU (0.006) | oxadiazon (0.02) |
| aclonifen (0.02) | famoxadone (0.01) | oxadixyl (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxamyl (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxasulfuron (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxydemeton-methyl (sum) (0.006) |
| aldrin (0.003) | fenazaquin (0.01) | oxyfluorfen (0.02) |
| aldrin and dieldrin (0.003) | fenbuconazole (0.01) | paclobutrazol (0.01) |
| allethrin (0.02) | fenbutatin oxide (0.02) | parathion (0.01) |
| alpha-HCH (0.01) | fenhexamid (0.02) | parathion-methyl (sum) (0.01) |
| ametoctradin (0.01) | fenitrothion (0.01) | penconazole (0.01) |
| amidosulfuron (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| amitraz (0.01) | fenpropathrin (0.01) | pendimethalin (0.01) |
| asulam (0.02) | fenpropidin (0.01) | penflufen (0.01) |
| atrazine (0.01) | fenpropimorph (0.01) | pentanochlor (0.01) |
| azinphos-ethyl (0.02) | fenpyrazamine (0.01) | penthiopyrad (0.01) |
| azinphos-methyl (0.02) | fenpyroximate (0.01) | permethrin (0.01) |
| azoxystrobin (0.01) | fensulfothion (sum) (0.003) | phenmedipham (0.02) |
| BAC (sum) (0.01) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| benalaxyl (0.01) | fentins (0.003) | phorate (partial sum) (0.02) |
| bendiocarb (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosalone (0.01) |
| benfuracarb (0.001) | fipronil (infant food) (0.004) | phosmet (sum) (0.01) |
| benthiavalicarb (sum) (0.01) | flonicamid (sum) (0.01) | phosphamidon (0.01) |
| beta-HCH (0.01) | fluazifop-p-butyl (sum) (0.01) | phoxim (0.01) |
| bifenox (0.02) | fluazinam (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flubendiamide (0.01) | picoxystrobin (0.01) |
| biphenyl (0.01) | flucythrinate (0.01) | piperonyl butoxide (0.01) |
| bispyribac-sodium (0.01) | fludioxonil (0.01) | pirimicarb (sum) (0.01) |
| bitertanol (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bixafen (0.01) | flufenoxuron (0.02) | pirimiphos-methyl (0.01) |
| boscalid (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |

| | | |
|-------------------------------|--|---|
| bromophos-ethyl (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bromopropylate (0.01) | fluopyram (0.01) | profenofos (0.01) |
| bromoxynil (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| bromuconazole (0.01) | fluquinconazole (0.01) | prometryn (0.01) |
| bupirimate (0.01) | flurochloridone (0.02) | propachlor (0.01) |
| buprofezin (0.01) | fluroxypyr (sum) (0.02) | propamocarb (0.01) |
| butachlor (0.01) | flusilazole (0.01) | propanil (0.02) |
| butocarboxim (parent) (0.01) | flutolanil (0.01) | propaquizafop (0.02) |
| butoxycarboxim (0.01) | flutriafol (0.01) | propargite (0.01) |
| cadusafos (0.006) | fluxapyroxad (0.01) | propetamphos (0.01) |
| captan (0.02) | folpet (0.01) | propham (0.02) |
| carbaryl (0.01) | fonofos (0.01) | propiconazole (0.01) |
| carbendazim (0.01) | formetanate (0.01) | propineb (sum) (0.006) |
| carbetamide (0.02) | fosthiazate (0.01) | propoxur (0.01) |
| carbofuran (sum) (0.001) | furalaxyl (0.01) | propyzamide (0.01) |
| carbosulfan (0.001) | furathiocarb (0.001) | proquinazid (0.01) |
| carboxin (0.02) | furmecyclox (0.01) | prosulfocarb (0.01) |
| chlorantraniliprole (0.01) | halofenozide (0.01) | prosulfuron (0.01) |
| chlorbufam (0.01) | halosulfuron-methyl (0.01) | prothioconazole (0.01) |
| chlordan (sum) (0.01) | haloxyfop (sum) (0.003) | prothiofos (0.01) |
| chlorfenapyr (0.01) | Heptachlor (sum) (0.003) | PTU (0.006) |
| chlorfenvinphos (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.003) | pyraclostrobin (0.01) |
| chlormequat (0.02) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.02) | hexaconazole (0.01) | pyrethrins (0.01) |
| chlorothalonil (0.01) | hexazinone (0.02) | pyridaben (0.01) |
| chlorpropham (sum) (0.01) | hexythiazox (0.01) | pyridalyl (0.01) |
| chlorpyrifos (0.01) | imazalil (0.02) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | imidacloprid (0.01) | pyrifenox (0.02) |
| chlorthal-dimethyl (0.01) | indoxacarb (0.01) | pyrimethanil (0.01) |
| chlortoluron (0.01) | ioxynil (0.01) | pyriproxifen (0.01) |
| chlozolinate (0.01) | iprodione (0.01) | quassia (0.01) |
| chromafenozide (0.01) | iprovalicarb (0.01) | quinalphos (0.01) |
| clethodim (0.02) | isazophos (0.01) | quinmerac (0.02) |
| clofentezine (0.01) | isocarbophos (0.01) | Quinoclamine (0.01) |
| clomazone (0.01) | isofenphos (0.01) | quinomethionate (0.02) |
| clothianidin (0.01) | isofenphos-methyl (0.01) | quinoxifen (0.01) |
| coumaphos (0.01) | isoprocab (0.01) | quintozene (sum) (0.01) |
| cyanazine (0.02) | isoprothiolane (0.01) | resmethrin (0.02) |
| cyazofamid (0.01) | isoproturon (0.01) | rimsulfuron (0.01) |
| cycloate (0.01) | isopyrazam (0.01) | rotenone (0.01) |
| cycloxydim (0.02) | isoxaben (0.01) | simazine (0.02) |
| cyflufenamid (0.01) | isoxaflutole (0.01) | spinosad (0.01) |
| cyfluthrin (0.02) | kresoxim-methyl (0.01) | spirodiclofen (0.01) |
| cyhalofop-butyl (sum) (0.01) | lambda-cyhalothrin (0.02) | spiromesifen (0.01) |
| cymoxanil (0.01) | lenacil (0.01) | spirotetramat (sum) (0.01) |
| cypermethrin (0.02) | lindane (0.01) | spiroxamine (0.01) |
| cyproconazole (0.01) | linuron (0.01) | sulcotrione (0.02) |
| cyprodinil (0.02) | lufenuron (0.02) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyromazine (0.02) | malathion (0.01) | tau-fluvalinate (0.01) |
| DDAC (sum) (0.01) | mandipropamid (0.01) | tebuconazole (0.01) |
| DDT (sum) (0.01) | MCPA only (0.01) | tebufenozide (0.01) |
| deltamethrin (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | tebufenpyrad (0.01) |
| demeton-S-methyl (0.006) | mecarbam (0.01) | tebuthiuron (0.01) |
| desmedipham (0.02) | mepanipyrim (sum) (0.01) | tecnazene (0.01) |
| diafenthiuron (0.02) | mephosfolan (0.02) | teflubenzuron (0.01) |
| diazinon (0.01) | mepiquat (0.02) | tefluthrin (0.01) |
| dichlobenil (0.01) | mepronil (0.01) | tepraloxydim (0.02) |
| dichlofluanid (0.01) | mesosulfuron-methyl (0.01) | terbufos (sum) (0.006) |
| dichlofluanid and DMSA (0.01) | metaflumizone (0.02) | terbuthylazine (0.02) |
| dichlorprop (0.01) | metalaxyl (0.01) | terbutryn (0.02) |

| | | |
|------------------------------|---------------------------|----------------------------------|
| dichlorvos (0.01) | metamitron (0.01) | tetrachlorvinphos (0.01) |
| diclobutrazol (0.01) | metazachlor (0.02) | tetraconazole (0.01) |
| dicloran (0.01) | metconazole (0.01) | tetradifon (0.01) |
| dicofol (sum) (0.01) | methabenzthiazuron (0.01) | tetramethrin (0.01) |
| dicrotophos (0.01) | methacrifos (0.01) | thiabendazole (0.02) |
| Dieldrin (only) (0.003) | methamidophos (0.01) | thiacloprid (0.01) |
| diethofencarb (0.01) | methidathion (0.01) | thiamethoxam (sum) (0.01) |
| difenoconazole (0.01) | methiocarb (sum) (0.01) | thiophanate-methyl (0.01) |
| diflubenzuron (0.01) | methomyl (sum) (0.01) | tolclofos-methyl (0.01) |
| diflufenican (0.01) | methoxychlor (0.01) | tolfenpyrad (0.01) |
| dimethenamid (0.01) | methoxyfenozide (0.01) | tolyfluanid (sum) (0.01) |
| dimethoate (only) (0.01) | metobromuron (0.01) | triadimefon & triadimenol (0.01) |
| dimethomorph (0.01) | metolachlor (0.01) | triallate (0.02) |
| dimoxystrobin (0.01) | metolcarb (0.01) | triasulfuron (0.02) |
| diniconazole (0.01) | metosulam (0.01) | triazamate (0.01) |
| dinotefuran (0.01) | metoxuron (0.01) | triazophos (0.01) |
| diphenylamine (0.02) | metrafenone (0.01) | triclopyr (0.02) |
| disulfoton (sum) (0.003) | metribuzin (0.02) | tricyclazole (0.01) |
| diuron (0.01) | metsulfuron-methyl (0.01) | trifloxystrobin (0.01) |
| dodine (0.02) | mevinphos (0.01) | triflumizole (0.01) |
| emamectin benzoate (0.01) | molinate (0.01) | triflumuron (0.01) |
| endosulfan (sum) (0.01) | monocrotophos (0.01) | trifluralin (0.01) |
| endrin (0.003) | monolinuron (0.01) | triforine (0.01) |
| EPN (0.01) | Monuron (0.01) | triticonazole (0.01) |
| epoxiconazole (0.01) | myclobutanil (0.01) | vinclozolin (sum) (0.01) |
| EPTC (0.01) | napropamide (0.02) | zoxamide (0.01) |
| ethiofencarb (parent) (0.01) | | |

Table 15a. JAM: Residues detected in retail samples purchased between June and August 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---------------------------------------|----------------------------|
| JAM, UK: 45 samples analysed | | |
| azoxystrobin (No MRL) | <0.01 (i.e. not found) 0.01 - 0.08 | 41 4 |
| BAC (sum) (MRL = 0.1) | <0.05 (i.e. not found) 0.8 | 44 1 |
| boscalid (No MRL) | <0.01 (i.e. not found) 0.01 - 0.06 | 32 13 |
| carbendazim (No MRL) | <0.01 (i.e. not found) 0.02 | 44 1 |
| clofentezine (No MRL) | <0.01 (i.e. not found) 0.03 | 44 1 |
| cyprodinil (No MRL) | <0.02 (i.e. not found) 0.02 - 0.3 | 38 7 |
| fenhexamid (No MRL) | <0.02 (i.e. not found) 0.06 - 0.2 | 39 6 |
| fenpyroximate (No MRL) | <0.01 (i.e. not found) 0.01 | 44 1 |
| fludioxonil (No MRL) | <0.01 (i.e. not found) 0.01 - 0.04 | 37 8 |
| fluopyram (No MRL) | <0.01 (i.e. not found) 0.03, 0.05 | 43 2 |
| imidacloprid (No MRL) | <0.01 (i.e. not found) 0.01 - 0.03 | 42 3 |
| indoxacarb (No MRL) | <0.01 (i.e. not found) 0.01 | 43 2 |
| myclobutanil (No MRL) | <0.01 (i.e. not found) 0.01 | 43 2 |
| pirimicarb (sum) (No MRL) | <0.01 (i.e. not found) 0.01 | 44 1 |
| pyrimethanil (No MRL) | <0.01 (i.e. not found) 0.01 - 0.02 | 35 10 |
| trifloxystrobin (No MRL) | <0.01 (i.e. not found) 0.02 | 43 2 |
| JAM, Imported (EC): 3 samples analysed | | |
| None found | - | 3 |

Imported (EC) samples of jam were from France (3).
UK samples of jam (45).

Residues were distributed by country of origin, as follows:
azoxystrobin UK (4)

| | |
|------------------|---------|
| BAC (sum) | UK (1) |
| boscalid | UK (13) |
| carbendazim | UK (1) |
| clofentazine | UK (1) |
| cyprodinil | UK (7) |
| fludioxonil | UK (8) |
| fenhexamid | UK (6) |
| fenpyroximate | UK (1) |
| fluopyram | UK (2) |
| indoxacarb | UK (2) |
| imidacloprid | UK (3) |
| myclobutanil | UK (2) |
| pirimicarb (sum) | UK (1) |
| pyrimethanil | UK (10) |
| trifloxystrobin | UK (2) |

No residues were found in 19 of the 45 UK samples

No residues were found in any of the Imported (EC) samples

Table 15b. JAM: Residues detected in retail samples purchased between June and August 2016

Residues (1-6 compounds) were found in 26 of the 48 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | Country of origin |
|--------------------|-----------|------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| | | AZOX | BACSM | BOS | CBZ | CLF | CYD | FLUD | FNHX | FNPY | FPYM | IDX | IMI | MYC | PIR | PYM | TRFL | |
| (1) | 0698/2016 | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | UK | |
| | 0704/2016 | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | UK | |
| | 0746/2016 | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | UK | |
| | 0752/2016 | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | UK | |
| | 0754/2016 | - | - | - | - | - | 0.01 | - | - | - | - | - | - | - | - | - | UK | |
| | 1711/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | UK | |
| | 1797/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | UK | |
| | 2700/2016 | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | UK | |
| | 2722/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | UK | |
| | 2728/2016 | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | UK | |
| | 2729/2016 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | UK | |
| | 2772/2016 | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | UK | |
| (2) | 0705/2016 | - | - | - | 0.02 | - | - | - | - | 0.01 | - | - | - | - | - | - | UK | |
| | 0745/2016 | - | - | - | - | - | - | - | - | - | 0.05 | - | - | - | - | 0.02 | UK | |
| | 0782/2016 | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | 0.02 | UK | |
| | 1710/2016 | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | 0.02 | - | UK | |
| | 2724/2016 | - | - | - | - | - | - | - | 0.06 | - | - | - | - | - | 0.02 | - | UK | |
| (4) | 0703/2016 | - | - | - | - | - | 0.03 | 0.03 | 0.2 | - | - | 0.01 | - | - | - | - | UK | |
| | 0744/2016 | 0.08 | 0.8 | 0.01 | - | - | - | - | 0.06 | - | - | - | - | - | - | - | UK | |
| | 2651/2016 | - | - | 0.02 | - | - | 0.04 | 0.02 | - | - | - | - | - | - | 0.01 | - | UK | |
| | 2723/2016 | 0.01 | - | - | - | - | 0.06 | 0.04 | - | - | - | - | - | - | 0.02 | - | UK | |
| (5) | 0734/2016 | 0.01 | - | 0.02 | - | - | 0.04 | 0.03 | - | - | - | - | - | - | 0.01 | - | UK | |
| | 1796/2016 | - | - | 0.06 | - | - | 0.3 | 0.02 | 0.2 | - | - | - | - | - | 0.01 | - | UK | |
| | 2698/2016 | 0.01 | - | 0.02 | - | - | 0.05 | 0.04 | - | - | - | - | - | - | 0.01 | - | UK | |
| | 2773/2016 | - | - | 0.02 | - | - | - | - | 0.1 | - | - | - | 0.01 | 0.01 | 0.02 | - | UK | |
| (6) | 0701/2016 | - | - | 0.01 | - | - | 0.02 | 0.02 | 0.2 | - | - | 0.01 | - | - | 0.01 | - | UK | |

The abbreviations used for the pesticide names are as follows:

| | | | | | | | | | | | |
|------|--------------|-------|------------------|------|---------------|------|-----------------|-----|--------------|-----|--------------|
| AZOX | azoxystrobin | BACSM | BAC (sum) | BOS | boscalid | CBZ | carbendazim | CLF | clofentezine | CYD | cyprodinil |
| FLUD | fludioxonil | FNHX | fenhexamid | FNPY | fenpyroximate | FPYM | fluopyram | IDX | indoxacarb | IMI | imidacloprid |
| MYC | myclobutanil | PIR | pirimicarb (sum) | PYM | pyrimethanil | TRFL | trifloxystrobin | | | | |

Table 15c. JAM: Residues sought but not found in retail samples purchased between June and August 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethirimol (0.01) | Novaluron (0.01) |
| 2,4-DB (0.01) | ethofumesate (0.01) | nuarimol (0.01) |
| 2-phenylphenol (0.02) | ethoprophos (0.01) | ofurace (0.01) |
| 6-benzyladenine (0.01) | etofenprox (0.01) | Oxadiargyl (0.01) |
| abamectin (sum) (0.01) | etoxazole (0.01) | oxadiazon (0.02) |
| acephate (0.01) | etridiazole (0.02) | oxadixyl (0.01) |
| acetamiprid (0.01) | etrimfos (0.01) | oxamyl (0.01) |
| acetochlor (0.01) | famoxadone (0.01) | oxasulfuron (0.01) |
| acibenzolar-s-methyl (0.01) | fenamidone (0.01) | oxydemeton-methyl (sum) (0.01) |
| aclonifen (0.02) | fenamiphos (sum) (0.01) | oxyfluorfen (0.02) |
| acrinathrin (0.02) | fenarimol (0.01) | paclobutrazol (0.01) |
| alachlor (0.01) | fenazaquin (0.01) | parathion (0.01) |
| aldicarb (sum) (0.01) | fenbuconazole (0.01) | parathion-methyl (sum) (0.01) |
| aldrin and dieldrin (0.01) | fenbutatin oxide (0.02) | penconazole (0.01) |
| allethrin (0.02) | fenitrothion (0.01) | pencycuron (0.01) |
| alpha-HCH (0.01) | fenoxycarb (0.01) | pendimethalin (0.01) |
| ametoctradin (0.01) | fenpropathrin (0.01) | penflufen (0.01) |
| amidosulfuron (0.01) | fenpropidin (0.01) | pentanochlor (0.01) |
| amitraz (0.01) | fenpropimorph (0.01) | pen thiopyrad (0.01) |
| asulam (0.02) | fenpyrazamine (0.01) | permethrin (0.01) |
| atrazine (0.01) | fensulfthion (sum) (0.01) | phenmedipham (0.02) |
| azinphos-ethyl (0.02) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| azinphos-methyl (0.02) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (partial sum) (0.01) |
| benalaxyl (0.01) | fipronil (sum) (0.005) | phosalone (0.01) |
| bendiocarb (0.01) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| benfuracarb (0.001) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| benthiavdicarb (sum) (0.01) | fluazinam (0.01) | phoxim (0.01) |
| beta-HCH (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| bifenox (0.02) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bifenthrin (0.01) | flufenacet (0.01) | piperonyl butoxide (0.01) |
| biphenyl (0.01) | flufenoxuron (0.02) | pirimiphos-ethyl (0.01) |
| bispyribac-sodium (0.01) | fluometuron (0.01) | pirimiphos-methyl (0.01) |
| bitertanol (0.01) | fluopicolide (0.01) | prochloraz (parent only) (0.01) |
| bixafen (0.01) | fluoxastrobin (0.01) | procymidone (0.01) |
| bromophos-ethyl (0.01) | fluquinconazole (0.01) | profenofos (0.01) |
| bromopropylate (0.01) | flurochloridone (0.02) | promecarb (0.01) |
| bromoxynil (0.01) | fluroxypyr (sum) (0.02) | prometryn (0.01) |
| bromuconazole (0.01) | flusilazole (0.01) | propachlor (0.01) |
| bupirimate (0.01) | flutolanil (0.01) | propamocarb (0.01) |
| buprofezin (0.01) | flutriafol (0.01) | propanil (0.02) |
| butachlor (0.01) | fluxapyroxad (0.01) | propaquizafoxop (0.02) |
| butocarboxim (parent) (0.01) | folpet (0.01) | propargite (0.01) |
| butoxycarboxim (0.01) | fonofos (0.01) | propetamphos (0.01) |
| cadusafos (0.01) | formetanate (0.01) | propham (0.02) |
| captan (0.02) | fosthiazate (0.01) | propiconazole (0.01) |
| carbaryl (0.01) | furalaxyl (0.01) | propoxur (0.01) |
| carbetamide (0.02) | furathiocarb (0.001) | propyzamide (0.01) |
| carbofuran (sum) (0.001) | furmecyclox (0.01) | proquinazid (0.01) |
| carbosulfan (0.001) | halofenozide (0.01) | prosulfocarb (0.01) |
| carboxin (0.02) | halosulfuron-methyl (0.01) | prosulfuron (0.01) |
| chlorantraniliprole (0.01) | haloxyfop (sum) (0.01) | prothioconazole (0.01) |
| chlorbufam (0.01) | Heptachlor (sum) (0.01) | prothiofos (0.01) |
| chlordane (sum) (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chlorfenapyr (0.01) | hexachlorobenzene (0.01) | pyraclostrobin (0.01) |
| chlorfenvinphos (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chloridazon (0.01) | hexaconazole (0.01) | pyrethrins (0.01) |

chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (0.01)
chlortoluron (0.01)
chlozolinate (0.01)
chromafenozide (0.01)
clethodim (0.02)
clomazone (0.01)
clothianidin (0.01)
coumaphos (0.01)
cyanazine (0.02)
cyazofamid (0.01)
cycloate (0.01)
cycloxydim (0.02)
cyflufenamid (0.01)
cyfluthrin (0.02)
cyhalofop-butyl (sum) (0.01)
cymoxanil (0.01)
cypermethrin (0.02)
cyproconazole (0.01)

cyromazine (0.02)
DDAC (sum) (0.05)
DDT (sum) (0.01)

deltamethrin (0.02)
demeton-S-methyl (0.01)
desmedipham (0.02)
diafenthiuron (0.02)
diazinon (0.01)
dichlobenil (0.01)
dichlofluanid (0.01)
dichlofluanid and DMSA (0.01)
dichlorprop (0.01)
dichlorvos (0.01)
diclobutrazol (0.01)
dicloran (0.01)
dicofol (sum) (0.01)
dicrotophos (0.01)
diethofencarb (0.01)
difenoconazole (0.01)
diflubenzuron (0.01)
diflufenican (0.01)
dimethenamid (0.01)
dimethoate (sum) (0.01)
dimethomorph (0.01)
dimoxystrobin (0.01)
diniconazole (0.01)
dinotefuran (0.01)
diphenylamine (0.02)
disulfoton (sum) (0.01)
diuron (0.01)
dodine (0.02)
emamectin benzoate (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)
ethiofencarb (parent) (0.01)
ethion (0.01)

hexazinone (0.02)
hexythiazox (0.01)
imazalil (0.02)
ioxynil (0.01)
iprodione (0.01)
iprovalicarb (0.01)
isazophos (0.01)
isocarbophos (0.01)
isofenphos (0.01)
isofenphos-methyl (0.01)
isoprocab (0.01)
isoprothiolane (0.01)
isoproturon (0.01)
isopyrazam (0.01)
isoxaben (0.01)
isoxaflutole (0.01)
kresoxim-methyl (0.01)
lambda-cyhalothrin (0.02)
lenacil (0.01)
lindane (0.01)
linuron (0.01)
lufenuron (0.02)
malathion (0.01)

mandipropamid (0.01)
MCPA only (0.01)
MCPA, MCPB and MCPA thioethyl
expressed (0.01)
mecarbam (0.01)
mepanipyrim (sum) (0.01)
mephosfolan (0.02)
mepronil (0.01)
mesosulfuron-methyl (0.01)
metaflumizone (0.02)
metalaxyl (0.01)
metamitron (0.01)
metazachlor (0.02)
metconazole (0.01)
methabenzthiazuron (0.01)
methacrifos (0.01)
methamidophos (0.01)
methidathion (0.01)
methiocarb (sum) (0.01)
methomyl (sum) (0.01)
methoxychlor (0.01)
methoxyfenozide (0.01)
metobromuron (0.01)
metolachlor (0.01)
metolcarb (0.01)
metosulam (0.01)
metoxuron (0.01)
metrafenone (0.01)
metribuzin (0.02)
metsulfuron-methyl (0.01)
mevinphos (0.01)
molinate (0.01)
monocrotophos (0.01)
monolinuron (0.01)
Monuron (0.01)
napropamide (0.02)
nitenpyram (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)

pyridaben (0.01)
pyridalyl (0.01)
pyridaphenthion (0.01)
pyrifenox (0.02)
pyriproxifen (0.01)
quassia (0.01)
quinalphos (0.01)
quinmerac (0.02)
Quinoclamine (0.01)
quinomethionate (0.02)
quinoxifen (0.01)
quintozene (sum) (0.01)
resmethrin (0.02)
rimsulfuron (0.01)
rotenone (0.01)
simazine (0.02)
spinosad (0.01)
spirodiclofen (0.01)
spiromesifen (0.01)
spirotetramat (sum) (0.01)
spiroxamine (0.01)
sulcotrione (0.02)
sum of butocarboxim and
butocarboxim sul (0.01)
tau-fluvalinate (0.01)
tebuconazole (0.01)
tebufenozide (0.01)

tebufenpyrad (0.01)
tebuthiuron (0.01)
tecnazene (0.01)
teflubenzuron (0.01)
tefluthrin (0.01)
tepraloxym (0.02)
terbufos (0.01)
Terbufos (sum not defintion) (0.01)
terbutylazine (0.02)
terbutryn (0.02)
tetrachlorvinphos (0.01)
tetraconazole (0.01)
tetradifon (0.01)
tetramethrin (0.01)
thiabendazole (0.02)
thiacloprid (0.01)
thiamethoxam (sum) (0.01)
thiophanate-methyl (0.01)
tolclofos-methyl (0.01)
tolfenpyrad (0.01)
tolyfluanid (sum) (0.01)
triadimefon & triadimenol (0.01)
triallate (0.02)
triasulfuron (0.02)
triazamate (0.01)
triazophos (0.01)
triclopyr (0.02)
tricyclazole (0.01)
triflumizole (0.01)
triflumuron (0.01)
trifluralin (0.01)
triforine (0.01)
triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 16a. LEEKS: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|--------------------------------------|----------------------------|
| LEEKS, UK: 18 samples analysed | | |
| azoxystrobin (MRL = 10) | <0.01 (i.e. not found) 0.01 | 16 2 |
| cypermethrin (MRL = 0.5) | <0.01 (i.e. not found) 0.05 | 17 1 |
| DDAC (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.04 | 17 1 |
| difenoconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.02, 0.03 | 16 2 |
| propamocarb (MRL = 20) | <0.01 (i.e. not found) 0.03 | 16 2 |
| LEEKS, Imported (EC): 5 samples analysed | | |
| boscalid (MRL = 5) | <0.01 (i.e. not found) 0.05 | 4 1 |
| chlorothalonil (MRL = 8) | <0.01 (i.e. not found) 0.02 | 4 1 |
| cypermethrin (MRL = 0.5) | <0.01 (i.e. not found) 0.08 | 4 1 |
| difenoconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.03 | 4 1 |

Imported (EC) samples of leeks were from Spain (5).
UK samples of leeks (18).

Residues were distributed by country of origin, as follows:

| | |
|----------------|-------------------|
| azoxystrobin | UK (2) |
| boscalid | Spain (1) |
| chlorothalonil | Spain (1) |
| cypermethrin | Spain (1), UK (1) |
| DDAC (sum) | UK (1) |
| difenoconazole | Spain (1), UK (2) |
| propamocarb | UK (2) |

No residues were found in 13 of the 18 UK samples
No residues were found in 2 of the 5 Imported (EC) samples

Table 16b. LEEKS: Residues detected in retail samples purchased between July and September 2016

Residues (1-3 compounds) were found in 8 of the 23 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | Country of origin |
|--------------------|-----------|------------------------|------|------|------|------|------|------|-------------------|
| | | AZOX | BOS | CLN | CYP | DDAC | DIFC | PCB | |
| (1) | 1563/2016 | - | - | - | 0.05 | - | - | - | UK |
| | 2024/2016 | - | - | - | - | - | - | 0.03 | UK |
| | 2048/2016 | - | - | - | - | - | - | 0.03 | UK |
| | 1669/2016 | - | - | - | - | - | 0.03 | - | Spain |
| | 2695/2016 | - | 0.05 | - | - | - | - | - | Spain |
| (2) | 2917/2016 | 0.01 | - | - | - | - | 0.02 | - | UK |
| | 1706/2016 | - | - | 0.02 | 0.08 | - | - | - | Spain |
| (3) | 2707/2016 | 0.01 | - | - | - | 0.04 | 0.03 | - | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|--------------|------|------------|------|----------------|
| AZOX | azoxystrobin | BOS | boscalid | CLN | chlorothalonil |
| CYP | cypermethrin | DDAC | DDAC (sum) | DIFC | difenoconazole |
| PCB | propamocarb | | | | |

Table 16c. LEEKS: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.02) | fenamidone (0.01) | ofurace (0.01) |
| 2,4-DB (0.01) | fenamiphos (sum) (0.01) | Oxadiargyl (0.01) |
| 2-phenylphenol (0.01) | fenarimol (0.01) | oxadiazon (0.01) |
| abamectin (sum) (0.01) | fenazaquin (0.01) | oxadixyl (0.01) |
| acephate (0.01) | fenbuconazole (0.01) | oxamyl (0.01) |
| acetamiprid (0.01) | fenbutatin oxide (0.01) | oxasulfuron (0.01) |
| acetochlor (0.01) | fenhexamid (0.01) | oxydemeton-methyl (sum) (0.01) |
| acibenzolar-s-methyl (0.01) | fenitrothion (0.01) | oxyfluorfen (0.01) |
| aclonifen (0.01) | fenoxycarb (0.01) | paclobutrazol (0.01) |
| acrinathrin (0.01) | fenpropathrin (0.01) | parathion (0.01) |
| alachlor (0.01) | fenpropidin (0.01) | parathion-methyl (sum) (0.01) |
| aldicarb (sum) (0.01) | fenpropimorph (0.01) | penconazole (0.01) |
| aldrin and dieldrin (0.01) | fenpyrazamine (0.01) | pencycuron (0.01) |
| allethrin (0.01) | fenpyroximate (0.01) | pendimethalin (0.01) |
| alpha-HCH (0.01) | fensulfothion (sum) (0.01) | penflufen (0.01) |
| ametocradin (0.01) | fenthion (partial sum) (0.01) | penthioopyrad (0.01) |
| aminocarb (0.01) | fenthion (sum) (0.01) | permethrin (0.01) |
| amitraz (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phenmedipham (0.01) |
| atrazine (0.01) | fipronil (sum) (0.01) | phenthoate (0.01) |
| azinphos-ethyl (0.01) | flonicamid (sum) (0.01) | phorate (sum) (0.02) |
| azinphos-methyl (0.01) | fluazifop-p-butyl (sum) (0.01) | phosalone (0.01) |
| BAC (sum) (0.01) | fluazinam (0.01) | phosmet (sum) (0.01) |
| benalaxyl (0.01) | flubendiamide (0.01) | phosphamidon (0.01) |
| bendiocarb (0.01) | flucythrinate (0.01) | phoxim (0.01) |
| benthiavalicarb (sum) (0.01) | fludioxonil (0.01) | picolinafen (0.01) |
| beta-HCH (0.01) | flufenacet (0.01) | picoxystrobin (0.01) |
| bifenthrin (0.01) | flufenoxuron (0.01) | piperonyl butoxide (0.01) |
| biphenyl (0.01) | fluometuron (0.01) | pirimicarb (sum) (0.01) |
| bispyribac-sodium (0.01) | fluopicolide (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.05) | fluopyram (0.01) | pirimiphos-methyl (0.01) |
| bromopropylate (0.01) | fluoxastrobin (0.01) | prochloraz (parent only) (0.01) |
| bromoxynil (0.01) | fluquinconazole (0.01) | procymidone (0.01) |
| bromuconazole (0.01) | flusilazole (0.01) | profenofos (0.01) |
| bupirimate (0.01) | flutolanil (0.01) | promecarb (0.01) |
| buprofezin (0.01) | flutriafol (0.01) | prometryn (0.01) |
| butocarboxim (parent) (0.01) | fluxapyroxad (0.01) | propanil (0.01) |
| butoxycarboxim (0.01) | folpet (0.01) | propaquizafop (0.01) |
| cadusafos (0.01) | fonofos (0.01) | propargite (0.01) |
| captan (0.01) | formetanate (0.01) | propetamphos (0.01) |
| carbaryl (0.01) | formothion (0.01) | propham (0.01) |
| carbendazim (0.01) | fosthiazate (0.01) | propiconazole (0.01) |
| carbetamide (0.01) | fuberidazole (0.01) | propoxur (0.01) |
| carbofuran (sum) (0.01) | furalaxyl (0.01) | propyzamide (0.01) |
| carboxin (0.01) | furathiocarb (0.001) | proquinazid (0.01) |
| chlorantraniliprole (0.01) | halofenozide (0.01) | prosulfocarb (0.01) |
| chlorbufam (0.01) | halosulfuron-methyl (0.01) | prosulfuron (0.01) |
| chlordane (sum) (0.01) | haloxyfop (sum) (0.01) | prothioconazole (0.01) |
| chlorfenapyr (0.01) | Haloxyfop-R methyl (0.01) | prothiofos (0.01) |
| chlorfenvinphos (0.01) | Heptachlor (sum) (0.01) | pymetrozine (0.01) |
| chlorfluazuron (0.01) | heptenophos (0.01) | pyraclostrobin (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrethrins (0.01) |
| chlorotoluron (0.01) | hexaconazole (0.01) | pyridaben (0.01) |
| chlorpropham (sum) (0.05) | hexaflumuron (0.01) | pyridaphenthion (0.01) |
| chlorpyrifos (0.01) | hexazinone (0.01) | pyrifenox (0.01) |
| chlorpyrifos-methyl (0.01) | hexythiazox (0.01) | pyrimethanil (0.01) |

chlorthal-dimethyl (0.01)
 chlozolate (0.01)
 chromafenozide (0.01)
 cinidon-ethyl (0.01)
 clethodim (0.01)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 crufomate (0.01)
 cyanazine (0.01)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.01)
 cyflufenamid (0.01)
 cyfluthrin (0.01)
 cyhalofop-butyl (sum) (0.01)

cymoxanil (0.01)
 cyproconazole (0.01)
 cyprodinil (0.01)
 cyromazine (0.01)
 DDT (sum) (0.01)
 deltamethrin (0.01)
 desmedipham (0.01)
 desmetryn (0.01)
 diazinon (0.01)
 dichlofluanid (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.02)
 dicrotophos (0.01)
 diethofencarb (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethoate (sum) (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinocap (0.01)
 dinotefuran (0.01)
 dioxathion (0.01)
 diphenylamine (0.05)
 disulfoton (sum) (0.01)
 diuron (0.01)
 dodine (0.05)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.01)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)
 ethion (0.01)
 ethirimol (0.01)
 ethofumesate (0.01)
 ethoprophos (0.01)
 etofenprox (0.01)
 etoxazole (0.01)
 etrimfos (0.01)
 famoxadone (0.01)

imazalil (0.01)
 imidacloprid (0.01)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprodione (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocarb (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)

lambda-cyhalothrin (0.01)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)
 lufenuron (0.01)
 malathion (0.01)
 mandipropamid (0.01)
 MCPA (sum) (0.01)
 MCPA only (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.01)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.01)
 metconazole (0.02)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.01)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 napropamide (0.01)
 neburon (0.01)
 nitenpyram (0.01)
 nitrothal-isopropyl (0.01)
 nuarimol (0.01)

pyriproxifen (0.01)
 pyroxsulam (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.01)
 Quinoclamine (0.01)
 quinoxifen (0.01)
 quintozone (sum) (0.01)
 Quizalofop, incl. quizalofop-P (0.01)
 rotenone (0.01)
 simazine (0.01)
 spinosad (0.01)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sum of butocarboxim and butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)
 tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 terbacil (0.01)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbumeton (0.01)
 terbuthylazine (0.01)
 terbutryn (0.01)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.01)
 thiachloprid (0.01)
 thiamethoxam (sum) (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.01)
 triasulfuron (0.01)
 triazamate (0.01)
 triazamate (acid) (0.01)
 triazamate (ester) (0.01)
 triazophos (0.01)
 trichlorfon (0.01)
 triclopyr (0.05)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.05)
 triticonazole (0.01)
 tritosulfuron (0.01)
 vamidothion (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 17a. LETTUCE: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|-----------------------------|----------------------------|
| ICEBERG UK: 10 samples analysed | | |
| spirotriamat (sum) | <0.01 (i.e. not found) | 9 |
| (MRL = 7) | 0.02 | 1 |
| LITTLE GEM UK: 2 samples analysed | | |
| None found | - | 2 |
| OTHER UK: 2 samples analysed | | |
| None found | - | 2 |
| ROMAINE UK: 1 sample analysed | | |
| None found | - | 1 |
| ICEBERG Imported (EC): 1 sample analysed | | |
| None found | - | 1 |

Imported (EC) samples of lettuce were from Spain (1).
 UK samples of lettuce (15).

Residues were distributed by country of origin, as follows:
 spirotriamat (sum) UK (1)

No residues were found in 9 of the 10 UK iceberg samples
 No residues were found in any of the UK little gem samples
 No residues were found in any of the UK other samples
 No residues were found in any of the UK romaine samples
 No residues were found in any of the Imported (EC) iceberg samples

Table 17b. LETTUCE: Residues detected in retail samples purchased between July and September 2016

Residue (1 compound) was found in 1 of the 16 samples as follows:

| Number of residues | Sample ID | Type of LETTUCE | Residues found (mg/kg) STTPS | Country of origin |
|--------------------|-----------|-----------------|---------------------------------|-------------------|
| (1) | 2883/2016 | ICEBERG | 0.02 | UK |

The abbreviations used for the pesticide names are as follows:

STTPS spirotetramat (sum)

Table 17c. LETTUCE: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethiofencarb (parent) (0.01) | napropamide (0.02) |
| 2,4-DB (0.01) | ethion (0.01) | nitenpyram (0.01) |
| 2-phenylphenol (0.02) | ethirimol (0.01) | nitrofen (0.02) |
| 6-benzyladenine (0.01) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| abamectin (sum) (0.01) | ethoprophos (0.01) | Novaluron (0.01) |
| acephate (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acetamiprid (0.01) | etoxazole (0.01) | ofurace (0.01) |
| acetochlor (0.01) | etridiazole (0.02) | Oxadiargyl (0.01) |
| acibenzolar-s-methyl (0.01) | etrimfos (0.01) | oxadiazon (0.02) |
| aclonifen (0.02) | famoxadone (0.01) | oxadixyl (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxamyl (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxasulfuron (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | oxyfluorfen (0.02) |
| allethrin (0.02) | fenbuconazole (0.01) | paclobutrazol (0.01) |
| alpha-HCH (0.01) | fenbutatin oxide (0.02) | parathion (0.01) |
| ametocradin (0.01) | fenhexamid (0.02) | parathion-methyl (sum) (0.01) |
| amidosulfuron (0.01) | fenitrothion (0.01) | penconazole (0.01) |
| amitraz (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| asulam (0.02) | fenpropathrin (0.01) | pendimethalin (0.01) |
| atrazine (0.01) | fenpropidin (0.01) | penflufen (0.01) |
| azinphos-ethyl (0.02) | fenpropimorph (0.01) | pentanochlor (0.01) |
| azinphos-methyl (0.02) | fenpyrazamine (0.01) | penthioopyrad (0.01) |
| azoxystrobin (0.01) | fenpyroximate (0.01) | permethrin (0.01) |
| BAC (sum) (0.05) | fensulfothion (sum) (0.01) | phenmedipham (0.02) |
| benalaxyl (0.01) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| bendiocarb (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (partial sum) (0.01) |
| benfuracarb (0.001) | fipronil (sum) (0.005) | phosalone (0.01) |
| benthiavaliacarb (sum) (0.01) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| beta-HCH (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| bifenox (0.02) | fluazinam (0.01) | phoxim (0.01) |
| bifenthrin (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| biphenyl (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bispyribac-sodium (0.01) | fluidioxonil (0.01) | piperonyl butoxide (0.01) |
| bitertanol (0.01) | flufenacet (0.01) | pirimicarb (sum) (0.01) |
| bixafen (0.01) | flufenoxuron (0.02) | pirimiphos-ethyl (0.01) |
| boscalid (0.01) | fluometuron (0.01) | pirimiphos-methyl (0.01) |
| bromophos-ethyl (0.01) | fluopicolide (0.01) | prochloraz (parent only) (0.01) |
| bromopropylate (0.01) | fluopyram (0.01) | procymidone (0.01) |
| bromoxynil (0.01) | fluoxastrobin (0.01) | profenofos (0.01) |
| bromuconazole (0.01) | fluquinconazole (0.01) | promecarb (0.01) |
| bupirimate (0.01) | flurochloridone (0.02) | prometryn (0.01) |
| buprofezin (0.01) | fluroxypyr (sum) (0.02) | propachlor (0.01) |
| butachlor (0.01) | flusilazole (0.01) | propamocarb (0.01) |
| butocarboxim (parent) (0.01) | flutolanil (0.01) | propanil (0.02) |
| butoxycarboxim (0.01) | flutriafol (0.01) | propaquizafop (0.02) |
| cadusafos (0.01) | fluxapyroxad (0.01) | propargite (0.01) |
| captan (0.02) | folpet (0.01) | propetamphos (0.01) |
| carbaryl (0.01) | fonofos (0.01) | propham (0.02) |
| carbendazim (0.01) | formetanate (0.01) | propiconazole (0.01) |
| carbetamide (0.02) | fosthiazate (0.01) | propoxur (0.01) |
| carbofuran (sum) (0.001) | furalaxyl (0.01) | propyzamide (0.01) |
| carbosulfan (0.001) | furathiocarb (0.001) | proquinazid (0.01) |
| carboxin (0.02) | halofenozide (0.01) | prosulfocarb (0.01) |
| chlorantraniliprole (0.01) | halosulfuron-methyl (0.01) | prosulfuron (0.01) |
| chlorbufam (0.01) | haloxyfop (sum) (0.01) | prothioconazole (0.01) |
| chlordan (sum) (0.01) | Heptachlor (sum) (0.01) | prothiofos (0.01) |

| | | |
|-------------------------------|--|---|
| chlorfenapyr (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chlorfenvinphos (0.01) | hexachlorobenzene (0.01) | pyraclostrobin (0.01) |
| chloridazon (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.02) | hexaconazole (0.01) | pyrethrins (0.01) |
| chlorothalonil (0.01) | hexazinone (0.02) | pyridaben (0.01) |
| chlorpropham (sum) (0.01) | hexythiazox (0.01) | pyridalyl (0.01) |
| chlorpyrifos (0.01) | imazalil (0.02) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | imidacloprid (0.01) | pyrifenox (0.02) |
| chlorthal-dimethyl (0.01) | indoxacarb (0.01) | pyrimethanil (0.01) |
| chlortoluron (0.01) | inorganic bromide (20) | pyriproxifen (0.01) |
| chlozolinate (0.01) | ioxynil (0.01) | quassia (0.01) |
| chromafenozide (0.01) | iprodione (0.01) | quinalphos (0.01) |
| clethodim (0.02) | iprovalicarb (0.01) | quinmerac (0.02) |
| clofentezine (0.01) | isazophos (0.01) | Quinoclamine (0.01) |
| clomazone (0.01) | isocarbophos (0.01) | quinoxifen (0.01) |
| clothianidin (0.01) | isofenphos (0.01) | quintozene (sum) (0.01) |
| coumaphos (0.01) | isofenphos-methyl (0.01) | resmethrin (0.02) |
| cyanazine (0.02) | isoprocarb (0.01) | rimsulfuron (0.01) |
| cyazofamid (0.01) | isoprothiolane (0.01) | rotenone (0.01) |
| cycloate (0.01) | isoproturon (0.01) | simazine (0.02) |
| cycloxydim (0.02) | isopyrazam (0.01) | spinosad (0.01) |
| cyflufenamid (0.01) | isoxaben (0.01) | spirodiclofen (0.01) |
| cyfluthrin (0.02) | isoxaflutole (0.01) | spiromesifen (0.01) |
| cyhalofop-butyl (sum) (0.01) | kresoxim-methyl (0.01) | spiroxamine (0.01) |
| cymoxanil (0.01) | lambda-cyhalothrin (0.02) | sulcotrione (0.02) |
| cypermethrin (0.02) | lenacil (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyproconazole (0.01) | lindane (0.01) | tau-fluvalinate (0.01) |
| cyprodinil (0.02) | linuron (0.01) | tebuconazole (0.01) |
| cyromazine (0.02) | lufenuron (0.02) | tebufenozide (0.01) |
| DDAC (sum) (0.05) | malathion (0.01) | tebufenpyrad (0.01) |
| DDT (sum) (0.01) | mandipropamid (0.01) | tebuthiuron (0.01) |
| deltamethrin (0.02) | MCPA only (0.01) | tecnazene (0.01) |
| demeton-S-methyl (0.01) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | teflubenzuron (0.01) |
| desmedipham (0.02) | mecarbam (0.01) | tefluthrin (0.01) |
| diafenthiuron (0.02) | mepanipyrim (sum) (0.01) | tepraloxymid (0.02) |
| diazinon (0.01) | mephosfolan (0.02) | terbufos (0.01) |
| dichlobenil (0.01) | mepronil (0.01) | Terbufos (sum not defintion) (0.01) |
| dichlofluanid (0.01) | mesosulfuron-methyl (0.01) | terbuthylazine (0.02) |
| dichlofluanid and DMSA (0.01) | metaflumizone (0.02) | terbutryn (0.02) |
| dichlorprop (0.01) | metalaxyl (0.01) | tetrachlorvinphos (0.01) |
| dichlorvos (0.01) | metamitron (0.01) | tetraconazole (0.01) |
| diclobutrazol (0.01) | metazachlor (0.02) | tetradifon (0.01) |
| dicloran (0.01) | metconazole (0.01) | tetramethrin (0.01) |
| dicofol (sum) (0.01) | methabenzthiazuron (0.01) | thiabendazole (0.02) |
| dicrotophos (0.01) | methacrifos (0.01) | thiacloprid (0.01) |
| diethofencarb (0.01) | methamidophos (0.01) | thiamethoxam (sum) (0.01) |
| difenoconazole (0.01) | methidathion (0.01) | thiophanate-methyl (0.01) |
| diflubenzuron (0.01) | methiocarb (sum) (0.01) | tolclofos-methyl (0.01) |
| diflufenican (0.01) | methomyl (sum) (0.01) | tolfenpyrad (0.01) |
| dimethenamid (0.01) | methoxychlor (0.01) | tolyfluanid (sum) (0.01) |
| dimethoate (sum) (0.01) | methoxyfenozide (0.01) | triadimefon & triadimenol (0.01) |
| dimethomorph (0.01) | metobromuron (0.01) | triallate (0.02) |
| dimoxystrobin (0.01) | metolachlor (0.01) | triasulfuron (0.02) |
| diniconazole (0.01) | metolcarb (0.01) | triazamate (0.01) |
| dinotefuran (0.01) | metosulam (0.01) | triazophos (0.01) |
| diphenylamine (0.02) | metoxuron (0.01) | triclopyr (0.02) |
| disulfoton (sum) (0.01) | metrafenone (0.01) | tricyclazole (0.01) |
| dithiocarbamates (0.05) | metribuzin (0.02) | trifloxystrobin (0.01) |
| diuron (0.01) | metsulfuron-methyl (0.01) | triflumizole (0.01) |
| dodine (0.02) | mevinphos (0.01) | triflururon (0.01) |
| emamectin benzoate (0.01) | molinate (0.01) | trifluralin (0.01) |

endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)

monocrotophos (0.01)
monolinuron (0.01)
Monuron (0.01)
myclobutanil (0.01)

triforine (0.01)
triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 18a. MILK: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|-----------------------------|----------------------------|
| COWS MILK UK: 96 samples analysed | | |
| BAC (sum) | <0.05 (i.e. not found) | 94 |
| (MRL = 0.1) | 0.06, 0.09 | 2 |
| GOATS MILK UK: 12 samples analysed | | |
| None found | - | 12 |

UK samples of milk (108).

Residues were distributed by country of origin, as follows:

BAC (sum) UK (2)

No residues were found in 94 of the 96 UK cows milk samples

No residues were found in any of the UK goats milk samples

Table 18b. MILK: Residues detected in retail samples purchased between July and September 2016

Residues (1-1 compounds) were found in 2 of the 108 samples as follows:

| Number of residues | Sample ID | Type of MILK | Residues found (mg/kg) BACSM | Country of origin |
|--------------------|-----------|--------------|---------------------------------|-------------------|
| (1) | 1891/2016 | COWS MILK | 0.06 | UK |
| | 1897/2016 | COWS MILK | 0.09 | UK |

The abbreviations used for the pesticide names are as follows:

BACSM BAC (sum)

Table 18c. MILK: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-----------------------------|---|---------------------------------|
| abamectin (sum) (0.01) | diazinon (0.005) | methidathion (0.002) |
| acephate (0.01) | dichlorvos (0.01) | methoxychlor (0.005) |
| aldrin and dieldrin (0.002) | diflubenzuron (0.01) | nitrofen (0.01) |
| alpha-HCH (0.005) | dimethoate (sum) (0.01) | parathion (0.005) |
| azamethiphos (0.01) | endosulfan (sum) (0.005) | parathion-methyl (sum) (0.002) |
| azinphos-ethyl (0.005) | endrin (0.002) | pendimethalin (0.005) |
| benfuracarb (0.002) | epoxiconazole (0.01) | permethrin (0.005) |
| beta-HCH (0.005) | ethoprophos (0.002) | phoxim (0.01) |
| bifenthrin (0.005) | etofenprox (0.01) | pirimicarb (sum) (0.002) |
| boscalid (0.01) | famoxadone (0.01) | pirimiphos-methyl (0.005) |
| bromophos-ethyl (0.002) | fenitrothion (0.002) | prochloraz (parent only) (0.01) |
| cadusafos (0.002) | fenpropimorph (0.01) | profenofos (0.01) |
| carbaryl (0.002) | fenthion (partial sum) (0.01) | propetamphos (0.002) |
| carbendazim (0.01) | fenvalerate & esfenvalerate (all isomers) (0.005) | propoxur (0.002) |
| carbofuran (sum) (0.002) | fluazifop-p-butyl (sum) (0.01) | prothioconazole (0.01) |
| carbosulfan (0.002) | fluquinconazole (0.01) | pyrazophos (0.002) |
| chlordane (sum) (0.002) | flusilazole (0.01) | quintozene (sum) (0.002) |
| chlorfenvinphos (0.002) | haloxyfop (sum) (0.01) | resmethrin (0.01) |
| chlorobenzilate (0.002) | Heptachlor (sum) (0.005) | spinosad (0.01) |
| chlorpropham (sum) (0.002) | hexachlorobenzene (0.005) | tau-fluvalinate (0.01) |
| chlorpyrifos (0.002) | hexachlorocyclohexane (sum) (0.005) | tebuconazole (0.01) |
| chlorpyrifos-methyl (0.002) | indoxacarb (0.01) | tecnazene (0.002) |
| coumaphos (0.002) | lambda-cyhalothrin (0.005) | teflubenzuron (0.01) |
| cyfluthrin (0.002) | lindane (0.002) | tetrachlorvinphos (0.002) |
| cypermethrin (0.005) | malathion (0.01) | tetraconazole (0.01) |
| cyproconazole (0.01) | metaflumizone (0.01) | thiacloprid (0.01) |
| DDAC (sum) (0.05) | metazachlor (0.002) | triazophos (0.002) |
| DDT (sum) (0.005) | methacrifos (0.002) | vinclozolin (sum) (0.002) |
| deltamethrin (0.005) | methamidophos (0.01) | |

Table 19a. OKRA: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|-----------------------------|----------------------------|
| OKRA, FRESH Imported (Non-EC): 25 samples analysed | | |
| abamectin (sum) (MRL = 0.01*) | <0.01 (i.e. not found) | 19 |
| | 0.02 - 0.1 | 6 |
| acetamiprid (MRL = 0.2) | <0.01 (i.e. not found) | 15 |
| | 0.02 - 0.2 | 9 |
| | 0.5 | 1 |
| deltamethrin (MRL = 0.3) | <0.02 (i.e. not found) | 24 |
| | 0.02 | 1 |
| dimethoate (sum) (MRL = 0.02*) | <0.01 (i.e. not found) | 23 |
| | 0.02 | 1 |
| | 1.8 | 1 |
| flonicamid (sum) (MRL = 0.05*) | <0.01 (i.e. not found) | 24 |
| | 0.1 | 1 |
| myclobutanil (MRL = 0.02*) | <0.01 (i.e. not found) | 24 |
| | 0.04 | 1 |
| oxamyl (MRL = 0.01*) | <0.01 (i.e. not found) | 23 |
| | 0.05, 0.07 | 2 |
| thiamethoxam (sum) (MRL = 0.01*) | <0.01 (i.e. not found) | 24 |
| | 0.01 | 1 |
| OKRA, FROZEN Imported (Non-EC): 13 samples analysed | | |
| acetamiprid (MRL = 0.2) | <0.01 (i.e. not found) | 11 |
| | 0.01 | 2 |
| flonicamid (sum) (MRL = 0.05*) | <0.01 (i.e. not found) | 5 |
| | 0.03 | 1 |
| | 0.2 - 0.3 | 7 |
| imidacloprid (MRL = 0.5) | <0.01 (i.e. not found) | 12 |
| | 0.05 | 1 |
| propoxur (MRL = 0.05*) | <0.01 (i.e. not found) | 12 |
| | 0.01 | 1 |
| OKRA, FRESH Imported (EC): 7 samples analysed | | |
| acetamiprid (MRL = 0.2) | <0.01 (i.e. not found) | 6 |
| | 0.01 | 1 |
| flonicamid (sum) (MRL = 0.05*) | <0.01 (i.e. not found) | 6 |
| | 0.01 | 1 |

NOTE: * Indicates MRL is set to the Limit of Determination.

Imported (EC) samples of okra were from Cyprus (2), Italy (4), Spain (1).

Imported (Non-EC) samples of okra were from Egypt (4), Honduras (5), India (9), Jordan (19), Thailand (1).

Residues were distributed by country of origin, as follows:

abamectin (sum) Jordan (6)
acetamiprid Cyprus (1), India (2), Jordan (10)
deltamethrin Jordan (1)

| | |
|--------------------|------------------------------------|
| dimethoate (sum) | Jordan (2) |
| flonicamid (sum) | India (8), Italy (1), Thailand (1) |
| imidacloprid | India (1) |
| myclobutanil | Jordan (1) |
| oxamyl | Jordan (2) |
| propoxur | India (1) |
| thiamethoxam (sum) | Honduras (1) |

No residues were found in 11 of the 25 Imported (Non-EC) fresh samples
No residues were found in 4 of the 13 Imported (Non-EC) frozen samples
No residues were found in 5 of the 7 Imported (EC) fresh samples

Table 19b. OKRA: Residues detected in samples obtained between July and September 2016

Residues (1-3 compounds) were found in 25 of the 45 samples as follows:

| Number of residues | Sample ID | Type of OKRA | Residues found (mg/kg) | | | | | | | | | | Country of origin | |
|--------------------|-----------|--------------|------------------------|------|------|-------|------|------|------|------|------|-------|-------------------|----------|
| | | | ABA | ACET | DEL | DIMSM | FLC | IMI | MYC | OXY | PPX | THMSM | | |
| (1) | 3699/2016 | FRESH | - | - | - | - | - | - | - | - | - | - | 0.01 | Honduras |
| | 0617/2016 | FROZEN | - | - | - | - | 0.2 | - | - | - | - | - | - | India |
| | 0618/2016 | FROZEN | - | - | - | - | 0.2 | - | - | - | - | - | - | India |
| | 0660/2016 | FROZEN | - | - | - | - | 0.2 | - | - | - | - | - | - | India |
| | 0661/2016 | FROZEN | - | - | - | - | 0.3 | - | - | - | - | - | - | India |
| | 1945/2016 | FROZEN | - | - | - | - | 0.3 | - | - | - | - | - | - | India |
| | 1973/2016 | FROZEN | - | - | - | - | 0.03 | - | - | - | - | - | - | India |
| | 2939/2016 | FROZEN | - | - | - | - | - | 0.05 | - | - | - | - | - | India |
| | 3686/2016 | FRESH | - | 0.02 | - | - | - | - | - | - | - | - | - | Jordan |
| | 3768/2016 | FRESH | - | - | - | 1.8 | - | - | - | - | - | - | - | Jordan |
| | 3772/2016 | FRESH | - | - | 0.02 | - | - | - | - | - | - | - | - | Jordan |
| | 3898/2016 | FRESH | - | 0.06 | - | - | - | - | - | - | - | - | - | Jordan |
| | 1830/2016 | FRESH | - | - | - | - | 0.1 | - | - | - | - | - | - | Thailand |
| | 3853/2016 | FRESH | - | 0.01 | - | - | - | - | - | - | - | - | - | Cyprus |
| 3668/2016 | FRESH | - | - | - | - | 0.01 | - | - | - | - | - | - | Italy | |
| (2) | 2875/2016 | FROZEN | - | 0.01 | - | - | 0.2 | - | - | - | - | - | - | India |
| | 3687/2016 | FRESH | 0.09 | 0.2 | - | - | - | - | - | - | - | - | - | Jordan |
| | 3697/2016 | FRESH | - | 0.03 | - | - | - | - | - | 0.05 | - | - | - | Jordan |
| | 3747/2016 | FRESH | 0.05 | 0.2 | - | - | - | - | - | - | - | - | - | Jordan |
| | 3942/2016 | FRESH | 0.03 | 0.04 | - | - | - | - | - | - | - | - | - | Jordan |
| | 4084/2016 | FRESH | 0.02 | 0.02 | - | - | - | - | - | - | - | - | - | Jordan |
| | 4093/2016 | FRESH | 0.02 | 0.03 | - | - | - | - | - | - | - | - | - | Jordan |
| (3) | 1944/2016 | FROZEN | - | 0.01 | - | - | 0.2 | - | - | - | 0.01 | - | - | India |
| | 3859/2016 | FRESH | - | 0.03 | - | 0.02 | - | - | 0.04 | - | - | - | - | Jordan |
| | 4080/2016 | FRESH | 0.1 | 0.5 | - | - | - | - | - | 0.07 | - | - | - | Jordan |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-------|--------------------|------|------------------|-----|--------------|
| ABA | abamectin (sum) | ACET | acetamiprid | DEL | deltamethrin |
| DIMSM | dimethoate (sum) | FLC | flonicamid (sum) | IMI | imidacloprid |
| MYC | myclobutanil | OXY | oxamyl | PPX | propoxur |
| THMSM | thiamethoxam (sum) | | | | |

Table 19c. OKRA: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethion (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethirimol (0.01) | nitrofen (0.02) |
| 2-phenylphenol (0.02) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| 6-benzyladenine (0.01) | ethoprophos (0.01) | Novaluron (0.01) |
| acephate (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acetochlor (0.01) | etoxazole (0.01) | ofurace (0.01) |
| acibenzolar-s-methyl (0.01) | etridiazole (0.02) | Oxadiargyl (0.01) |
| aclonifen (0.02) | etrimfos (0.01) | oxadiazon (0.02) |
| acrinathrin (0.02) | famoxadone (0.01) | oxadixyl (0.01) |
| alachlor (0.01) | fenamidone (0.01) | oxasulfuron (0.01) |
| aldicarb (sum) (0.01) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldrin and dieldrin (0.01) | fenarimol (0.01) | oxyfluorfen (0.02) |
| allethrin (0.02) | fenazaquin (0.01) | paclobutrazol (0.01) |
| alpha-HCH (0.01) | fenbuconazole (0.01) | parathion (0.01) |
| ametoctradin (0.01) | fenbutatin oxide (0.02) | parathion-methyl (sum) (0.01) |
| amidosulfuron (0.01) | fenhexamid (0.02) | penconazole (0.01) |
| amitraz (0.01) | fenitrothion (0.01) | percycuron (0.01) |
| asulam (0.02) | fenoxycarb (0.01) | pendimethalin (0.01) |
| atrazine (0.01) | fenpropathrin (0.01) | penflufen (0.01) |
| azinphos-ethyl (0.02) | fenpropidin (0.01) | pentanochlor (0.01) |
| azinphos-methyl (0.02) | fenpropimorph (0.01) | penthiopyrad (0.01) |
| azoxystrobin (0.01) | fenpyrazamine (0.01) | permethrin (0.01) |
| BAC (sum) (0.05) | fenpyroximate (0.01) | phenmedipham (0.02) |
| benalaxyl (0.01) | fensulfothion (sum) (0.01) | phenthoate (0.01) |
| bendiocarb (0.01) | fenthion (partial sum) (0.01) | phorate (partial sum) (0.01) |
| benfuracarb (0.001) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosalone (0.01) |
| benthiavalicarb (sum) (0.01) | fipronil (sum) (0.005) | phosmet (sum) (0.01) |
| beta-HCH (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| bifenox (0.02) | fluazinam (0.01) | phoxim (0.01) |
| bifenthrin (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| biphenyl (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bispyribac-sodium (0.01) | fludioxonil (0.01) | piperonyl butoxide (0.01) |
| bitertanol (0.01) | flufenacet (0.01) | pirimicarb (sum) (0.01) |
| bixafen (0.01) | flufenoxuron (0.02) | pirimiphos-ethyl (0.01) |
| boscalid (0.01) | fluometuron (0.01) | pirimiphos-methyl (0.01) |
| bromophos-ethyl (0.01) | fluopicolide (0.01) | prochloraz (parent only) (0.01) |
| bromopropylate (0.01) | fluopyram (0.01) | procymidone (0.01) |
| bromoxynil (0.01) | fluoxastrobin (0.01) | profenofos (0.01) |
| bromuconazole (0.01) | fluquinconazole (0.01) | promecarb (0.01) |
| bupirimate (0.01) | flurochloridone (0.02) | prometryn (0.01) |
| buprofezin (0.01) | fluroxypyr (sum) (0.02) | propachlor (0.01) |
| butachlor (0.01) | flusilazole (0.01) | propamocarb (0.01) |
| butocarboxim (parent) (0.01) | flutolanil (0.01) | propanil (0.02) |
| butoxycarboxim (0.01) | flutriafol (0.01) | propaquizafop (0.02) |
| cadusafos (0.01) | fluxapyroxad (0.01) | propargite (0.01) |
| captan (0.02) | folpet (0.01) | propetamphos (0.01) |
| carbaryl (0.01) | fonofos (0.01) | propham (0.02) |
| carbendazim (0.01) | formetanate (0.01) | propiconazole (0.01) |
| carbetamide (0.02) | fosthiazate (0.01) | propyzamide (0.01) |
| carbofuran (sum) (0.001) | furalaxyl (0.01) | proquinazid (0.01) |
| carbosulfan (0.001) | furathiocarb (0.001) | prosulfocarb (0.01) |
| carboxin (0.02) | furmecyclox (0.01) | prosulfuron (0.01) |
| chlorantraniliprole (0.01) | halofenozide (0.01) | prothioconazole (0.01) |
| chlorbufam (0.01) | halosulfuron-methyl (0.01) | prothiofos (0.01) |
| chlordane (sum) (0.01) | haloxyfop (sum) (0.01) | pymetrozine (0.01) |
| chlorfenapyr (0.01) | Heptachlor (sum) (0.01) | pyraclostrobin (0.01) |
| chlorfenvinphos (0.01) | heptenophos (0.01) | pyrazophos (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.01) | pyrethrins (0.01) |

chlorobenzilate (0.02)
 chlorothalonil (0.01)
 chlorpropham (sum) (0.01)
 chlorpyrifos (0.01)
 chlorpyrifos-methyl (0.01)
 chlorthal-dimethyl (0.01)
 chlortoluron (0.01)
 chlozolinate (0.01)
 chromafenozide (0.01)
 clethodim (0.02)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 cyanazine (0.02)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.02)
 cyflufenamid (0.01)
 cyfluthrin (0.02)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)
 cypermethrin (0.02)

cyproconazole (0.01)
 cyprodinil (0.02)
 cyromazine (0.02)
 DDAC (sum) (0.05)
 DDT (sum) (0.01)
 demeton-S-methyl (0.01)

desmedipham (0.02)
 diafenthiuron (0.02)
 diazinon (0.01)
 dichlobenil (0.01)
 dichlofluanid (0.01)
 dichlofluanid and DMSA (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.01)
 dicrotophos (0.01)
 diethofencarb (0.01)
 difenoconazole (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethenamid (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinotefuran (0.01)
 diphenylamine (0.02)
 disulfoton (sum) (0.01)
 dithiocarbamates (0.05)
 diuron (0.01)
 dodine (0.02)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.02)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)

hexachlorocyclohexane (sum) (0.01)
 hexaconazole (0.01)
 hexazinone (0.02)
 hexythiazox (0.01)
 imazalil (0.02)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprodione (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocab (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)
 lambda-cyhalothrin (0.02)
 lenacil (0.01)
 lindane (0.01)

linuron (0.01)
 lufenuron (0.02)
 malathion (0.01)
 mandipropamid (0.01)
 MCPA only (0.01)
 MCPA, MCPB and MCPA thioethyl
 expressed (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mephosfolan (0.02)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.02)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.02)
 metconazole (0.01)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.02)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 napropamide (0.02)

pyridaben (0.01)
 pyridalyl (0.01)
 pyridaphenthion (0.01)
 pyrifenox (0.02)
 pyrimethanil (0.01)
 pyriproxifen (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.02)
 Quinoclamine (0.01)
 quinomethionate (0.02)
 quinoxyfen (0.01)
 quintozene (sum) (0.01)
 rimsulfuron (0.01)
 rotenone (0.01)
 simazine (0.02)
 spinosad (0.01)
 spiroadiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sulcotrione (0.02)
 sum of butocarboxim and
 butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)
 tebuthiuron (0.01)
 tecnazene (0.01)

teflubenzuron (0.01)
 tefluthrin (0.01)
 tepraloxydim (0.02)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbuthylazine (0.02)
 terbutryn (0.02)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.02)
 thiacloprid (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.02)
 triasulfuron (0.02)
 triazamate (0.01)
 triazophos (0.01)
 triclopyr (0.02)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumizole (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.01)
 triticonazole (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 20a. PEACHES AND NECTARINES: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|-----------------------------|----------------------------|
| NECTARINES Imported (EC): 23 samples analysed | | |
| boscalid (MRL = 3) | <0.01 (i.e. not found) | 17 |
| (MRL = 5) | 0.05 - 0.1 | 4 |
| | 0.03, 0.05 | 2 |
| carbendazim (MRL = 0.2) | <0.01 (i.e. not found) | 22 |
| | 0.04 | 1 |
| chlorpyrifos-methyl (MRL = 0.5) | <0.01 (i.e. not found) | 21 |
| | 0.02, 0.3 | 2 |
| cypermethrin (MRL = 2) | <0.02 (i.e. not found) | 18 |
| | 0.02 - 0.07 | 5 |
| cyprodinil (MRL = 2) | <0.02 (i.e. not found) | 20 |
| | 0.04 - 0.07 | 3 |
| difenoconazole (MRL = 0.5) | <0.01 (i.e. not found) | 22 |
| | 0.04 | 1 |
| dithiocarbamates (MRL = 2) | <0.05 (i.e. not found) | 18 |
| | 0.07 - 0.1 | 5 |
| etofenprox (MRL = 0.6) | <0.01 (i.e. not found) | 18 |
| | 0.04 - 0.1 | 5 |
| fenbuconazole (MRL = 0.5) | <0.01 (i.e. not found) | 22 |
| | 0.01 | 1 |
| flonicamid (sum) (MRL = 0.3) | <0.01 (i.e. not found) | 20 |
| (MRL = 0.4) | 0.03, 0.04 | 2 |
| | 0.01 | 1 |
| fludioxonil (MRL = 10) | <0.01 (i.e. not found) | 14 |
| | 0.01 - 1.9 | 9 |
| fluopyram (MRL = 1.5) | <0.01 (i.e. not found) | 14 |
| | 0.01 - 0.1 | 9 |
| imidacloprid (MRL = 0.5) | <0.01 (i.e. not found) | 19 |
| | 0.01 - 0.1 | 4 |
| phosmet (sum) (MRL = 1) | <0.01 (i.e. not found) | 22 |
| | 0.02 | 1 |
| pyraclostrobin (MRL = 0.3) | <0.01 (i.e. not found) | 21 |
| | 0.01, 0.02 | 2 |
| spinosad (MRL = 0.6) | <0.01 (i.e. not found) | 16 |
| | 0.01 - 0.04 | 7 |
| tebuconazole (MRL = 0.6) | <0.01 (i.e. not found) | 16 |
| | 0.01 - 0.1 | 7 |
| thiacloprid (MRL = 0.5) | <0.01 (i.e. not found) | 22 |
| | 0.02 | 1 |
| thiophanate-methyl (MRL = 2) | <0.01 (i.e. not found) | 22 |
| | 0.02 | 1 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--|----------------------------|
| triflumuron (MRL = 1) | <0.01 (i.e. not found) 0.02 | 22 1 |
| PEACHES Imported (EC): 23 samples analysed | | |
| carbendazim (MRL = 0.2) | <0.01 (i.e. not found) 0.01, 0.04 | 21 2 |
| chlorpyrifos-methyl (MRL = 0.5) | <0.01 (i.e. not found) 0.01 | 22 1 |
| cypermethrin (MRL = 2) | <0.02 (i.e. not found) 0.04 - 0.06 | 19 4 |
| cyprodinil (MRL = 2) | <0.02 (i.e. not found) 0.08, 0.1 | 21 2 |
| difenoconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 22 1 |
| dithiocarbamates (MRL = 2) | <0.05 (i.e. not found) 0.06 - 0.2 | 16 7 |
| etofenprox (MRL = 0.6) | <0.01 (i.e. not found) 0.02 - 0.07 | 20 3 |
| fenhexamid (MRL = 10) | <0.02 (i.e. not found) 0.02 | 22 1 |
| fenvalerate & esfenvalerate (all isomers) (MRL = 0.2) | <0.01 (i.e. not found) 0.02 | 22 1 |
| flonicamid (sum) (MRL = 0.3) (MRL = 0.4) | <0.01 (i.e. not found) 0.01 0.02 | 21 1 1 |
| fludioxonil (MRL = 10) | <0.01 (i.e. not found) 0.01 - 2.3 | 13 10 |
| fluopyram (MRL = 1.5) | <0.01 (i.e. not found) 0.01 - 0.3 | 16 7 |
| imidacloprid (MRL = 0.5) | <0.01 (i.e. not found) 0.01 - 0.02 | 19 4 |
| spinosad (MRL = 0.6) | <0.01 (i.e. not found) 0.02 - 0.04 | 17 6 |
| tebuconazole (MRL = 0.6) | <0.01 (i.e. not found) 0.01 - 0.1 | 16 7 |
| triflumuron (MRL = 1) | <0.01 (i.e. not found) 0.01 | 22 1 |

Imported (EC) samples of peaches and nectarines were from Italy (5), Spain (41).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|----------------------|
| boscalid | Italy (4), Spain (2) |
| carbendazim | Spain (3) |
| chlorpyrifos-methyl | Italy (1), Spain (2) |
| cyprodinil | Italy (1), Spain (4) |

| | |
|---|-----------------------|
| cypermethrin | Spain (9) |
| difenoconazole | Spain (2) |
| dithiocarbamates | Spain (12) |
| etofenprox | Italy (3), Spain (5) |
| fenbuconazole | Spain (1) |
| flonicamid (sum) | Italy (1), Spain (4) |
| fludioxonil | Italy (2), Spain (17) |
| fenhexamid | Spain (1) |
| fenvalerate & esfenvalerate (all isomers) | Spain (1) |
| fluopyram | Italy (1), Spain (15) |
| imidacloprid | Spain (8) |
| phosmet (sum) | Spain (1) |
| pyraclostrobin | Italy (2) |
| spinosad | Spain (13) |
| tebuconazole | Italy (4), Spain (10) |
| triflumuron | Spain (2) |
| thiacloprid | Spain (1) |
| thiophanate-methyl | Spain (1) |

Residues were found in all of the 23 Imported (EC) nectarines samples
No residues were found in 1 of the 23 Imported (EC) peaches samples

Table 20b. PEACHES AND NECTARINES: Residues detected in samples obtained between July and September 2016

Residues (1-9 compounds) were found in 45 of the 46 samples as follows:

| Number of residues | Sample ID | Type of peaches and nectarines | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | | Country of origin | | |
|--------------------|-----------|--------------------------------|------------------------|------|-------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|-------------------|-------|-------|
| | | | BOS | CBZ | CPFME | CYD | CYP | DIFC | DTC | EFX | FENB | FLC | FLUD | FNHX | FNV | FPYM | IMI | PMT | PYC | SPN | TBC | TFM | | THC | TME |
| (1) | 3638/2016 | Nectarines | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | Italy |
| | 0662/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | Spain |
| | 0761/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | 0.5 | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 0907/2016 | Peaches | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 2610/2016 | Peaches | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 2678/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.09 | - | - | - | - | - | - | - | - | Spain |
| | 3585/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | Spain |
| | 3858/2016 | Peaches | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 3886/2016 | Peaches | - | - | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| (2) | 4711/2016 | Nectarines | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | Italy |
| | 0231/2016 | Peaches | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | - | - | - | - | 0.02 | - | - | - | Spain |
| | 0567/2016 | Peaches | - | - | - | - | 0.04 | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 0592/2016 | Peaches | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | 0.01 | - | - | - | - | - | - | - | - | Spain |
| | 0867/2016 | Peaches | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - | Spain |
| | 1975/2016 | Nectarines | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | - | - | Spain |
| | 2679/2016 | Peaches | - | - | - | - | - | - | - | - | - | - | 2.3 | - | - | - | 0.02 | - | - | - | - | - | - | - | Spain |
| | 3777/2016 | Nectarines | - | - | - | 0.04 | - | - | - | - | - | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 3779/2016 | Peaches | - | - | - | - | - | - | - | - | - | - | 0.04 | 0.02 | - | - | - | - | - | - | - | - | - | - | Spain |
| | 3840/2016 | Peaches | - | - | - | - | - | - | - | 0.07 | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | Spain |
| | 3843/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | 0.05 | - | - | - | - | - | - | - | - | Spain |
| | 3848/2016 | Nectarines | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | Spain |
| | 3850/2016 | Peaches | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | 0.03 | - | - | - | Spain |
| | 3864/2016 | Peaches | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | Spain |
| 3877/2016 | Peaches | - | - | - | - | - | - | - | 0.06 | - | - | - | 0.7 | - | - | - | - | - | - | - | - | - | - | Spain | |
| (3) | 3962/2016 | Nectarines | 0.05 | - | - | - | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | Italy |
| | 0866/2016 | Nectarines | - | - | - | 0.05 | 0.02 | - | - | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | Spain |
| | 1828/2016 | Peaches | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | 0.02 | 0.1 | - | - | - | Spain |
| | 1919/2016 | Peaches | - | - | - | - | - | - | - | 0.1 | - | - | - | - | - | 0.05 | - | - | - | 0.02 | - | - | - | - | Spain |
| | 3651/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | 0.3 | - | - | 0.08 | - | - | - | 0.02 | - | - | - | - | Spain |
| | 3701/2016 | Peaches | - | - | - | - | - | - | 0.07 | - | - | 0.02 | - | - | - | 0.02 | - | - | - | - | - | - | - | - | Spain |
| | 3702/2016 | Peaches | - | - | - | 0.1 | - | - | - | - | - | - | 0.9 | - | - | - | - | - | - | - | 0.01 | - | - | - | Spain |
| | 3798/2016 | Nectarines | 0.05 | - | - | - | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | 0.04 | - | - | - | - | Spain |
| | 3823/2016 | Nectarines | - | - | - | - | - | - | - | - | 0.05 | 0.01 | - | - | - | - | 0.01 | - | - | - | - | - | - | - | Spain |
| (4) | 3642/2016 | Nectarines | - | - | - | - | - | - | 0.07 | - | - | - | 0.01 | - | - | 0.09 | - | - | - | - | 0.02 | - | - | - | Spain |
| | 3643/2016 | Peaches | - | - | - | - | - | - | 0.07 | - | - | - | 0.9 | - | - | 0.07 | - | - | - | - | 0.01 | - | - | - | Spain |
| | 3960/2016 | Nectarines | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.01 | 0.01 | - | - | 0.04 | - | - | 0.02 | - | Spain |
| (5) | 2575/2016 | Nectarines | - | - | - | - | 0.03 | - | 0.1 | - | - | - | 0.03 | - | - | - | - | 0.02 | - | 0.01 | - | - | - | Spain | |

| Number of residues | Sample ID | Type of peaches and nectarines | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | | Country of origin | | |
|--------------------|-----------|--------------------------------|------------------------|------|-------|------|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|-------------------|------|-------|
| | | | BOS | CBZ | CPFME | CYD | CYP | DIFC | DTC | EFX | FENB | FLC | FLUD | FNHX | FNV | FPYM | IMI | PMT | PYC | SPN | TBC | TFM | | THC | TME |
| | 2876/2016 | Nectarines | - | - | 0.3 | - | 0.07 | 0.04 | 0.1 | - | - | - | - | - | - | 0.1 | - | - | - | - | - | - | - | - | Spain |
| | 3835/2016 | Nectarines | 0.05 | 0.04 | - | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | - | - | 0.01 | - | - | 0.02 | Spain |
| | 3964/2016 | Peaches | - | - | - | - | - | - | 0.06 | 0.04 | - | - | 0.2 | - | - | 0.2 | - | - | - | 0.03 | - | - | - | - | Spain |
| | 3976/2016 | Peaches | - | - | - | - | - | - | - | 0.02 | - | - | 0.2 | - | - | 0.3 | - | - | - | 0.03 | 0.05 | - | - | - | Spain |
| (6) | 3825/2016 | Nectarines | 0.05 | - | - | - | - | - | - | 0.09 | - | - | 1.9 | - | - | 0.02 | - | - | 0.01 | - | 0.01 | - | - | - | Italy |
| (7) | 4709/2016 | Nectarines | 0.1 | - | 0.02 | 0.07 | - | - | - | 0.07 | - | - | 0.02 | - | - | - | - | - | 0.02 | - | 0.05 | - | - | - | Italy |
| (8) | 0918/2016 | Nectarines | - | - | - | - | - | - | 0.1 | 0.04 | - | - | 0.1 | - | - | 0.1 | 0.01 | - | - | 0.03 | 0.1 | 0.02 | - | - | Spain |
| (9) | 0919/2016 | Peaches | - | - | 0.01 | - | - | - | 0.2 | 0.07 | - | - | 0.2 | - | 0.02 | 0.3 | 0.01 | - | - | 0.04 | - | 0.01 | - | - | Spain |

The abbreviations used for the pesticide names are as follows:

| | | | | | | | | | |
|------|----------------|------|--------------------|-------|---|------|---------------|-----|------------------|
| BOS | boscalid | CBZ | carbendazim | CPFME | chlorpyrifos-methyl | CYD | cyprodinil | CYP | cypermethrin |
| DIFC | difenoconazole | DTC | dithiocarbamates | EFX | etofenprox | FENB | fenbuconazole | FLC | flonicamid (sum) |
| FLUD | fludioxonil | FNHX | fenhexamid | FNV | fenvalerate & esfenvalerate (all isomers) | FPYM | fluopyram | IMI | imidacloprid |
| PMT | phosmet (sum) | PYC | pyraclostrobin | SPN | spinosad | TBC | tebuconazole | TFM | triflumuron |
| THC | thiacloprid | TME | thiophanate-methyl | | | | | | |

Table 20c. PEACHES AND NECTARINES: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|------------------------------------|---------------------------------|
| 2,4-D (sum) (0.01) | EPTC (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethiofencarb (parent) (0.01) | nitrofen (0.02) |
| 2-phenylphenol (0.02) | ethion (0.01) | nitrothal-isopropyl (0.01) |
| 6-benzyladenine (0.01) | ethirimol (0.01) | Novaluron (0.01) |
| abamectin (sum) (0.01) | ethofumesate (0.01) | nuarimol (0.01) |
| acephate (0.01) | ethoprophos (0.01) | ofurace (0.01) |
| acetamiprid (0.01) | etoxazole (0.01) | Oxadiazyl (0.01) |
| acetochlor (0.01) | etridiazole (0.02) | oxadiazon (0.02) |
| acibenzolar-s-methyl (0.01) | etrimfos (0.01) | oxadixyl (0.01) |
| aclonifen (0.02) | famoxadone (0.01) | oxamyl (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxasulfuron (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxyfluorfen (0.02) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | paclobutrazol (0.01) |
| allethrin (0.02) | fenbutatin oxide (0.02) | parathion (0.01) |
| alpha-HCH (0.01) | fenitrothion (0.01) | parathion-methyl (sum) (0.01) |
| ametoctradin (0.01) | fenoxycarb (0.01) | penconazole (0.01) |
| amidosulfuron (0.01) | fenpropathrin (0.01) | pencycuron (0.01) |
| amitraz (0.01) | fenpropidin (0.01) | pendimethalin (0.01) |
| asulam (0.02) | fenpropimorph (0.01) | penflufen (0.01) |
| atrazine (0.01) | fenpyrazamine (0.01) | pentanochlor (0.01) |
| azinphos-ethyl (0.02) | fenpyroximate (0.01) | penthioopyrad (0.01) |
| azinphos-methyl (0.02) | fensulfthion (sum) (0.01) | permethrin (0.01) |
| azoxystrobin (0.01) | fenthion (partial sum) (0.01) | phenmedipham (0.02) |
| BAC (sum) (0.05) | fipronil (sum) (0.005) | phenthoate (0.01) |
| benalaxyl (0.01) | fluazifop-p-butyl (sum) (0.01) | phorate (partial sum) (0.01) |
| bendiocarb (0.01) | fluazinam (0.01) | phosalone (0.01) |
| benfuracarb (0.001) | flubendiamide (0.01) | phosphamidon (0.01) |
| benthiavalicarb (sum) (0.01) | flucythrinate (0.01) | phoxim (0.01) |
| beta-HCH (0.01) | flufenacet (0.01) | picolinafen (0.01) |
| bifenox (0.02) | flufenoxuron (0.02) | picoxystrobin (0.01) |
| bifenthrin (0.01) | fluometuron (0.01) | piperonyl butoxide (0.01) |
| biphenyl (0.01) | fluopicolide (0.01) | pirimicarb (sum) (0.01) |
| bispyribac-sodium (0.01) | fluoxastrobin (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.01) | fluquinconazole (0.01) | pirimiphos-methyl (0.01) |
| bixafen (0.01) | flurochloridone (0.02) | prochloraz (parent only) (0.01) |
| bromophos-ethyl (0.01) | fluroxypyr (sum) (0.02) | procymidone (0.01) |
| bromopropylate (0.01) | flusilazole (0.01) | profenofos (0.01) |
| bromoxynil (0.01) | flutolanil (0.01) | promecarb (0.01) |
| bromuconazole (0.01) | flutriafol (0.01) | prometryn (0.01) |
| bupirimate (0.01) | fluxapyroxad (0.01) | propachlor (0.01) |
| buprofezin (0.01) | folpet (0.01) | propamocarb (0.01) |
| butachlor (0.01) | fonofos (0.01) | propanil (0.02) |
| butocarboxim (parent) (0.01) | formetanate (0.01) | propaquizafop (0.02) |
| butoxycarboxim (0.01) | fosthiazate (0.01) | propargite (0.01) |
| cadusafos (0.01) | furalaxyl (0.01) | propetamphos (0.01) |
| captan (0.02) | furathiocarb (0.001) | propham (0.02) |
| carbaryl (0.01) | furmecyclox (0.01) | propiconazole (0.01) |
| carbetamide (0.02) | halofenozide (0.01) | propoxur (0.01) |
| carbofuran (sum) (0.001) | halosulfuron-methyl (0.01) | propyzamide (0.01) |
| carbosulfan (0.001) | haloxyfop (sum) (0.01) | proquinazid (0.01) |
| carboxin (0.02) | Heptachlor (sum) (0.01) | prosulfocarb (0.01) |
| chlorantraniliprole (0.01) | heptenophos (0.01) | prosulfuron (0.01) |
| chlorbufam (0.01) | hexachlorobenzene (0.01) | prothioconazole (0.01) |
| chlordan (sum) (0.01) | hexachlorocyclohexane (sum) (0.01) | prothiofos (0.01) |
| chlorfenapyr (0.01) | hexaconazole (0.01) | pymetrozine (0.01) |
| chlorfenvinphos (0.01) | hexazinone (0.02) | pyrazophos (0.01) |

chloridazon (0.01)
 chlorobenzilate (0.02)
 chlorothalonil (0.01)
 chlorpropham (sum) (0.01)
 chlorpyrifos (0.01)
 chlorthal-dimethyl (0.01)
 chlortoluron (0.01)
 chlozolinate (0.01)
 chromafenozide (0.01)
 clethodim (0.02)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 cyanazine (0.02)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.02)
 cyflufenamid (0.01)
 cyfluthrin (0.02)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)
 cyproconazole (0.01)

cyromazine (0.02)
 DDAC (sum) (0.05)
 DDT (sum) (0.01)

deltamethrin (0.02)
 demeton-S-methyl (0.01)
 desmedipham (0.02)
 diafenthiuron (0.02)
 diazinon (0.01)
 dichlobenil (0.01)
 dichlofluanid (0.01)
 dichlofluanid and DMSA (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.01)
 dicrotophos (0.01)
 diethofencarb (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethenamid (0.01)
 dimethoate (sum) (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinotefuran (0.01)
 diphenylamine (0.02)
 disulfoton (sum) (0.01)
 dithianon (0.02)
 diuron (0.01)
 dodine (0.02)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.02)
 EPN (0.01)
 epoxiconazole (0.01)

hexythiazox (0.01)
 imazalil (0.02)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprodione (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocarb (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)
 lambda-cyhalothrin (0.02)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)
 lufenuron (0.02)
 malathion (0.01)

mandipropamid (0.01)
 MCPA only (0.01)
 MCPA, MCPB and MCPA thioethyl
 expressed (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mephosfolan (0.02)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.02)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.02)
 metconazole (0.01)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.02)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 napropamide (0.02)

pyrethrins (0.01)
 pyridaben (0.01)
 pyridalyl (0.01)
 pyridaphenthion (0.01)
 pyrifenox (0.02)
 pyrimethanil (0.01)
 pyriproxifen (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.02)
 Quinoclamine (0.01)
 quinoxifen (0.01)
 quintozene (sum) (0.01)
 resmethrin (0.02)
 rimsulfuron (0.01)
 rotenone (0.01)
 simazine (0.02)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sulcotrione (0.02)
 sum of butocarboxim and
 butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)

tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 tepraloxymid (0.02)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbuthylazine (0.02)
 terbutryn (0.02)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.02)
 thiamethoxam (sum) (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.02)
 triasulfuron (0.02)
 triazamate (0.01)
 triazophos (0.01)
 triclopyr (0.02)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumizole (0.01)
 trifluralin (0.01)
 triforine (0.01)
 triticonazole (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 21a. PEAR Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---------------------------------------|----------------------------|
| PEARS, Imported (Non-EC): 8 samples analysed | | |
| chlorantraniliprole (MRL = 0.5) | <0.01 (i.e. not found) 0.02 - 0.03 | 5 3 |
| dithiocarbamates (MRL = 5) | <0.05 (i.e. not found) 0.08 - 0.5 | 3 5 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.2 - 0.5 | 5 3 |
| pyrimethanil (MRL = 15) | <0.01 (i.e. not found) 0.6 - 0.7 | 5 3 |
| thiacloprid (MRL = 0.3) | <0.01 (i.e. not found) 0.02 - 0.08 | 4 4 |
| PEARS, Imported (EC): 16 samples analysed | | |
| boscalid (MRL = 1.5) | <0.01 (i.e. not found) 0.02, 0.1 | 7 2 |
| (MRL = 2) | 0.05 - 0.2 | 7 |
| captan and folpet (MRL = 3) | <0.02 (i.e. not found) 0.03 - 0.8 | 8 8 |
| cyprodinil (MRL = 2) | <0.02 (i.e. not found) 0.02 - 0.3 | 9 7 |
| difenoconazole (MRL = 0.8) | <0.01 (i.e. not found) 0.01 | 14 2 |
| dithiocarbamates (MRL = 5) | <0.05 (i.e. not found) 0.07, 0.2 | 14 2 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.1 - 0.8 | 8 8 |
| imazalil (MRL = 2) | <0.02 (i.e. not found) 0.7, 0.9 | 14 2 |
| imidacloprid (MRL = 0.5) | <0.01 (i.e. not found) 0.03 | 15 1 |
| pyraclostrobin (MRL = 0.5) | <0.01 (i.e. not found) 0.02 - 0.1 | 8 8 |
| pyrimethanil (MRL = 15) | <0.01 (i.e. not found) 0.5, 0.7 | 14 2 |
| thiacloprid (MRL = 0.3) | <0.01 (i.e. not found) 0.03 | 15 1 |

Imported (EC) samples of pears were from Belgium (4), France (2), Spain (1), the Netherlands (9).
Imported (Non-EC) samples of pears were from Argentina (2), South Africa (6).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|----------------------------------|
| boscalid | Belgium (1), the Netherlands (8) |
| captan and folpet | Belgium (1), the Netherlands (7) |
| chlorantraniliprole | South Africa (3) |

| | |
|------------------|---------------------------------------|
| cyprodinil | the Netherlands (7) |
| difenoconazole | Belgium (1), the Netherlands (1) |
| dithiocarbamates | Belgium (2), South Africa (5) |
| fludioxonil | South Africa (3), the Netherlands (8) |
| imidacloprid | Spain (1) |
| imazalil | the Netherlands (2) |
| pyraclostrobin | the Netherlands (8) |
| pyrimethanil | South Africa (3), the Netherlands (2) |
| thiacloprid | South Africa (4), Spain (1) |

No residues were found in 2 of the 8 Imported (Non-EC) samples

No residues were found in 2 of the 16 Imported (EC) samples

Table 21b. PEARS: Residues detected in samples obtained between July and September 2016

Residues (1-7 compounds) were found in 20 of the 24 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | Country of origin |
|--------------------|-----------|------------------------|-------|------|------|------|------|------|------|-----|------|-----|------|-------------------|
| | | BOS | CPFOL | CTP | CYD | DIFC | DTC | FLUD | IMI | IMZ | PYC | PYM | THC | |
| (1) | 0630/2016 | - | - | - | - | - | 0.07 | - | - | - | - | - | - | Belgium |
| | 2062/2016 | - | - | - | - | 0.01 | - | - | - | - | - | - | - | Belgium |
| | 2714/2016 | - | 0.03 | - | - | - | - | - | - | - | - | - | - | Belgium |
| (2) | 0920/2016 | - | - | - | - | - | - | - | - | - | - | 0.7 | 0.03 | South Africa |
| | 2844/2016 | - | - | - | - | - | 0.09 | 0.5 | - | - | - | - | - | South Africa |
| | 2027/2016 | 0.02 | - | - | - | - | 0.2 | - | - | - | - | - | - | Belgium |
| | 2667/2016 | - | - | - | - | - | - | - | 0.03 | - | - | - | 0.03 | Spain |
| | 1921/2016 | - | - | - | 0.3 | - | - | 0.8 | - | - | - | - | - | the Netherlands |
| (3) | 2877/2016 | - | - | - | - | - | 0.08 | 0.2 | - | - | - | - | 0.08 | South Africa |
| | 2948/2016 | - | - | 0.02 | - | - | 0.5 | - | - | - | - | 0.7 | - | South Africa |
| (4) | 1816/2016 | - | - | 0.03 | - | - | 0.09 | 0.3 | - | - | - | - | 0.03 | South Africa |
| | 2980/2016 | - | - | 0.02 | - | - | 0.1 | - | - | - | - | 0.6 | 0.02 | South Africa |
| | 0593/2016 | 0.05 | - | - | - | - | - | - | - | 0.9 | 0.04 | 0.5 | - | the Netherlands |
| | 0663/2016 | 0.05 | 0.05 | - | - | - | - | 0.1 | - | - | 0.03 | - | - | the Netherlands |
| (5) | 0759/2016 | 0.08 | 0.05 | - | 0.05 | - | - | 0.2 | - | - | 0.05 | - | - | the Netherlands |
| | 0921/2016 | 0.1 | 0.8 | - | 0.2 | - | - | 0.3 | - | - | 0.06 | - | - | the Netherlands |
| | 2577/2016 | 0.2 | 0.2 | - | 0.1 | - | - | 0.1 | - | - | 0.1 | - | - | the Netherlands |
| | 2659/2016 | 0.1 | 0.1 | - | 0.02 | - | - | 0.1 | - | - | 0.05 | - | - | the Netherlands |
| (6) | 0906/2016 | 0.09 | 0.2 | - | 0.1 | 0.01 | - | 0.2 | - | - | 0.07 | - | - | the Netherlands |
| (7) | 0232/2016 | 0.05 | 0.07 | - | 0.2 | - | - | 0.1 | - | 0.7 | 0.02 | 0.7 | - | the Netherlands |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|----------------|-------|-------------------|-----|---------------------|
| BOS | boscalid | CPFOL | captan and folpet | CTP | chlorantraniliprole |
| CYD | cyprodinil | DIFC | difenoconazole | DTC | dithiocarbamates |
| FLUD | fludioxonil | IMI | imidacloprid | IMZ | imazalil |
| PYC | pyraclostrobin | PYM | pyrimethanil | THC | thiacloprid |

Table 21c. PEARS: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethion (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethirimol (0.01) | nitrofen (0.02) |
| 2-phenylphenol (0.02) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| 6-benzyladenine (0.01) | ethoprophos (0.01) | Novaluron (0.01) |
| abamectin (sum) (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acephate (0.01) | etoxazole (0.01) | ofurace (0.01) |
| acetamiprid (0.01) | etridiazole (0.02) | Oxadiazyl (0.01) |
| acetochlor (0.01) | etrimfos (0.01) | oxadiazon (0.02) |
| acibenzolar-s-methyl (0.01) | famoxadone (0.01) | oxadixyl (0.01) |
| aclonifen (0.02) | fenamidone (0.01) | oxamyl (0.01) |
| acrinathrin (0.02) | fenamiphos (sum) (0.01) | oxasulfuron (0.01) |
| alachlor (0.01) | fenarimol (0.01) | oxydemeton-methyl (sum) (0.01) |
| aldicarb (sum) (0.01) | fenazaquin (0.01) | oxyfluorfen (0.02) |
| aldrin and dieldrin (0.01) | fenbuconazole (0.01) | paclobutrazol (0.01) |
| allethrin (0.02) | fenbutatin oxide (0.02) | parathion (0.01) |
| alpha-HCH (0.01) | fenhexamid (0.02) | parathion-methyl (sum) (0.01) |
| ametoctradin (0.01) | fenitrothion (0.01) | penconazole (0.01) |
| amidosulfuron (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| amitraz (0.01) | fenpropathrin (0.01) | pendimethalin (0.01) |
| asulam (0.02) | fenpropidin (0.01) | penflufen (0.01) |
| atrazine (0.01) | fenpropimorph (0.01) | pentanochlor (0.01) |
| azinphos-ethyl (0.02) | fenpyrazamine (0.01) | penthiopyrad (0.01) |
| azinphos-methyl (0.02) | fenpyroximate (0.01) | permethrin (0.01) |
| azoxystrobin (0.01) | fensulfothion (sum) (0.01) | phenmedipham (0.02) |
| BAC (sum) (0.05) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| benalaxyl (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (partial sum) (0.01) |
| bendiocarb (0.01) | fipronil (sum) (0.005) | phosalone (0.01) |
| benfuracarb (0.001) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| benthiavalicarb (sum) (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| beta-HCH (0.01) | fluazinam (0.01) | phoxim (0.01) |
| bifenox (0.02) | flubendiamide (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| biphenyl (0.01) | flufenacet (0.01) | piperonyl butoxide (0.01) |
| bispyribac-sodium (0.01) | flufenoxuron (0.02) | pirimicarb (sum) (0.01) |
| bitertanol (0.01) | fluometuron (0.01) | pirimiphos-ethyl (0.01) |
| bixafen (0.01) | fluopicolide (0.01) | pirimiphos-methyl (0.01) |
| bromophos-ethyl (0.01) | fluopyram (0.01) | prochloraz (parent only) (0.01) |
| bromopropylate (0.01) | fluoxastrobin (0.01) | procymidone (0.01) |
| bromoxynil (0.01) | fluquinconazole (0.01) | profenofos (0.01) |
| bromuconazole (0.01) | flurochloridone (0.02) | promecarb (0.01) |
| bupirimate (0.01) | fluroxypyr (sum) (0.02) | prometryn (0.01) |
| buprofezin (0.01) | flusilazole (0.01) | propachlor (0.01) |
| butachlor (0.01) | flutolanil (0.01) | propamocarb (0.01) |
| butocarboxim (parent) (0.01) | flutriafol (0.01) | propanil (0.02) |
| butoxycarboxim (0.01) | fluxapyroxad (0.01) | propaquizafop (0.02) |
| cadusafos (0.01) | fonofos (0.01) | propargite (0.01) |
| carbaryl (0.01) | formetanate (0.01) | propetamphos (0.01) |
| carbendazim (0.01) | fosthiazate (0.01) | propham (0.02) |
| carbetamide (0.02) | furalaxyl (0.01) | propiconazole (0.01) |
| carbofuran (sum) (0.001) | furathiocarb (0.001) | propoxur (0.01) |
| carbosulfan (0.001) | furmecyclox (0.01) | propyzamide (0.01) |
| carboxin (0.02) | halofenozide (0.01) | proquinazid (0.01) |
| chlorbufam (0.01) | halosulfuron-methyl (0.01) | prosulfocarb (0.01) |
| chlordane (sum) (0.01) | haloxyfop (sum) (0.01) | prosulfuron (0.01) |
| chlorfenapyr (0.01) | Heptachlor (sum) (0.01) | prothioconazole (0.01) |
| chlorfenvinphos (0.01) | heptenophos (0.01) | prothiofos (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.01) | pymetrozine (0.01) |
| chlormequat (0.02) | hexachlorocyclohexane (sum) | pyrazophos (0.01) |

chlorobenzilate (0.02)
 chlorothalonil (0.01)
 chlorpropham (sum) (0.01)
 chlorpyrifos (0.01)
 chlorpyrifos-methyl (0.01)
 chlorthal-dimethyl (0.01)
 chlortoluron (0.01)
 chlozolate (0.01)
 chromafenozide (0.01)
 clethodim (0.02)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 cyanazine (0.02)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.02)
 cyflufenamid (0.01)
 cyfluthrin (0.02)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)
 cypermethrin (0.02)

cyproconazole (0.01)
 cyromazine (0.02)
 DDAC (sum) (0.05)
 DDT (sum) (0.01)

deltamethrin (0.02)
 demeton-S-methyl (0.01)
 desmedipham (0.02)
 diafenthiuron (0.02)
 diazinon (0.01)
 dichlobenil (0.01)
 dichlofluanid (0.01)
 dichlofluanid and DMSA (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.01)
 dicrotophos (0.01)
 diethofencarb (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethenamid (0.01)
 dimethoate (sum) (0.01)
 dimethomorph (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinotefuran (0.01)
 diphenylamine (0.02)
 disulfoton (sum) (0.01)
 diuron (0.01)
 dodine (0.02)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.02)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)

(0.01)
 hexaconazole (0.01)
 hexazinone (0.02)
 hexythiazox (0.01)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprodione (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocab (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)
 lambda-cyhalothrin (0.02)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)
 lufenuron (0.02)

malathion (0.01)
 mandipropamid (0.01)
 MCPA only (0.01)
 MCPA, MCPB and MCPA thioethyl
 expressed (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mephosfolan (0.02)
 mepiquat (0.02)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.02)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.02)
 metconazole (0.01)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.02)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 naptopamide (0.02)

pyrethrins (0.01)
 pyridaben (0.01)
 pyridalyl (0.01)
 pyridaphenthion (0.01)
 pyrifenox (0.02)
 pyriproxifen (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.02)
 Quinoclamine (0.01)
 quinoxifen (0.01)
 quintozone (sum) (0.01)
 resmethrin (0.02)
 rimsulfuron (0.01)
 rotenone (0.01)
 simazine (0.02)
 spinosad (0.01)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sulcotrione (0.02)
 sum of butocarboxim and
 butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)

tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 tepraloxymid (0.02)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbuthylazine (0.02)
 terbutryn (0.02)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.02)
 thiamethoxam (sum) (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.02)
 triasulfuron (0.02)
 triazamate (0.01)
 triazophos (0.01)
 triclopyr (0.02)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumizole (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.01)
 triticonazole (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 22a. PEPPERS: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| PEPPERS, FRESH UK: 4 samples analysed | | |
| spiromesifen (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 3 1 |
| PEPPERS, FRESH Imported (Non-EC): 1 sample analysed | | |
| cypermethrin (MRL = 0.5) | <0.02 (i.e. not found) 0.05 | 0 1 |
| PEPPERS, FRESH Imported (EC): 25 samples analysed | | |
| boscalid (MRL = 3) | <0.01 (i.e. not found) 0.05 | 24 1 |
| indoxacarb (MRL = 0.3) | <0.01 (i.e. not found) 0.01 - 0.02 | 20 5 |
| methoxyfenozide (MRL = 2) | <0.01 (i.e. not found) 0.01, 0.02 | 23 2 |
| metrafenone (MRL = 2) | <0.01 (i.e. not found) 0.01 | 24 1 |
| pirimicarb (sum) (MRL = 0.5) | <0.01 (i.e. not found) 0.01 | 24 1 |
| propamocarb (MRL = 3) | <0.01 (i.e. not found) 0.01 - 0.06 | 21 4 |
| pymetrozine (MRL = 3) | <0.01 (i.e. not found) 0.02 | 23 2 |
| pyraclostrobin (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 24 1 |
| pyridalyl (MRL = 2) | <0.01 (i.e. not found) 0.01 - 0.06 | 21 4 |

Imported (EC) samples of peppers were from Spain (2), the Netherlands (23).

Imported (Non-EC) samples of peppers were from Turkey (1).

UK samples of peppers (4).

Residues were distributed by country of origin, as follows:

| | |
|------------------|---------------------|
| boscalid | the Netherlands (1) |
| cypermethrin | Turkey (1) |
| indoxacarb | the Netherlands (5) |
| metrafenone | Spain (1) |
| methoxyfenozide | the Netherlands (2) |
| propamocarb | the Netherlands (4) |
| pirimicarb (sum) | the Netherlands (1) |
| pyraclostrobin | the Netherlands (1) |
| pyridalyl | the Netherlands (4) |
| pymetrozine | the Netherlands (2) |
| spiromesifen | UK (1) |

No residues were found in 3 of the 4 UK fresh samples

Residues were found in all of the 1 Imported (Non-EC) fresh samples

No residues were found in 13 of the 25 Imported (EC) fresh samples

Table 22b. PEPPERS: Residues detected in retail samples purchased between July and September 2016

Residues (1-3 compounds) were found in 14 of the 30 samples as follows:

| Number of residues | Sample ID | Type of PEPPERS | Residues found (mg/kg) | | | | | | | | | | | Country of origin | |
|--------------------|-----------|-----------------|------------------------|------|------|------|------|------|------|-----|------|------|-----|-------------------|-----------------|
| | | | BOS | CYP | IDX | MTF | MXF | PCB | PIR | PYC | PYDL | PYMT | SPM | | |
| (1) | 2670/2016 | FRESH | - | - | - | - | - | - | - | - | - | - | - | 0.02 | UK |
| | 2949/2016 | FRESH | - | 0.05 | - | - | - | - | - | - | - | - | - | - | Turkey |
| | 0664/2016 | FRESH | - | - | - | 0.01 | - | - | - | - | - | - | - | - | Spain |
| | 0233/2016 | FRESH | - | - | - | - | - | 0.01 | - | - | - | - | - | - | the Netherlands |
| | 0510/2016 | FRESH | - | - | 0.01 | - | - | - | - | - | - | - | - | - | the Netherlands |
| | 0584/2016 | FRESH | - | - | 0.01 | - | - | - | - | - | - | - | - | - | the Netherlands |
| | 0631/2016 | FRESH | - | - | 0.02 | - | - | - | - | - | - | - | - | - | the Netherlands |
| | 0905/2016 | FRESH | - | - | 0.02 | - | - | - | - | - | - | - | - | - | the Netherlands |
| 1814/2016 | FRESH | - | - | - | - | - | - | 0.06 | - | - | - | - | - | the Netherlands | |
| (2) | 2815/2016 | FRESH | 0.05 | - | - | - | - | - | - | - | 0.02 | - | - | - | the Netherlands |
| (3) | 2157/2016 | FRESH | - | - | - | - | - | 0.01 | 0.01 | - | 0.06 | - | - | - | the Netherlands |
| | 2352/2016 | FRESH | - | - | 0.02 | - | - | - | - | - | 0.01 | 0.02 | - | - | the Netherlands |
| | 2365/2016 | FRESH | - | - | - | - | 0.01 | - | - | - | 0.01 | 0.02 | - | - | the Netherlands |
| | 2825/2016 | FRESH | - | - | - | - | 0.02 | 0.01 | - | - | 0.03 | - | - | - | the Netherlands |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|------------------|-----|-----------------|------|-------------|
| BOS | boscalid | CYP | cypermethrin | IDX | indoxacarb |
| MTF | metrafenone | MXF | methoxyfenozide | PCB | propamocarb |
| PIR | pirimicarb (sum) | PYC | pyraclostrobin | PYDL | pyridalyl |
| PYMT | pymetrozine | SPM | spiromesifen | | |

Table 22c. PEPPERS: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | EPTC (0.01) | Monuron (0.01) |
| 2,4-DB (0.01) | ethephon (0.05) | myclobutanil (0.01) |
| 2-phenylphenol (0.02) | ethiofencarb (parent) (0.01) | napropamide (0.02) |
| 6-benzyladenine (0.01) | ethion (0.01) | nitenpyram (0.01) |
| abamectin (sum) (0.01) | ethirimol (0.01) | nitrofen (0.02) |
| acephate (0.01) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| acetamiprid (0.01) | ethoprophos (0.01) | Novaluron (0.01) |
| acetochlor (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acibenzolar-s-methyl (0.01) | etoxazole (0.01) | ofurace (0.01) |
| aclonifen (0.02) | etridiazole (0.02) | Oxadiargyl (0.01) |
| acrinathrin (0.02) | etrimfos (0.01) | oxadiazon (0.02) |
| alachlor (0.01) | famoxadone (0.01) | oxadixyl (0.01) |
| aldicarb (sum) (0.01) | fenamidone (0.01) | oxamyl (0.01) |
| aldrin and dieldrin (0.01) | fenamiphos (sum) (0.01) | oxasulfuron (0.01) |
| allethrin (0.02) | fenarimol (0.01) | oxydemeton-methyl (sum) (0.01) |
| alpha-HCH (0.01) | fenazaquin (0.01) | oxyfluorfen (0.02) |
| ametoctradin (0.01) | fenbuconazole (0.01) | paclobutrazol (0.01) |
| amidosulfuron (0.01) | fenbutatin oxide (0.02) | parathion (0.01) |
| amitraz (0.01) | fenhexamid (0.02) | parathion-methyl (sum) (0.01) |
| asulam (0.02) | fenitrothion (0.01) | penconazole (0.01) |
| atrazine (0.01) | fenoxycarb (0.01) | pencycuron (0.01) |
| azinphos-ethyl (0.02) | fenpropathrin (0.01) | pendimethalin (0.01) |
| azinphos-methyl (0.02) | fenpropidin (0.01) | penflufen (0.01) |
| azoxystrobin (0.01) | fenpropimorph (0.01) | pentanochlor (0.01) |
| BAC (sum) (0.05) | fenpyrazamine (0.01) | penthiopyrad (0.01) |
| benalaxyl (0.01) | fenpyroximate (0.01) | permethrin (0.01) |
| bendiocarb (0.01) | fensulfothion (sum) (0.01) | phenmedipham (0.02) |
| benfuracarb (0.001) | fenthion (partial sum) (0.01) | phenthoate (0.01) |
| benthiavalicarb (sum) (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (partial sum) (0.01) |
| beta-HCH (0.01) | fipronil (sum) (0.005) | phosalone (0.01) |
| bifenox (0.02) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| bifenthrin (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| biphenyl (0.01) | fluazinam (0.01) | phoxim (0.01) |
| bispyribac-sodium (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| bitertanol (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bixafen (0.01) | fludioxonil (0.01) | piperyonyl butoxide (0.01) |
| bromophos-ethyl (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bromopropylate (0.01) | flufenoxuron (0.02) | pirimiphos-methyl (0.01) |
| bromoxynil (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| bromuconazole (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bupirimate (0.01) | fluopyram (0.01) | profenofos (0.01) |
| buprofezin (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| butachlor (0.01) | fluquinconazole (0.01) | prometryn (0.01) |
| butocarboxim (parent) (0.01) | flurochloridone (0.02) | propachlor (0.01) |
| butoxycarboxim (0.01) | fluroxypyr (sum) (0.02) | propanil (0.02) |
| cadusafos (0.01) | flusilazole (0.01) | propaquizafop (0.02) |
| captan (0.02) | flutolanil (0.01) | propargite (0.01) |
| carbaryl (0.01) | flutriafol (0.01) | propetamphos (0.01) |
| carbendazim (0.01) | fluxapyroxad (0.01) | propham (0.02) |
| carbetamide (0.02) | folpet (0.01) | propiconazole (0.01) |
| carbofuran (sum) (0.001) | fonofos (0.01) | propoxur (0.01) |
| carbosulfan (0.001) | formetanate (0.01) | propyzamide (0.01) |
| carboxin (0.02) | fosthiazate (0.01) | proquinazid (0.01) |
| chlorantraniliprole (0.01) | furalaxyl (0.01) | prosulfocarb (0.01) |
| chlorbufam (0.01) | furathiocarb (0.001) | prosulfuron (0.01) |
| chlordan (sum) (0.01) | furmecyclox (0.01) | prothioconazole (0.01) |
| chlorfenapyr (0.01) | halofenozide (0.01) | prothiofos (0.01) |
| chlorfenvinphos (0.01) | halosulfuron-methyl (0.01) | pyrazophos (0.01) |
| chloridazon (0.01) | haloxyfop (sum) (0.01) | pyrethrins (0.01) |

chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (0.01)
chlortoluron (0.01)
chlozolinate (0.01)
chromafenozide (0.01)
clethodim (0.02)
clofentezine (0.01)
clomazone (0.01)
clothianidin (0.01)
coumaphos (0.01)
cyanazine (0.02)
cyazofamid (0.01)
cycloate (0.01)
cycloxydim (0.02)
cyflufenamid (0.01)
cyfluthrin (0.02)
cyhalofop-butyl (sum) (0.01)

cymoxanil (0.01)
cyproconazole (0.01)
cyprodinil (0.02)
cyromazine (0.02)
DDAC (sum) (0.05)
DDT (sum) (0.01)
deltamethrin (0.02)
demeton-S-methyl (0.01)
desmedipham (0.02)
diafenthiuron (0.02)
diazinon (0.01)

dichlobenil (0.01)
dichlofluanid (0.01)
dichlofluanid and DMSA (0.01)
dichlorprop (0.01)
dichlorvos (0.01)
diclobutrazol (0.01)
dicloran (0.01)
dicofol (sum) (0.01)
dicrotophos (0.01)
diethofencarb (0.01)
difenoconazole (0.01)
diflubenzuron (0.01)
diflufenican (0.01)
dimethenamid (0.01)
dimethoate (sum) (0.01)
dimethomorph (0.01)
dimoxystrobin (0.01)
diniconazole (0.01)
dinotefuran (0.01)
diphenylamine (0.02)
disulfoton (sum) (0.01)
dithiocarbamates (0.05)
diuron (0.01)
dodine (0.02)
emamectin benzoate (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)

Heptachlor (sum) (0.01)
heptenophos (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (0.01)
imazalil (0.02)
imidacloprid (0.01)
ioxynil (0.01)
iprodione (0.01)
iprovalicarb (0.01)
isazophos (0.01)
isocarbophos (0.01)
isofenphos (0.01)
isofenphos-methyl (0.01)
isoprocarb (0.01)
isoprothiolane (0.01)
isoproturon (0.01)
isopyrazam (0.01)
isoxaben (0.01)

isoxaflutole (0.01)
kresoxim-methyl (0.01)
lambda-cyhalothrin (0.02)
lenacil (0.01)
lindane (0.01)
linuron (0.01)
lufenuron (0.02)
malathion (0.01)
mandipropamid (0.01)
MCPA only (0.01)
MCPA, MCPB and MCPA thioethyl expressed (0.01)
mecarbam (0.01)
mepanipyrim (sum) (0.01)
mephosfolan (0.02)

mepronil (0.01)
mesosulfuron-methyl (0.01)
metaflumizone (0.02)
metalaxyl (0.01)
metamitron (0.01)
metazachlor (0.02)
metconazole (0.01)
methabenzthiazuron (0.01)
methacrifos (0.01)
methamidophos (0.01)
methidathion (0.01)
methiocarb (sum) (0.01)
methomyl (sum) (0.01)
methoxychlor (0.01)
metobromuron (0.01)
metolachlor (0.01)
metolcarb (0.01)
metosulam (0.01)
metoxuron (0.01)
metribuzin (0.02)
metsulfuron-methyl (0.01)
mevinphos (0.01)
molinate (0.01)
monocrotophos (0.01)
monolinuron (0.01)

pyridaben (0.01)
pyridaphenthion (0.01)
pyrifenox (0.02)
pyrimethanil (0.01)
pyriproxifen (0.01)
quassia (0.01)
quinalphos (0.01)
quinmerac (0.02)
Quinoclamine (0.01)
quinoxifen (0.01)
quintozene (sum) (0.01)
resmethrin (0.02)
rimsulfuron (0.01)
rotenone (0.01)
simazine (0.02)
spinosad (0.01)
spirodiclofen (0.01)
spirotetramat (sum) (0.01)
spiroxamine (0.01)
sulcotrione (0.02)
sum of butocarboxim and butocarboxim sul (0.01)
tau-fluvalinate (0.01)
tebuconazole (0.01)
tebufenozide (0.01)
tebufenpyrad (0.01)
tebuthiuron (0.01)
tecnazene (0.01)
teflubenzuron (0.01)
tefluthrin (0.01)
tepraloxymid (0.02)
terbufos (0.01)
Terbufos (sum not defintion) (0.01)

terbuthylazine (0.02)
terbutryn (0.02)
tetrachlorvinphos (0.01)

tetraconazole (0.01)
tetradifon (0.01)
tetramethrin (0.01)
thiabendazole (0.02)
thiacloprid (0.01)
thiamethoxam (sum) (0.01)
thiophanate-methyl (0.01)
tolclofos-methyl (0.01)
tolfenpyrad (0.01)
tolyfluanid (sum) (0.01)
triadimefon & triadimenol (0.01)
triallate (0.02)
triasulfuron (0.02)
triazamate (0.01)
triazophos (0.01)
triclopyr (0.02)
tricyclazole (0.01)
trifloxystrobin (0.01)
triflumizole (0.01)
triflumuron (0.01)
trifluralin (0.01)
triforine (0.01)
triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 23a. PORK: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|-----------------------------|----------------------------|
| PORK, UK: 38 samples analysed | | |
| BAC (sum) | <0.05 (i.e. not found) | 35 |
| (MRL = 0.1) | 0.09, 0.1 | 2 |
| | 0.3 | 1 |
| DDAC (sum) | <0.05 (i.e. not found) | 37 |
| (MRL = 0.1) | 0.09 | 1 |
| PORK, Imported (Non-EC): 1 sample analysed | | |
| None found | - | 1 |
| PORK, Imported (EC): 14 samples analysed | | |
| None found | - | 14 |

Imported (EC) samples of pork were from Belgium (1), Denmark (7), France (2), Germany (3), the Netherlands (1).
 Imported (Non-EC) samples of pork were from USA (1).
 UK samples of pork (38).

Residues were distributed by country of origin, as follows:

BAC (sum) UK (3)
 DDAC (sum) UK (1)

No residues were found in 35 of the 38 UK samples
 No residues were found in any of the Imported (Non-EC) samples
 No residues were found in any of the Imported (EC) samples

Table 23b. PORK: Residues detected in retail samples purchased between July and September 2016

Residues (1-2 compounds) were found in 3 of the 53 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | Country of origin |
|--------------------|-----------|------------------------|------|-------------------|
| | | BACSM | DDAC | |
| (1) | 2205/2016 | 0.09 | - | UK |
| | 2369/2016 | 0.1 | - | UK |
| (2) | 0677/2016 | 0.3 | 0.09 | UK |

The abbreviations used for the pesticide names are as follows:

BACSM BAC (sum) DDAC DDAC (sum)

Table 23c. PORK: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-----------------------------|---|---------------------------------|
| abamectin (sum) (0.01) | diazinon (0.002) | methidathion (0.002) |
| acephate (0.01) | dichlorvos (0.01) | methoxychlor (0.002) |
| aldrin and dieldrin (0.002) | diflubenzuron (0.01) | nitrofen (0.01) |
| alpha-HCH (0.002) | endosulfan (sum) (0.002) | parathion (0.005) |
| azamethiphos (0.01) | endrin (0.002) | parathion-methyl (sum) (0.002) |
| azinphos-ethyl (0.005) | epoxiconazole (0.01) | pendimethalin (0.005) |
| benfuracarb (0.002) | ethoprophos (0.002) | permethrin (0.005) |
| beta-HCH (0.002) | etofenprox (0.01) | phoxim (0.01) |
| bifenthrin (0.005) | famoxadone (0.01) | pirimicarb (sum) (0.002) |
| boscalid (0.01) | fenitrothion (0.002) | pirimiphos-methyl (0.002) |
| bromophos-ethyl (0.002) | fenpropimorph (0.01) | prochloraz (parent only) (0.01) |
| cadusafos (0.002) | fenthion (partial sum) (0.01) | profenofos (0.01) |
| carbaryl (0.002) | fenvalerate & esfenvalerate (all isomers) (0.002) | propetamphos (0.002) |
| carbendazim (0.01) | fluazifop-p-butyl (sum) (0.01) | propoxur (0.002) |
| carbofuran (sum) (0.002) | fluquinconazole (0.01) | prothioconazole (0.01) |
| carbosulfan (0.002) | flusilazole (0.01) | pyrazophos (0.002) |
| chlordane (sum) (0.002) | haloxyfop (sum) (0.01) | quintozene (sum) (0.002) |
| chlorfenvinphos (0.002) | Heptachlor (sum) (0.002) | resmethrin (0.01) |
| chlorobenzilate (0.002) | hexachlorobenzene (0.002) | spinosad (0.01) |
| chlorpropham (sum) (0.005) | hexachlorocyclohexane (sum) (0.002) | tau-fluvalinate (0.01) |
| chlorpyrifos (0.002) | indoxacarb (0.01) | tebuconazole (0.01) |
| chlorpyrifos-methyl (0.002) | lambda-cyhalothrin (0.005) | tecnazene (0.002) |
| coumaphos (0.002) | lindane (0.002) | teflubenzuron (0.01) |
| cyfluthrin (0.002) | malathion (0.01) | tetrachlorvinphos (0.002) |
| cypermethrin (0.005) | metaflumizone (0.01) | tetraconazole (0.01) |
| cyproconazole (0.01) | metazachlor (0.002) | thiacloprid (0.01) |
| DDT (sum) (0.002) | methacrifos (0.002) | triazophos (0.002) |
| deltamethrin (0.005) | methamidophos (0.01) | vinclozolin (sum) (0.002) |

Table 24a. POTATOES: Residues detected in samples obtained between June and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---------------------------------------|----------------------------|
| POTATOES, MAINCROP UK: 17 samples analysed | | |
| Chlorpropham (potato definition) (MRL = 10) | <0.05 (i.e. not found) 0.6 - 3.4 | 13 4 |
| flonicamid (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.01, 0.03 | 15 2 |
| fluopicolide (MRL = 0.03) | <0.01 (i.e. not found) 0.01 | 16 1 |
| fosthiazate (MRL = 0.02*) | <0.01 (i.e. not found) 0.02 | 16 1 |
| maleic hydrazide (MRL = 50) | <1 (i.e. not found) 13, 16 | 15 2 |
| propamocarb (MRL = 0.3) | <0.01 (i.e. not found) 0.01 - 0.02 | 13 4 |
| POTATOES, NEW UK: 1 sample analysed | | |
| None found | - | 1 |

NOTE: * Indicates MRL is set to the Limit of Determination.

UK samples of potatoes (18).

Residues were distributed by country of origin, as follows:

| | |
|----------------------------------|--------|
| Chlorpropham (potato definition) | UK (4) |
| flonicamid (sum) | UK (2) |
| fosthiazate | UK (1) |
| fluopicolide | UK (1) |
| maleic hydrazide | UK (2) |
| propamocarb | UK (4) |

No residues were found in 9 of the 17 UK maincrop samples

No residues were found in any of the UK new samples

Table 24b. POTATOES: Residues detected in samples obtained between June and September 2016

Residues (1-3 compounds) were found in 8 of the 18 samples as follows:

| Number of residues | Sample ID | Type of POTATOES | Residues found (mg/kg) | | | | | | Country of origin |
|--------------------|-----------|------------------|------------------------|------|------|------|----|------|-------------------|
| | | | CPPOT | FLC | FOST | FPC | MH | PCB | |
| (1) | 4171/2016 | MAINCROP | 1.1 | - | - | - | - | - | UK |
| | 4182/2016 | MAINCROP | - | - | - | - | - | 0.01 | UK |
| | 4227/2016 | MAINCROP | - | 0.03 | - | - | - | - | UK |
| | 4231/2016 | MAINCROP | - | - | 0.02 | - | - | - | UK |
| (2) | 4153/2016 | MAINCROP | - | - | - | 0.01 | - | 0.02 | UK |
| | 4203/2016 | MAINCROP | 3.4 | - | - | - | 13 | - | UK |
| (3) | 4229/2016 | MAINCROP | 2.6 | - | - | - | 16 | 0.01 | UK |
| | 4230/2016 | MAINCROP | 0.6 | 0.01 | - | - | - | 0.02 | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|-------|-------------------------------------|-----|------------------|------|-------------|
| CPPOT | Chlorpropham (potato definition) | FLC | flonicamid (sum) | FOST | fosthiazate |
| FPC | fluopicolide | MH | maleic hydrazide | PCB | propamocarb |

Table 24c. POTATOES: Residues sought but not found in samples obtained between June and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|-------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethiofencarb (parent) (0.01) | nitrofen (0.02) |
| 2,4-DB (0.01) | ethion (0.01) | nitrothal-isopropyl (0.01) |
| 2-phenylphenol (0.02) | ethirimol (0.01) | Novaluron (0.01) |
| 6-benzyladenine (0.01) | ethofumesate (0.01) | nuarimol (0.01) |
| abamectin (sum) (0.01) | ethoprophos (0.01) | ofurace (0.01) |
| acephate (0.01) | etofenprox (0.01) | Oxadiargyl (0.01) |
| acetamiprid (0.01) | etoxazole (0.01) | oxadiazon (0.02) |
| acetochlor (0.01) | etridiazole (0.02) | oxadixyl (0.01) |
| acibenzolar-s-methyl (0.01) | etrimfos (0.01) | oxamyl (0.01) |
| aclonifen (0.02) | famoxadone (0.01) | oxasulfuron (0.01) |
| acrinathrin (0.02) | fenamidone (0.01) | oxydemeton-methyl (sum) (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxyfluorfen (0.02) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | paclobutrazol (0.01) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | parathion (0.01) |
| allethrin (0.02) | fenbuconazole (0.01) | parathion-methyl (sum) (0.01) |
| alpha-HCH (0.01) | fenbutatin oxide (0.02) | penconazole (0.01) |
| ametocradin (0.01) | fenhexamid (0.02) | pencycuron (0.01) |
| amidosulfuron (0.01) | fenitrothion (0.01) | pendimethalin (0.01) |
| amitraz (0.01) | fenoxycarb (0.01) | penflufen (0.01) |
| asulam (0.02) | fenpropathrin (0.01) | pentanochlor (0.01) |
| atrazine (0.01) | fenpropidin (0.01) | penthioopyrad (0.01) |
| azinphos-ethyl (0.02) | fenpropimorph (0.01) | permethrin (0.01) |
| azinphos-methyl (0.02) | fenpyrazamine (0.01) | phenmedipham (0.02) |
| azoxystrobin (0.01) | fenpyroximate (0.01) | phenthoate (0.01) |
| BAC (sum) (0.05) | fensulfothion (sum) (0.01) | phorate (partial sum) (0.01) |
| benalaxyl (0.01) | fenthion (partial sum) (0.01) | phosalone (0.01) |
| bendiocarb (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosmet (sum) (0.01) |
| benfuracarb (0.001) | fipronil (sum) (0.005) | phosphamidon (0.01) |
| benthiavaliacarb (sum) (0.01) | fluazifop-p-butyl (sum) (0.01) | phoxim (0.01) |
| beta-HCH (0.01) | fluazinam (0.01) | picolinafen (0.01) |
| bifenox (0.02) | flubendiamide (0.01) | picoxystrobin (0.01) |
| bifenthrin (0.01) | flucythrinate (0.01) | piperonyl butoxide (0.01) |
| biphenyl (0.01) | fludioxonil (0.01) | pirimicarb (sum) (0.01) |
| bispyribac-sodium (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.01) | flufenoxuron (0.02) | pirimiphos-methyl (0.01) |
| bixafen (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| boscalid (0.01) | fluopyram (0.01) | procymidone (0.01) |
| bromophos-ethyl (0.01) | fluoxastrobin (0.01) | profenofos (0.01) |
| bromopropylate (0.01) | fluquinconazole (0.01) | promecarb (0.01) |
| bromoxynil (0.01) | flurochloridone (0.02) | prometryn (0.01) |
| bromuconazole (0.01) | fluroxypyr (sum) (0.02) | propachlor (0.01) |
| bupirimate (0.01) | flusilazole (0.01) | propanil (0.02) |
| buprofezin (0.01) | flutolanil (0.01) | propaquizafop (0.02) |
| butachlor (0.01) | flutriafol (0.01) | propargite (0.01) |
| butocarboxim (parent) (0.01) | fluxapyroxad (0.01) | propetamphos (0.01) |
| butoxycarboxim (0.01) | folpet (0.01) | propham (0.02) |
| cadusafos (0.01) | fonofos (0.01) | propiconazole (0.01) |
| captan (0.02) | formetanate (0.01) | propoxur (0.01) |
| carbaryl (0.01) | furalaxyl (0.01) | propyzamide (0.01) |
| carbendazim (0.01) | furathiocarb (0.001) | proquinazid (0.01) |
| carbetamide (0.02) | furmecyclox (0.01) | prosulfocarb (0.01) |
| carbofuran (sum) (0.001) | halofenozide (0.01) | prosulfuron (0.01) |
| carbosulfan (0.001) | halosulfuron-methyl (0.01) | prothioconazole (0.01) |
| carboxin (0.02) | haloxyfop (sum) (0.01) | prothiofos (0.01) |
| chlorantraniliprole (0.01) | Heptachlor (sum) (0.01) | pymetrozine (0.01) |
| chlorbufam (0.01) | heptenophos (0.01) | pyraclostrobin (0.01) |
| chlordane (sum) (0.01) | hexachlorobenzene (0.01) | pyrazophos (0.01) |

| | | |
|-------------------------------|--|---|
| chlorfenapyr (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrethrins (0.01) |
| chlorfenvinphos (0.01) | hexaconazole (0.01) | pyridaben (0.01) |
| chloridazon (0.01) | hexazinone (0.02) | pyridalyl (0.01) |
| chlorobenzilate (0.02) | hexythiazox (0.01) | pyridaphenthion (0.01) |
| chlorothalonil (0.01) | imazalil (0.02) | pyrifenox (0.02) |
| chlorpyrifos (0.01) | imidacloprid (0.01) | pyrimethanil (0.01) |
| chlorpyrifos-methyl (0.01) | indoxacarb (0.01) | pyriproxifen (0.01) |
| chlorthal-dimethyl (0.01) | ioxynil (0.01) | quassia (0.01) |
| chlortoluron (0.01) | iprodione (0.01) | quinalphos (0.01) |
| chlozolinate (0.01) | iprovalicarb (0.01) | quinmerac (0.02) |
| chromafenozide (0.01) | isazophos (0.01) | Quinoclamine (0.01) |
| clethodim (0.02) | isocarbophos (0.01) | quinomethionate (0.02) |
| clofentezine (0.01) | isofenphos (0.01) | quinoxifen (0.01) |
| clomazone (0.01) | isofenphos-methyl (0.01) | quintozene (sum) (0.01) |
| clothianidin (0.01) | isoprocab (0.01) | resmethrin (0.02) |
| coumaphos (0.01) | isoprothiolane (0.01) | rimsulfuron (0.01) |
| cyanazine (0.02) | isoproturon (0.01) | rotenone (0.01) |
| cyazofamid (0.01) | isopyrazam (0.01) | simazine (0.02) |
| cycloate (0.01) | isoxaben (0.01) | spinosad (0.01) |
| cycloxydim (0.02) | isoxaflutole (0.01) | spirodiclofen (0.01) |
| cyflufenamid (0.01) | kresoxim-methyl (0.01) | spiromesifen (0.01) |
| cyfluthrin (0.02) | lambda-cyhalothrin (0.02) | spirotetramat (sum) (0.01) |
| cyhalofop-butyl (sum) (0.01) | lenacil (0.01) | spiroxamine (0.01) |
| cymoxanil (0.01) | lindane (0.01) | sulcotrione (0.02) |
| cypermethrin (0.02) | linuron (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| | | tau-fluvalinate (0.01) |
| cyproconazole (0.01) | lufenuron (0.02) | tebuconazole (0.01) |
| cyprodinil (0.02) | malathion (0.01) | tebufenozide (0.01) |
| cyromazine (0.02) | mandipropamid (0.01) | tebufenpyrad (0.01) |
| DDAC (sum) (0.05) | MCPA only (0.01) | tebuthiuron (0.01) |
| DDT (sum) (0.01) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | |
| | mecarbam (0.01) | tecnazene (0.01) |
| deltamethrin (0.02) | mepanipyrim (sum) (0.01) | teflubenzuron (0.01) |
| demeton-S-methyl (0.01) | mephosfolan (0.02) | tefluthrin (0.01) |
| desmedipham (0.02) | mepronil (0.01) | tepraloxydim (0.02) |
| diafenthiuron (0.02) | mesosulfuron-methyl (0.01) | terbufos (0.01) |
| diazinon (0.01) | metaflumizone (0.02) | Terbufos (sum not defintion) (0.01) |
| dichlobenil (0.01) | metalaxyl (0.01) | terbuthylazine (0.02) |
| dichlofluanid (0.01) | metamitron (0.01) | terbutryn (0.02) |
| dichlofluanid and DMSA (0.01) | metazachlor (0.02) | tetrachlorvinphos (0.01) |
| dichlorprop (0.01) | metconazole (0.01) | tetraconazole (0.01) |
| dichlorvos (0.01) | methabenzthiazuron (0.01) | tetradifon (0.01) |
| diclobutrazol (0.01) | methacrifos (0.01) | tetramethrin (0.01) |
| dicloran (0.01) | methamidophos (0.01) | thiabendazole (0.02) |
| dicofol (sum) (0.01) | methidathion (0.01) | thiacloprid (0.01) |
| dicrotophos (0.01) | methiocarb (sum) (0.01) | thiamethoxam (sum) (0.01) |
| diethofencarb (0.01) | methomyl (sum) (0.01) | thiophanate-methyl (0.01) |
| difenoconazole (0.01) | methoxychlor (0.01) | tolclofos-methyl (0.01) |
| diflubenzuron (0.01) | methoxyfenozide (0.01) | tolfenpyrad (0.01) |
| diflufenican (0.01) | metobromuron (0.01) | tolyfluanid (sum) (0.01) |
| dimethenamid (0.01) | metolachlor (0.01) | triadimefon & triadimenol (0.01) |
| dimethoate (sum) (0.01) | metolcarb (0.01) | triallate (0.02) |
| dimethomorph (0.01) | metosulam (0.01) | triasulfuron (0.02) |
| dimoxystrobin (0.01) | metoxuron (0.01) | triazamate (0.01) |
| diniconazole (0.01) | metrafenone (0.01) | triazophos (0.01) |
| dinotefuran (0.01) | metribuzin (0.02) | tricyclpyr (0.02) |
| diphenylamine (0.02) | metsulfuron-methyl (0.01) | tricyclazole (0.01) |
| disulfoton (sum) (0.01) | mevinphos (0.01) | trifloxystrobin (0.01) |
| diuron (0.01) | molinate (0.01) | triflumizole (0.01) |
| dodine (0.02) | monocrotophos (0.01) | triflururon (0.01) |
| emamectin benzoate (0.01) | monolinuron (0.01) | trifluralin (0.01) |
| endosulfan (sum) (0.01) | Monuron (0.01) | triforine (0.01) |
| endrin (0.02) | | |

EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)

myclobutanil (0.01)
napropamide (0.02)
nitenpyram (0.01)

triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 25a. PREPARED FRESH FRUIT: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|--------------------------------------|----------------------------|
| MANGO UK: 1 sample analysed | | |
| None found | - | 1 |
| MELON UK: 5 samples analysed | | |
| Chlorate (MRL = 0.01*) | <0.01 (i.e. not found) 0.03 | 4 1 |
| MIXED UK: 6 samples analysed | | |
| Chlorate (MRL = 0.01*) | <0.01 (i.e. not found) 0.03 | 5 1 |
| PINEAPPLE UK: 9 samples analysed | | |
| Chlorate (MRL = 0.01*) | <0.01 (i.e. not found) 0.02 | 8 1 |
| DDAC (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.01, 0.03 | 7 2 |
| WATERMELON UK: 1 sample analysed | | |
| None found | - | 1 |
| PINEAPPLE Imported (Non-EC): 1 sample analysed | | |
| None found | - | 1 |
| BLUEBERRY Imported (EC): 1 sample analysed | | |
| None found | - | 1 |

NOTE: * Indicates MRL is set to the Limit Of Detection.

Imported (EC) samples of prepared fresh fruit were from the Netherlands (1).
 Imported (Non-EC) samples of prepared fresh fruit were from Costa Rica (1).
 UK samples of prepared fresh fruit (22).

Residues were distributed by country of origin, as follows:

Chlorate UK (3)
 DDAC (sum) UK (2)

No residues were found in any of the UK mango samples
 No residues were found in 4 of the 5 UK melon samples
 No residues were found in 5 of the 6 UK mixed samples
 No residues were found in 6 of the 9 UK pineapple samples
 No residues were found in any of the UK watermelon samples
 No residues were found in any of the Imported (Non-EC) pineapple samples
 No residues were found in any of the Imported (EC) blueberry samples

Table 25c. PREPARED FRESH FRUIT: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

BAC (sum) (0.05)

BAC (sum) (0.01)

Table 26a. SPECIALITY VEGETABLES: Residues detected in samples obtained between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|---------------------------------------|----------------------------|
| CHARD UK: 2 samples analysed | | |
| boscalid (MRL = 30) | <0.01 (i.e. not found) 0.07 | 1 1 |
| CHINESE LEAF UK: 10 samples analysed | | |
| dithiocarbamates (MRL = 0.5) | <0.05 (i.e. not found) 0.05 - 0.1 | 2 8 |
| spirotetramat (sum) (MRL = 7) | <0.01 (i.e. not found) 0.01 - 0.03 | 7 3 |
| CHOI SUM UK: 3 samples analysed | | |
| lambda-cyhalothrin (MRL = 1) | <0.02 (i.e. not found) 0.02, 0.2 | 1 2 |
| GAI CHOY UK: 1 sample analysed | | |
| dithiocarbamates (MRL = 0.5) | <0.05 (i.e. not found) 0.1 | 0 1 |
| PAK CHOI UK: 13 samples analysed | | |
| acetamiprid (MRL = 1.5) | <0.01 (i.e. not found) 0.03 | 12 1 |
| boscalid (MRL = 30) | <0.01 (i.e. not found) 0.01 | 12 1 |
| indoxacarb (MRL = 3) | <0.01 (i.e. not found) 0.01 | 12 1 |
| lambda-cyhalothrin (MRL = 1) | <0.02 (i.e. not found) 0.03 - 0.1 | 9 4 |
| oxadixyl (MRL = 0.01*) | <0.01 (i.e. not found) 0.02 | 12 1 |
| pirimicarb (sum) (MRL = 2) | <0.01 (i.e. not found) 0.08 | 12 1 |
| propyzamide (MRL = 0.01*) | <0.01 (i.e. not found) 0.01 | 12 1 |
| spinosad (MRL = 2) | <0.01 (i.e. not found) 0.05, 0.4 | 11 2 |
| spirotetramat (sum) (MRL = 7) | <0.01 (i.e. not found) 0.1 | 12 1 |
| SAAG UK: 1 sample analysed | | |
| None found | - | 1 |
| BANANA LEAF Imported (Non-EC): 1 samples analysed | | |
| None found | - | 1 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--------------------------------------|----------------------------|
| CHINESE LEAF Imported (Non-EC): 1 sample analysed | | |
| dithiocarbamates (MRL = 0.5) | <0.05 (i.e. not found) 0.2 | 0 1 |
| PAN Imported (Non-EC): 1 sample analysed | | |
| imidacloprid (MRL = 2) | <0.01 (i.e. not found) 1 | 0 1 |
| metalaxyl (MRL = 2) | <0.01 (i.e. not found) 0.1 | 0 1 |
| thiamethoxam (sum) (MRL = 1.5) | <0.01 (i.e. not found) 0.1 | 0 1 |
| CALLALOO Imported (EC): 1 sample analysed | | |
| boscalid (MRL = 50) | <0.01 (i.e. not found) 0.02 | 0 1 |
| indoxacarb (MRL = 2) | <0.01 (i.e. not found) 1.2 | 0 1 |
| CHICORY Imported (EC): 2 samples analysed | | |
| None found | - | 2 |
| CHINESE CABBAGE Imported (EC): 1 sample analysed | | |
| dimethoate (sum) (MRL = 0.02*) | <0.01 (i.e. not found) 0.07 | 0 1 |
| metalaxyl (MRL = 0.05*) | <0.01 (i.e. not found) 0.01 | 0 1 |
| thiacloprid (MRL = 1) | <0.01 (i.e. not found) 0.04 | 0 1 |
| PAK CHOI Imported (EC): 2 samples analysed | | |
| spinosad (MRL = 2) | <0.01 (i.e. not found) 0.02 | 1 1 |
| spirotetramat (sum) (MRL = 7) | <0.01 (i.e. not found) 0.03, 0.04 | 0 2 |

NOTE: * Indicates MRL is set to the Limit of Determination.

Imported (EC) samples of speciality vegetables were from Italy (3), Poland (1), the Netherlands (2).
 Imported (Non-EC) samples of speciality vegetables were from Bangladesh (1), China (1), Thailand (1).
 UK samples of speciality vegetables (30).

Residues were distributed by country of origin, as follows:

| | |
|--------------------|----------------------------|
| acetamiprid | UK (1) |
| boscalid | Italy (1), UK (2) |
| dimethoate (sum) | Poland (1) |
| dithiocarbamates | China (1), UK (9) |
| indoxacarb | Italy (1), UK (1) |
| imidacloprid | Bangladesh (1) |
| lambda-cyhalothrin | UK (6) |
| metalaxyl | Bangladesh (1), Poland (1) |
| oxadixyl | UK (1) |

| | |
|---------------------|-------------------|
| pirimicarb (sum) | UK (1) |
| propryzamide | UK (1) |
| spinosad | Italy (1), UK (2) |
| spirotetramat (sum) | Italy (2), UK (4) |
| thiacloprid | Poland (1) |
| thiamethoxam (sum) | Bangladesh (1) |

No residues were found in 1 of the 2 UK chard samples
 Residues were found in all of the 10 UK chinese leaf samples
 No residues were found in 1 of the 3 UK choi sum samples
 Residues were found in all of the 1 UK gai choy samples
 No residues were found in 6 of the 13 UK pak choi samples
 No residues were found in any of the UK saag samples
 No residues were found in any of the Imported (Non-EC) banana leaf samples
 Residues were found in all of the 1 Imported (Non-EC) chinese leaf samples
 Residues were found in all of the 1 Imported (Non-EC) pan samples
 Residues were found in all of the 1 Imported (EC) callaloo samples
 No residues were found in any of the Imported (EC) chicory samples
 Residues were found in all of the 1 Imported (EC) chinese cabbage samples
 Residues were found in all of the 2 Imported (EC) pak choi samples

Table 26b. SPECIALITY VEGETABLES: Residues detected in samples of obtained between July and September 2016

Residues (1-3 compounds) were found in 27 of the 39 samples as follows:

| Number of residues | Sample ID | Type of SPECIALITY VEGETABLES | Residues found (mg/kg) | | | | | | | | | | | | | | Country of origin | |
|--------------------|-----------|-------------------------------|------------------------|------|-------|------|------|-----|------|------|------|-----|------|------|-------|------|-------------------|------------|
| | | | ACET | BOS | DIMSM | DTC | IDX | IMI | LCY | MTX | OXL | PIR | PPZ | SPN | STTPS | THC | | THMSM |
| (1) | 0755/2016 | CHINESE LEAF | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0756/2016 | CHINESE LEAF | - | - | - | 0.07 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0832/2016 | CHINESE LEAF | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0924/2016 | CHINESE LEAF | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 1925/2016 | CHOI SUM | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | UK |
| | 2197/2016 | CHINESE LEAF | - | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2251/2016 | CHARD | - | 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2668/2016 | CHINESE LEAF | - | - | - | 0.08 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 3677/2016 | GAI CHOY | - | - | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 3771/2016 | CHINESE LEAF | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | UK |
| | 3928/2016 | PAK CHOI | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 3940/2016 | CHINESE LEAF | - | - | - | 0.09 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 3975/2016 | CHINESE LEAF | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | UK |
| | 4544/2016 | PAK CHOI | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | UK |
| | 4714/2016 | CHOI SUM | - | - | - | - | - | - | 0.2 | - | - | - | - | - | - | - | - | UK |
| | 2206/2016 | CHINESE LEAF | - | - | - | 0.2 | - | - | - | - | - | - | - | - | - | - | - | China |
| 3887/2016 | PAK CHOI | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | Italy | |
| (2) | 2366/2016 | CHINESE LEAF | - | - | - | 0.1 | - | - | - | - | - | - | - | 0.01 | - | - | - | UK |
| | 2669/2016 | PAK CHOI | - | - | - | - | - | - | 0.05 | - | - | - | - | 0.1 | - | - | - | UK |
| | 3854/2016 | PAK CHOI | - | 0.01 | - | - | - | - | - | - | - | - | 0.05 | - | - | - | - | UK |
| | 3939/2016 | PAK CHOI | - | - | - | - | - | - | - | - | 0.08 | - | 0.4 | - | - | - | - | UK |
| | 3961/2016 | PAK CHOI | - | - | - | - | 0.01 | - | 0.07 | - | - | - | - | - | - | - | - | UK |
| | 3694/2016 | CALLALOO | - | 0.02 | - | - | 1.2 | - | - | - | - | - | - | - | - | - | - | Italy |
| | 3824/2016 | PAK CHOI | - | - | - | - | - | - | - | - | - | - | 0.02 | 0.04 | - | - | - | Italy |
| (3) | 3783/2016 | PAK CHOI | - | - | - | - | - | - | 0.1 | - | 0.02 | - | 0.01 | - | - | - | - | UK |
| | 2919/2016 | PAN | - | - | - | - | - | 1 | - | 0.1 | - | - | - | - | - | - | 0.1 | Bangladesh |
| | 3775/2016 | CHINESE CABBAGE | - | - | 0.07 | - | - | - | - | 0.01 | - | - | - | - | - | 0.04 | - | Poland |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|--------------------|-----|------------|-------|------------------|
| ACET | acetamiprid | BOS | boscalid | DIMSM | dimethoate (sum) |
| DTC | dithiocarbamates | IDX | indoxacarb | IMI | imidacloprid |
| LCY | lambda-cyhalothrin | MTX | metalaxyl | OXL | oxadixyl |

| | | | | | |
|-------|---------------------|-----|--------------|-------|--------------------|
| PIR | pirimicarb (sum) | PPZ | propryzamide | SPN | spinosad |
| STTPS | spirotetramat (sum) | THC | thiacloprid | THMSM | thiamethoxam (sum) |

Table 26c. SPECIALITY VEGETABLES: Residues sought but not found in samples obtained between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | EPTC (0.01) | myclobutanil (0.01) |
| 2,4-DB (0.01) | ethiofencarb (parent) (0.01) | napropamide (0.02) |
| 2-phenylphenol (0.02) | ethion (0.01) | nitenpyram (0.01) |
| 6-benzyladenine (0.01) | ethirimol (0.01) | nitrofen (0.02) |
| abamectin (sum) (0.01) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| acephate (0.01) | ethoprophos (0.01) | Novaluron (0.01) |
| acetochlor (0.01) | etofenprox (0.01) | nuarimol (0.01) |
| acibenzolar-s-methyl (0.01) | etoxazole (0.01) | ofurace (0.01) |
| aclonifen (0.02) | etridiazole (0.02) | Oxadiargyl (0.01) |
| acrinathrin (0.02) | etrimfos (0.01) | oxadiazon (0.02) |
| alachlor (0.01) | famoxadone (0.01) | oxamyl (0.01) |
| aldicarb (sum) (0.01) | fenamidone (0.01) | oxasulfuron (0.01) |
| aldrin and dieldrin (0.01) | fenamiphos (sum) (0.01) | oxydemeton-methyl (sum) (0.01) |
| allethrin (0.02) | fenarimol (0.01) | oxyfluorfen (0.02) |
| alpha-HCH (0.01) | fenazaquin (0.01) | paclobutrazol (0.01) |
| ametoctradin (0.01) | fenbuconazole (0.01) | parathion (0.01) |
| amidosulfuron (0.01) | fenbutatin oxide (0.02) | parathion-methyl (sum) (0.01) |
| amitraz (0.01) | fenhexamid (0.02) | penconazole (0.01) |
| asulam (0.02) | fenitrothion (0.01) | pencycuron (0.01) |
| atrazine (0.01) | fenoxycarb (0.01) | pendimethalin (0.01) |
| azinphos-ethyl (0.02) | fenpropathrin (0.01) | penflufen (0.01) |
| azinphos-methyl (0.02) | fenpropidin (0.01) | pentanochlor (0.01) |
| azoxystrobin (0.01) | fenpropimorph (0.01) | penthioopyrad (0.01) |
| BAC (sum) (0.05) | fenpyrazamine (0.01) | permethrin (0.01) |
| benalaxyl (0.01) | fenpyroximate (0.01) | phenmedipham (0.02) |
| bendiocarb (0.01) | fensulfothion (sum) (0.01) | phenthoate (0.01) |
| benfuracarb (0.001) | fenthion (partial sum) (0.01) | phorate (partial sum) (0.01) |
| benthiavalicarb (sum) (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phosalone (0.01) |
| beta-HCH (0.01) | fipronil (sum) (0.005) | phosmet (sum) (0.01) |
| bifenox (0.02) | flonicamid (sum) (0.01) | phosphamidon (0.01) |
| bifenthrin (0.01) | fluazifop-p-butyl (sum) (0.01) | phoxim (0.01) |
| biphenyl (0.01) | fluazinam (0.01) | picolinafen (0.01) |
| bispyribac-sodium (0.01) | flubendiamide (0.01) | picoxystrobin (0.01) |
| bitertanol (0.01) | flucythrinate (0.01) | piperonyl butoxide (0.01) |
| bixafen (0.01) | fludioxonil (0.01) | pirimiphos-ethyl (0.01) |
| bromophos-ethyl (0.01) | flufenacet (0.01) | pirimiphos-methyl (0.01) |
| bromopropylate (0.01) | flufenoxuron (0.02) | prochloraz (parent only) (0.01) |
| bromoxynil (0.01) | fluometuron (0.01) | procymidone (0.01) |
| bromuconazole (0.01) | fluopicolide (0.01) | profenofos (0.01) |
| bupirimate (0.01) | fluopyram (0.01) | promecarb (0.01) |
| buprofezin (0.01) | fluoxastrobin (0.01) | prometryn (0.01) |
| butachlor (0.01) | fluquinconazole (0.01) | propachlor (0.01) |
| butocarboxim (parent) (0.01) | flurochloridone (0.02) | propamocarb (0.01) |
| butoxycarboxim (0.01) | fluroxypyr (sum) (0.02) | propanil (0.02) |
| cadusafos (0.01) | flusilazole (0.01) | propaquizafop (0.02) |
| captan (0.02) | flutolanil (0.01) | propargite (0.01) |
| carbaryl (0.01) | flutriafol (0.01) | propetamphos (0.01) |
| carbendazim (0.01) | fluxapyroxad (0.01) | propham (0.02) |
| carbetamide (0.02) | folpet (0.01) | propiconazole (0.01) |
| carbofuran (sum) (0.001) | fonofos (0.01) | propoxur (0.01) |
| carbosulfan (0.001) | formetanate (0.01) | proquinazid (0.01) |
| carboxin (0.02) | fosthiazate (0.01) | prosulfocarb (0.01) |
| chlorantraniliprole (0.01) | furalaxyl (0.01) | prosulfuron (0.01) |
| chlorbufam (0.01) | furathiocarb (0.001) | prothioconazole (0.01) |
| chlordane (sum) (0.01) | halofenozide (0.01) | prothiofos (0.01) |
| chlorfenapyr (0.01) | halosulfuron-methyl (0.01) | pymetrozine (0.01) |
| chlorfenvinphos (0.01) | haloxyfop (sum) (0.01) | pyraclostrobin (0.01) |

| | | |
|-------------------------------|--|---|
| chloridazon (0.01) | Heptachlor (sum) (0.01) | pyrazophos (0.01) |
| chlorobenzilate (0.02) | heptenophos (0.01) | pyrethrins (0.01) |
| chlorothalonil (0.01) | hexachlorobenzene (0.01) | pyridaben (0.01) |
| chlorpropham (sum) (0.01) | hexachlorocyclohexane (sum) (0.01) | pyridalyl (0.01) |
| chlorpyrifos (0.01) | hexaconazole (0.01) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | hexazinone (0.02) | pyrifenox (0.02) |
| chlorthal-dimethyl (0.01) | hexythiazox (0.01) | pyrimethanil (0.01) |
| chlortoluron (0.01) | imazalil (0.02) | pyriproxifen (0.01) |
| chlozolate (0.01) | ioxynil (0.01) | quassia (0.01) |
| chromafenozide (0.01) | iprodone (0.01) | quinalphos (0.01) |
| clethodim (0.02) | iprovalicarb (0.01) | quinmerac (0.02) |
| clofentezine (0.01) | isazophos (0.01) | Quinoclamine (0.01) |
| clomazone (0.01) | isocarbophos (0.01) | quinoxifen (0.01) |
| clothianidin (0.01) | isofenphos (0.01) | quintozene (sum) (0.01) |
| coumaphos (0.01) | isofenphos-methyl (0.01) | resmethrin (0.02) |
| cyanazine (0.02) | isoprocab (0.01) | rimsulfuron (0.01) |
| cyazofamid (0.01) | isoprothiolane (0.01) | rotenone (0.01) |
| cycloate (0.01) | isoproturon (0.01) | simazine (0.02) |
| cycloxydim (0.02) | isoprazam (0.01) | spirodiclofen (0.01) |
| cyflufenamid (0.01) | isoxaben (0.01) | spiromesifen (0.01) |
| cyfluthrin (0.02) | isoxaflutole (0.01) | spiroxamine (0.01) |
| cyhalofop-butyl (sum) (0.01) | kresoxim-methyl (0.01) | sulcotrione (0.02) |
| cymoxanil (0.01) | lenacil (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cypermethrin (0.02) | lindane (0.01) | tau-fluvalinate (0.01) |
| cyproconazole (0.01) | linuron (0.01) | tebuconazole (0.01) |
| cyprodinil (0.02) | lufenuron (0.02) | tebufenozide (0.01) |
| cyromazine (0.02) | malathion (0.01) | tebufenpyrad (0.01) |
| DDAC (sum) (0.05) | mandipropamid (0.01) | tebuthiuron (0.01) |
| DDT (sum) (0.01) | MCPA only (0.01) | tecnazene (0.01) |
| deltamethrin (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | teflubenzuron (0.01) |
| demeton-S-methyl (0.01) | mecarbam (0.01) | tefluthrin (0.01) |
| desmedipham (0.02) | mepanipyrim (sum) (0.01) | tepraloxymid (0.02) |
| diafenthiuron (0.02) | mephosfolan (0.02) | terbufos (0.01) |
| diazinon (0.01) | mepronil (0.01) | Terbufos (sum not defintion) (0.01) |
| dichlobenil (0.01) | mesosulfuron-methyl (0.01) | terbutylazine (0.02) |
| dichlofluanid (0.01) | metaflumizone (0.02) | terbutryn (0.02) |
| dichlofluanid and DMSA (0.01) | metamitron (0.01) | tetrachlorvinphos (0.01) |
| dichlorprop (0.01) | metazachlor (0.02) | tetraconazole (0.01) |
| dichlorvos (0.01) | metconazole (0.01) | tetradifon (0.01) |
| diclobutrazol (0.01) | methabenzthiazuron (0.01) | tetramethrin (0.01) |
| dicloran (0.01) | methacrifos (0.01) | thiabendazole (0.02) |
| dicofol (sum) (0.01) | methamidophos (0.01) | thiophanate-methyl (0.01) |
| dicrotophos (0.01) | methidathion (0.01) | tolclofos-methyl (0.01) |
| diethofencarb (0.01) | methiocarb (sum) (0.01) | tolfenpyrad (0.01) |
| difenoconazole (0.01) | methomyl (sum) (0.01) | tolyfluanid (sum) (0.01) |
| diflubenzuron (0.01) | methoxychlor (0.01) | triadimefon & triadimenol (0.01) |
| diflufenican (0.01) | methoxyfenozide (0.01) | triallate (0.02) |
| dimethenamid (0.01) | metobromuron (0.01) | triasulfuron (0.02) |
| dimethomorph (0.01) | metolachlor (0.01) | triazamate (0.01) |
| dimoxystrobin (0.01) | metolcarb (0.01) | triazophos (0.01) |
| diniconazole (0.01) | metosulam (0.01) | triclopyr (0.02) |
| dinotefuran (0.01) | metoxuron (0.01) | tricyclazole (0.01) |
| diphenylamine (0.02) | metrafenone (0.01) | trifloxystrobin (0.01) |
| disulfoton (sum) (0.01) | metribuzin (0.02) | triflumizole (0.01) |
| diuron (0.01) | metsulfuron-methyl (0.01) | triflumuron (0.01) |
| dodine (0.02) | mevinphos (0.01) | trifluralin (0.01) |
| emamectin benzoate (0.01) | molinate (0.01) | triforine (0.01) |
| endosulfan (sum) (0.01) | monocrotophos (0.01) | triconazole (0.01) |
| endrin (0.02) | monolinuron (0.01) | vinclozolin (sum) (0.01) |
| EPN (0.01) | Monuron (0.01) | zoxamide (0.01) |
| epoxiconazole (0.01) | | |

Table 27a. SPICES: Residues detected in retail samples purchased between May and August 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--------------------------------------|-----------------------------|----------------------------|
| CUMIN UK: 22 samples analysed | | |
| 2,4-D (sum) (MRL = 0.1*) | <0.02 (i.e. not found) | 21 |
| | 0.03 | 1 |
| acetamiprid (MRL = 0.05*) | <0.02 (i.e. not found) | 10 |
| | 0.06 - 1.1 | 12 |
| atrazine (MRL = 0.1*) | <0.02 (i.e. not found) | 21 |
| | 0.08 | 1 |
| azoxystrobin (MRL = 0.3) | <0.02 (i.e. not found) | 12 |
| | 0.02 - 0.06 | 10 |
| carbendazim (MRL = 0.1*) | <0.02 (i.e. not found) | 7 |
| | 0.02 - 0.07 | 4 |
| | 0.5 - 4.3 | 11 |
| carbofuran (sum) (MRL = 0.05*) | <0.005 (i.e. not found) | 11 |
| | 0.01 - 0.05 | 8 |
| | 0.08 - 0.09 | 3 |
| chlorantraniliprole (MRL = 0.02*) | <0.02 (i.e. not found) | 19 |
| | 0.03 - 0.04 | 3 |
| chlorpyrifos (MRL = 5) | <0.02 (i.e. not found) | 11 |
| | 0.03 - 0.5 | 11 |
| clothianidin (MRL = 0.05*) | <0.02 (i.e. not found) | 9 |
| | 0.02 | 1 |
| | 0.08 - 0.1 | 12 |
| cypermethrin (MRL = 0.1*) | <0.01 (i.e. not found) | 12 |
| | 0.1 | 1 |
| | 0.2 - 0.5 | 9 |
| difenoconazole (MRL = 0.3) | <0.02 (i.e. not found) | 16 |
| | 0.02 - 0.07 | 6 |
| ethion (MRL = 3) | <0.02 (i.e. not found) | 14 |
| | 0.03 - 0.1 | 8 |
| fipronil (sum) (MRL = 0.005*) | <0.005 (i.e. not found) | 20 |
| | 0.008, 0.009 | 2 |
| flusilazole (MRL = 0.05*) | <0.02 (i.e. not found) | 21 |
| | 0.05 | 1 |
| imidacloprid (MRL = 0.05*) | <0.01 (i.e. not found) | 10 |
| | 0.03 - 0.05 | 4 |
| | 0.06 - 0.2 | 8 |
| kresoxim-methyl (MRL = 0.05*) | <0.01 (i.e. not found) | 14 |
| | 0.03 | 2 |
| | 0.06 - 0.2 | 6 |
| linuron (MRL = 0.1*) | <0.02 (i.e. not found) | 19 |
| | 0.04 - 0.05 | 3 |
| metalaxyl | <0.02 (i.e. not found) | 13 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--|----------------------------|
| (MRL = 0.1*) | 0.02 - 0.1 | 9 |
| myclobutanil (MRL = 0.05*) | <0.02 (i.e. not found) 0.04 | 21 1 |
| phenthoate (MRL = 7) | <0.02 (i.e. not found) 0.02 | 21 1 |
| profenofos (MRL = 0.05*) | <0.02 (i.e. not found) 0.07 - 1.4 | 10 12 |
| propiconazole (MRL = 0.1*) | <0.02 (i.e. not found) 0.06 - 0.1 0.3 - 0.4 | 15 3 4 |
| pyraclostrobin (MRL = 0.1*) | <0.02 (i.e. not found) 0.02 - 0.03 | 17 5 |
| tebuconazole (MRL = 1.5) | <0.05 (i.e. not found) 0.1 - 1.1 | 12 10 |
| thiamethoxam (sum) (MRL = 0.05*) | <0.02 (i.e. not found) 0.03 0.1 - 0.2 | 9 1 12 |
| triazophos (MRL = 0.02*) | <0.02 (i.e. not found) 0.02 0.03 - 0.09 | 14 1 7 |
| tricyclazole (MRL = 0.05*) | <0.02 (i.e. not found) 0.4 - 1.2 | 11 11 |
| trifloxystrobin (MRL = 0.05*) | <0.01 (i.e. not found) 0.02 - 0.05 0.07, 0.1 | 14 6 2 |
| CUMIN Imported (EC): 2 samples analysed | | |
| carbendazim (MRL = 0.1*) | <0.02 (i.e. not found) 0.04, 0.06 | 0 2 |
| linuron (MRL = 0.1*) | <0.02 (i.e. not found) 0.02, 0.03 | 0 2 |

NOTE: * Indicates MRL is set to the Limit of Determination.

Imported (EC) samples of spices were from EU (1), France (1).
UK samples of spices (22).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|-----------------------------|
| 2,4-D (sum) | UK (1) |
| acetamiprid | UK (12) |
| atrazine | UK (1) |
| azoxystrobin | UK (10) |
| carbofuran (sum) | UK (11) |
| carbendazim | EU (1), France (1), UK (15) |
| chlorpyrifos | UK (11) |
| clothianidin | UK (13) |
| chlorantraniliprole | UK (3) |
| cypermethrin | UK (10) |
| difenoconazole | UK (6) |
| ethion | UK (8) |
| fipronil (sum) | UK (3) |

| | |
|--------------------|----------------------------|
| flusilazole | UK (1) |
| imidacloprid | UK (12) |
| kresoxim-methyl | UK (8) |
| linuron | EU (1), France (1), UK (3) |
| metalaxyl | UK (9) |
| myclobutanil | UK (1) |
| propiconazole | UK (7) |
| profenofos | UK (12) |
| phenthoate | UK (1) |
| pyraclostrobin | UK (5) |
| tebuconazole | UK (10) |
| tricyclazole | UK (11) |
| thiamethoxam (sum) | UK (13) |
| trifloxystrobin | UK (8) |
| triazophos | UK (8) |

No residues were found in 6 of the 22 UK cumin samples
Residues were found in all of the 2 Imported (EC) cumin samples

Table 27b. SPICES: Residues detected in retail samples purchased between May and August 2016

Residues (2-23 compounds) were found in 18 of the 24 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | Country of origin | | |
|--------------------|-----------|------------------------|------|------|------|-------|------|------|------|------|-----|------|------|-------|------|------|------|------|------|------|------|------|------|------|-----|-----|-------|------|-------------------|-----|--------|
| | | 24DS | ACET | ATZ | AZOX | CBF_S | CBZ | CPF | CTH | CTP | CYP | DIFC | ETN | FIP | FLUZ | IMI | KREM | LNR | MTX | MYC | PCZ | PFS | PHN | PYC | TBC | TCY | THMSM | TRFL | | TRI | |
| (2) | 2572/2016 | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | UK |
| | 2689/2016 | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2906/2016 | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2886/2016 | - | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | EU |
| | 2688/2016 | - | - | - | - | - | 0.04 | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | - | - | France |
| (3) | 2885/2016 | - | - | - | - | - | 0.07 | - | - | - | - | 0.02 | - | - | - | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | - | UK | |
| (6) | 2884/2016 | - | 0.06 | - | - | - | 0.02 | - | 0.09 | - | - | - | - | - | 0.05 | - | - | - | - | - | - | 0.07 | - | - | - | - | 0.1 | - | - | UK | |
| (14) | 2889/2016 | - | 0.4 | 0.08 | - | 0.03 | 0.5 | 0.03 | 0.1 | - | - | - | 0.05 | - | - | 0.06 | 0.03 | - | 0.02 | - | - | 0.5 | - | - | - | 0.4 | 0.2 | - | 0.02 | UK | |
| (15) | 2560/2016 | - | 1 | - | 0.04 | 0.09 | 4 | 0.5 | 0.1 | 0.03 | 0.4 | - | - | - | 0.1 | - | - | 0.04 | - | - | 1.4 | - | - | 1.1 | 1.1 | 0.2 | 0.1 | - | UK | | |
| (16) | 2562/2016 | - | 0.7 | - | 0.03 | 0.08 | 4.3 | 0.4 | 0.08 | 0.04 | 0.5 | - | - | - | 0.2 | - | - | 0.07 | - | - | 1 | - | 0.02 | 0.6 | 1 | 0.1 | 0.05 | - | UK | | |
| | 2888/2016 | - | 0.8 | - | 0.03 | 0.05 | 4 | 0.2 | 0.09 | 0.03 | 0.3 | - | - | - | 0.1 | - | - | 0.05 | - | - | 1.1 | - | 0.02 | 0.8 | 1 | 0.1 | 0.07 | - | UK | | |
| (17) | 2908/2016 | - | 0.5 | - | 0.02 | 0.01 | 0.9 | 0.05 | 0.1 | - | 0.2 | - | 0.05 | - | - | 0.03 | 0.06 | - | 0.05 | - | 0.1 | 1.4 | - | - | 0.1 | 0.4 | 0.2 | - | 0.05 | UK | |
| (19) | 2561/2016 | - | 0.5 | - | 0.06 | 0.04 | 1.7 | 0.07 | 0.08 | - | 0.3 | 0.04 | 0.1 | 0.009 | - | 0.1 | 0.2 | - | - | - | 0.4 | 1.2 | - | - | 0.2 | 1.1 | 0.2 | 0.03 | 0.09 | UK | |
| | 2571/2016 | - | 0.5 | - | 0.02 | 0.02 | 0.9 | 0.04 | 0.1 | - | 0.3 | 0.02 | 0.06 | - | - | 0.04 | 0.07 | - | 0.06 | - | 0.09 | 1.4 | - | - | 0.1 | 0.4 | 0.2 | 0.02 | 0.05 | UK | |
| | 2573/2016 | - | 0.6 | - | 0.06 | 0.04 | 1.8 | 0.06 | 0.09 | - | 0.3 | 0.04 | 0.1 | 0.008 | - | 0.1 | 0.2 | - | - | - | 0.4 | 1.1 | - | - | 0.2 | 1.2 | 0.2 | 0.03 | 0.09 | UK | |
| | 2891/2016 | - | 0.5 | - | 0.04 | 0.01 | 1 | 0.05 | 0.1 | - | 0.2 | - | 0.03 | - | - | 0.03 | 0.1 | - | 0.1 | - | 0.06 | 1.4 | 0.02 | 0.03 | 0.1 | 0.6 | 0.2 | - | 0.03 | UK | |
| (20) | 2887/2016 | - | 1.1 | - | 0.02 | 0.08 | 0.7 | 0.3 | 0.08 | - | 0.1 | 0.07 | 0.07 | - | - | 0.2 | 0.03 | - | 0.06 | - | 0.3 | 0.5 | - | 0.03 | 0.2 | 0.4 | 0.2 | 0.03 | 0.09 | UK | |
| (23) | 2691/2016 | 0.03 | 0.5 | - | 0.03 | 0.05 | 1.5 | 0.08 | 0.1 | - | 0.2 | 0.03 | 0.1 | - | 0.05 | 0.2 | 0.09 | - | 0.05 | 0.04 | 0.3 | 0.9 | - | 0.03 | 0.2 | 0.7 | 0.2 | 0.04 | 0.05 | UK | |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|-----------------|-------|--------------------|------|--------------------|
| 24DS | 2,4-D (sum) | ACET | acetamiprid | ATZ | atrazine |
| AZOX | azoxystrobin | CBF_S | carbofuran (sum) | CBZ | carbendazim |
| CPF | chlorpyrifos | CTH | clothianidin | CTP | chlorantranilprole |
| CYP | cypermethrin | DIFC | difenoconazole | ETN | ethion |
| FIP | fipronil (sum) | FLUZ | flusilazole | IMI | imidacloprid |
| KREM | kresoxim-methyl | LNR | linuron | MTX | metalaxyl |
| MYC | myclobutanil | PCZ | propiconazole | PFS | profenofos |
| PHN | phenthoate | PYC | pyraclostrobin | TBC | tebuconazole |
| TCY | tricyclazole | THMSM | thiamethoxam (sum) | TRFL | trifloxystrobin |
| TRI | triazophos | | | | |

Table 27c. SPICES: Residues sought but not found in retail samples purchased between May and August 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-DB (0.02) | ethoprophos (0.05) | nitrothal-isopropyl (0.02) |
| 2-phenylphenol (0.05) | etofenprox (0.02) | Novaluron (0.02) |
| 6-benzyladenine (0.02) | etoxazole (0.05) | nuarimol (0.02) |
| abamectin (sum) (0.02) | etridiazole (0.05) | ofurace (0.02) |
| acephate (0.02) | etrimfos (0.02) | Oxadiargyl (0.02) |
| acetochlor (0.02) | famoxadone (0.02) | oxadiazon (0.05) |
| acibenzolar-s-methyl (0.02) | fenamidone (0.02) | oxadixyl (0.02) |
| aclonifen (0.05) | fenamiphos (sum) (0.02) | oxamyl (0.02) |
| acrinathrin (0.05) | fenarimol (0.02) | oxasulfuron (0.02) |
| alachlor (0.02) | fenazaquin (0.02) | oxydemeton-methyl (sum) (0.02) |
| aldicarb (sum) (0.02) | fenbuconazole (0.02) | oxyfluorfen (0.05) |
| aldrin and dieldrin (0.02) | fenbutatin oxide (0.05) | paclobutrazol (0.02) |
| alpha-HCH (0.02) | fenhexamid (0.05) | parathion (0.02) |
| ametoctradin (0.02) | fenitrothion (0.05) | parathion-methyl (sum) (0.02) |
| amidosulfuron (0.02) | fenoxycarb (0.02) | penconazole (0.02) |
| amitraz (0.1) | fenpropathrin (0.05) | pencycuron (0.02) |
| asulam (0.05) | fenpropidin (0.02) | pendimethalin (0.02) |
| azinphos-ethyl (0.05) | fenpropimorph (0.02) | penflufen (0.02) |
| azinphos-methyl (0.05) | fenpyrazamine (0.02) | pentanochlor (0.02) |
| BAC (sum) (0.1) | fenpyroximate (0.02) | penthioopyrad (0.02) |
| benalaxyl (0.02) | fensulfthion (sum) (0.02) | permethrin (0.1) |
| bendiocarb (0.02) | fenthion (partial sum) (0.02) | phenmedipham (0.05) |
| benfuracarb (0.005) | fenvalerate & esfenvalerate (all isomers) (0.02) | phorate (partial sum) (0.05) |
| benthiavalicarb (sum) (0.02) | flonicamid (sum) (0.02) | phosalone (0.05) |
| beta-HCH (0.02) | fluazifop-p-butyl (sum) (0.02) | phosmet (sum) (0.02) |
| bifenox (0.05) | fluazinam (0.02) | phosphamidon (0.02) |
| bifenthrin (0.02) | flubendiamide (0.02) | phoxim (0.02) |
| biphenyl (0.1) | flucythrinate (0.02) | picolinafen (0.02) |
| bispyribac-sodium (0.02) | fludioxonil (0.05) | picoxystrobin (0.02) |
| bitertanol (0.02) | flufenacet (0.02) | piperonyl butoxide (0.02) |
| bixafen (0.02) | flufenoxuron (0.05) | pirimicarb (sum) (0.02) |
| boscalid (0.02) | fluometuron (0.02) | pirimiphos-ethyl (0.02) |
| bromophos-ethyl (0.02) | fluopicolide (0.02) | pirimiphos-methyl (0.05) |
| bromopropylate (0.02) | fluopyram (0.02) | prochloraz (parent only) (0.02) |
| bromoxynil (0.02) | fluoxastrobin (0.02) | procymidone (0.02) |
| bromuconazole (0.02) | fluquinconazole (0.02) | promecarb (0.02) |
| bupirimate (0.02) | flurochloridone (0.05) | prometryn (0.02) |
| buprofezin (0.02) | flutolanil (0.05) | propachlor (0.02) |
| butachlor (0.02) | fluxapyroxad (0.02) | propamocarb (0.02) |
| butocarboxim (parent) (0.05) | folpet (0.05) | propaquizafop (0.05) |
| butoxycarboxim (0.05) | fonofos (0.05) | propargite (0.02) |
| cadusafos (0.02) | formetanate (0.05) | propetamphos (0.02) |
| captan (0.1) | formothion (0.02) | propham (0.05) |
| carbaryl (0.02) | fosthiazate (0.02) | propoxur (0.02) |
| carbetamide (0.05) | furalaxyl (0.02) | propyzamide (0.02) |
| carbosulfan (0.005) | furathiocarb (0.005) | proquinazid (0.02) |
| chlorbufam (0.05) | halofenozide (0.02) | prosulfocarb (0.02) |
| chlordane (sum) (0.02) | halosulfuron-methyl (0.02) | prosulfuron (0.02) |
| chlorfenapyr (0.02) | haloxyfop (sum) (0.02) | prothioconazole (0.02) |
| chlorfenvinphos (0.02) | Heptachlor (sum) (0.1) | prothiofos (0.02) |
| chloridazon (0.02) | heptenophos (0.02) | pymetrozine (0.1) |
| chlorobenzilate (0.05) | hexachlorobenzene (0.02) | pyrazophos (0.02) |
| chlorothalonil (0.05) | hexachlorocyclohexane (sum) (0.02) | pyrethrins (0.02) |
| chlorpropham (sum) (0.02) | hexazinone (0.05) | pyridaben (0.02) |
| chlorpyrifos-methyl (0.02) | hexythiazox (0.02) | pyridalyl (0.02) |
| chlorthal-dimethyl (0.02) | imazalil (0.05) | pyridaphenthion (0.02) |

| | | |
|-------------------------------|---|--|
| chlortoluron (0.02) | indoxacarb (0.02) | pyrifenox (0.05) |
| chlozolinate (0.02) | ioxynil (0.02) | pyrimethanil (0.02) |
| chromafenozide (0.02) | iprodione (0.1) | pyriproxifen (0.02) |
| clethodim (0.05) | iprovalicarb (0.02) | quassia (0.02) |
| clofentezine (0.02) | isazophos (0.02) | quinalphos (0.05) |
| clomazone (0.02) | isocarbophos (0.02) | quinmerac (0.05) |
| coumaphos (0.02) | isofenphos (0.02) | Quinoclamine (0.02) |
| cyanazine (0.05) | isofenphos-methyl (0.02) | quinoxifen (0.02) |
| cyazofamid (0.02) | isoprocarb (0.02) | quintozene (sum) (0.02) |
| cycloate (0.02) | isoprothiolane (0.02) | rimsulfuron (0.02) |
| cyflufenamid (0.1) | isoproturon (0.02) | rotenone (0.02) |
| cyfluthrin (0.05) | isopyrazam (0.02) | simazine (0.05) |
| cyhalofop-butyl (sum) (0.02) | isoxaben (0.02) | spinosad (0.02) |
| cymoxanil (0.02) | isoxaflutole (0.02) | spirodiclofen (0.02) |
| cyproconazole (0.02) | lenacil (0.02) | spiromesifen (0.02) |
| cyprodinil (0.05) | lindane (0.05) | spirotetramat (sum) (0.02) |
| cyromazine (0.05) | lufenuron (0.05) | spiroxamine (0.02) |
| DDAC (sum) (0.1) | malathion (0.02) | sulcotrione (0.05) |
| DDT (sum) (0.05) | mandipropamid (0.02) | sum of butocarboxim and butocarboxim sul (0.05) |
| deltamethrin (0.05) | MCPA only (0.02) | tau-fluvalinate (0.02) |
| demeton-S-methyl (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.02) | tebufenozide (0.02) |
| desmedipham (0.05) | mecarbam (0.02) | tebufenpyrad (0.02) |
| diazinon (0.02) | mepanipyrim (sum) (0.02) | tebuthiuron (0.02) |
| dichlobenil (0.02) | mephosfolan (0.05) | tecnazene (0.02) |
| dichlofluanid (0.05) | mepronil (0.02) | teflubenzuron (0.02) |
| dichlofluanid and DMSA (0.05) | mesosulfuron-methyl (0.02) | tefluthrin (0.05) |
| dichlorprop (0.02) | metaflumizone (0.05) | tepraloxydim (0.05) |
| dichlorvos (0.05) | metamitron (0.02) | terbufos (0.02) |
| diclobutrazol (0.02) | metazachlor (0.05) | Terbufos (sum not defintion) (0.02) |
| dicloran (0.05) | metconazole (0.02) | terbutylazine (0.05) |
| dicofol (sum) (0.05) | methabenzthiazuron (0.02) | terbutryn (0.05) |
| dicrotophos (0.02) | methacrifos (0.02) | tetrachlorvinphos (0.02) |
| diethofencarb (0.02) | methamidophos (0.02) | tetraconazole (0.02) |
| diflubenzuron (0.02) | methidathion (0.02) | tetradifon (0.02) |
| diflufenican (0.02) | methiocarb (sum) (0.02) | tetramethrin (0.02) |
| dimethenamid (0.02) | methomyl (sum) (0.02) | thiabendazole (0.05) |
| dimethoate (sum) (0.02) | methoxychlor (0.05) | thiacloprid (0.02) |
| dimethomorph (0.02) | methoxyfenozide (0.02) | thiophanate-methyl (0.05) |
| dimoxystrobin (0.02) | metobromuron (0.02) | tolclofos-methyl (0.02) |
| diniconazole (0.02) | metolachlor (0.02) | tolfenpyrad (0.02) |
| dinotefuran (0.02) | metolcarb (0.05) | tolyfluanid (sum) (0.02) |
| diphenylamine (0.05) | metosulam (0.02) | triadimefon & triadimenol (0.02) |
| disulfoton (sum) (0.02) | metoxuron (0.02) | triallate (0.05) |
| diuron (0.02) | metrafenone (0.02) | triasulfuron (0.05) |
| dodine (0.05) | metribuzin (0.05) | triazamate (0.02) |
| emamectin benzoate (0.02) | metsulfuron-methyl (0.02) | triclopyr (0.05) |
| endosulfan (sum) (0.05) | mevinphos (0.02) | triflumizole (0.02) |
| endrin (0.05) | molinate (0.02) | triflumuron (0.02) |
| EPN (0.05) | monocrotophos (0.02) | trifluralin (0.02) |
| epoxiconazole (0.02) | monolinuron (0.02) | triforine (0.02) |
| EPTC (0.02) | Monuron (0.02) | triticonazole (0.02) |
| ethiofencarb (parent) (0.05) | napropamide (0.05) | vinclozolin (sum) (0.02) |
| ethirimol (0.02) | nitenpyram (0.02) | zoxamide (0.02) |
| ethofumesate (0.02) | nitrofen (0.05) | |

Table 28a. SPRING ONIONS: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|---------------------------------------|----------------------------|
| SPRING ONIONS, UK: 39 samples analysed | | |
| azoxystrobin (MRL = 10) | <0.01 (i.e. not found) 0.01 - 0.2 | 29 10 |
| BAC (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.02 - 0.06 | 34 5 |
| boscalid (MRL = 6) | <0.01 (i.e. not found) 0.03, 0.05 | 37 2 |
| chlorothalonil (MRL = 10) | <0.01 (i.e. not found) 0.02 | 38 1 |
| cyprodinil (MRL = 0.8) | <0.01 (i.e. not found) 0.01 - 0.1 | 36 3 |
| DDAC (sum) (MRL = 0.1) | <0.01 (i.e. not found) 0.01 - 0.04 | 34 5 |
| dimethomorph (MRL = 9) | <0.01 (i.e. not found) 0.01 - 0.03 | 31 8 |
| fludioxonil (MRL = 5) | <0.01 (i.e. not found) 0.01 - 0.07 | 36 3 |
| fluopicolide (MRL = 10) | <0.01 (i.e. not found) 0.09 | 38 1 |
| iprodione (MRL = 4) | <0.01 (i.e. not found) 0.01 - 0.1 | 34 5 |
| propamocarb (MRL = 30) | <0.01 (i.e. not found) 0.9 | 38 1 |
| tebuconazole (MRL = 0.6) | <0.01 (i.e. not found) 0.02 | 37 2 |
| tefluthrin (MRL = 0.05) | <0.01 (i.e. not found) 0.01 | 38 1 |
| SPRING ONIONS, Imported (Non-EC): 4 samples analysed | | |
| None found | - | 4 |
| SPRING ONIONS, Imported (EC): 5 samples analysed | | |
| boscalid (MRL = 6) | <0.01 (i.e. not found) 0.02 | 4 1 |

Imported (EC) samples of spring onions were from Germany (3), Poland (2).
 Imported (Non-EC) samples of spring onions were from Egypt (1), Mexico (3).
 UK samples of spring onions (39).

Residues were distributed by country of origin, as follows:

| | |
|----------------|--------------------|
| azoxystrobin | UK (10) |
| BAC (sum) | UK (5) |
| boscalid | Poland (1), UK (2) |
| chlorothalonil | UK (1) |

| | |
|--------------|--------|
| cyprodinil | UK (3) |
| DDAC (sum) | UK (5) |
| dimethomorph | UK (8) |
| fludioxonil | UK (3) |
| fluopicolide | UK (1) |
| iprodione | UK (5) |
| propamocarb | UK (1) |
| tebuconazole | UK (2) |
| tefluthrin | UK (1) |

No residues were found in 12 of the 39 UK samples

No residues were found in any of the Imported (Non-EC) samples

No residues were found in 4 of the 5 Imported (EC) samples

Table 28b. SPRING ONIONS: Residues detected in retail samples purchased between July and September 2016

Residues (1-5 compounds) were found in 28 of the 48 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | Country of origin | |
|--------------------|-----------|------------------------|-------|------|------|------|------|------|------|------|------|------|------|-------------------|-----|
| | | AZOX | BACSM | BOS | CLN | CYD | DDAC | DMR | FLUD | FPC | IPR | PCB | TBC | | TEF |
| (1) | 0598/2016 | - | - | - | - | - | - | - | - | - | 0.01 | - | - | - | UK |
| | 0634/2016 | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | UK |
| | 0636/2016 | - | 0.06 | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0687/2016 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0713/2016 | - | - | - | - | - | - | - | - | 0.02 | - | - | - | - | UK |
| | 0714/2016 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 0715/2016 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 1155/2016 | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | UK |
| | 1708/2016 | - | - | - | - | - | - | 0.01 | - | - | - | - | - | - | UK |
| | 2032/2016 | - | - | - | - | - | - | 0.03 | - | - | - | - | - | - | UK |
| | 2052/2016 | 0.01 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2160/2016 | - | - | 0.05 | - | - | - | - | - | - | - | - | - | - | UK |
| | 2231/2016 | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | UK |
| | 2662/2016 | 0.04 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2892/2016 | - | - | - | - | - | - | 0.02 | - | - | - | - | - | - | UK |
| 0685/2016 | - | - | 0.02 | - | - | - | - | - | - | - | - | - | - | Poland | |
| (2) | 0561/2016 | - | 0.04 | - | - | - | 0.04 | - | - | - | - | - | - | - | UK |
| | 0565/2016 | 0.02 | - | - | - | - | - | - | - | - | - | 0.02 | - | - | UK |
| | 1181/2016 | - | 0.02 | - | - | - | 0.02 | - | - | - | - | - | - | - | UK |
| | 1564/2016 | - | - | - | - | - | - | 0.01 | - | - | - | - | 0.01 | - | UK |
| | 1707/2016 | - | 0.02 | - | - | - | 0.03 | - | - | - | - | - | - | - | UK |
| | 1980/2016 | - | - | - | 0.02 | - | - | 0.02 | - | - | - | - | - | - | UK |
| | 2893/2016 | 0.04 | - | - | - | - | 0.01 | - | - | - | - | - | - | - | UK |
| | 2918/2016 | - | - | - | - | - | - | - | - | 0.1 | - | 0.02 | - | - | UK |
| (3) | 2616/2016 | 0.04 | 0.02 | - | - | - | 0.03 | - | - | - | - | - | - | UK | |
| (4) | 2030/2016 | 0.2 | - | - | - | 0.01 | - | - | 0.01 | - | 0.03 | - | - | - | UK |
| | 2232/2016 | - | - | - | - | 0.03 | - | 0.02 | 0.01 | - | 0.01 | - | - | - | UK |
| (5) | 2663/2016 | 0.08 | - | - | - | 0.1 | - | - | 0.07 | 0.09 | - | 0.9 | - | UK | |

The abbreviations used for the pesticide names are as follows:

| | | | | | | | | | |
|------|--------------|-------|--------------|------|-------------|-----|----------------|-----|------------|
| AZOX | azoxystrobin | BACSM | BAC (sum) | BOS | boscalid | CLN | chlorothalonil | CYD | cyprodinil |
| DDAC | DDAC (sum) | DMR | dimethomorph | FLUD | fludioxonil | FPC | fluopicolide | IPR | iprodione |
| PCB | propamocarb | TBC | tebuconazole | TEF | tefluthrin | | | | |

Table 28c. SPRING ONIONS: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.02) | famoxadone (0.01) | ofurace (0.01) |
| 2,4-DB (0.01) | fenamidone (0.01) | Oxadiargyl (0.01) |
| 2-phenylphenol (0.01) | fenamiphos (sum) (0.01) | oxadiazon (0.01) |
| abamectin (sum) (0.01) | fenarimol (0.01) | oxadixyl (0.01) |
| acephate (0.01) | fenazaquin (0.01) | oxamyl (0.01) |
| acetamiprid (0.01) | fenbuconazole (0.01) | oxasulfuron (0.01) |
| acetochlor (0.01) | fenbutatin oxide (0.01) | oxydemeton-methyl (sum) (0.01) |
| acibenzolar-s-methyl (0.01) | fenhexamid (0.01) | oxyfluorfen (0.01) |
| aclonifen (0.01) | fenitrothion (0.01) | paclobutrazol (0.01) |
| acrinathrin (0.01) | fenoxycarb (0.01) | parathion (0.01) |
| alachlor (0.01) | fenpropathrin (0.01) | parathion-methyl (sum) (0.01) |
| aldicarb (sum) (0.01) | fenpropidin (0.01) | penconazole (0.01) |
| aldrin and dieldrin (0.01) | fenpropimorph (0.01) | pencycuron (0.01) |
| allethrin (0.01) | fenpyrazamine (0.01) | pendimethalin (0.01) |
| alpha-HCH (0.01) | fenpyroximate (0.01) | penflufen (0.01) |
| ametocradin (0.01) | fensulfothion (sum) (0.01) | penthioopyrad (0.01) |
| aminocarb (0.01) | fenthion (partial sum) (0.01) | permethrin (0.01) |
| amitraz (0.01) | fenthion (sum) (0.01) | phenmedipham (0.01) |
| atrazine (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phenthoate (0.01) |
| azinphos-ethyl (0.01) | fipronil (sum) (0.01) | phorate (sum) (0.02) |
| azinphos-methyl (0.01) | flonicamid (sum) (0.01) | phosalone (0.01) |
| benalaxyl (0.01) | fluazifop-p-butyl (sum) (0.01) | phosmet (sum) (0.01) |
| bendiocarb (0.01) | fluazinam (0.01) | phosphamidon (0.01) |
| benthiavalicarb (sum) (0.01) | flubendiamide (0.01) | phoxim (0.01) |
| beta-HCH (0.01) | flucythrinate (0.01) | picolinafen (0.01) |
| bifenthrin (0.01) | flufenacet (0.01) | picoxystrobin (0.01) |
| biphenyl (0.01) | flufenoxuron (0.01) | piperonyl butoxide (0.01) |
| bispyribac-sodium (0.01) | fluometuron (0.01) | pirimicarb (sum) (0.01) |
| bitertanol (0.05) | fluopyram (0.01) | pirimiphos-ethyl (0.01) |
| bromopropylate (0.01) | fluoxastrobin (0.01) | pirimiphos-methyl (0.01) |
| bromoxynil (0.01) | fluquinconazole (0.01) | prochloraz (parent only) (0.01) |
| bromuconazole (0.01) | flusilazole (0.01) | procymidone (0.01) |
| bupirimate (0.01) | flutolanil (0.01) | profenofos (0.01) |
| buprofezin (0.01) | flutriafol (0.01) | promecarb (0.01) |
| butocarboxim (parent) (0.01) | fluxapyroxad (0.01) | prometryn (0.01) |
| butoxycarboxim (0.01) | folpet (0.01) | propanil (0.01) |
| cadusafos (0.01) | fonofos (0.01) | propaquizafop (0.01) |
| captan (0.01) | formetanate (0.01) | propargite (0.01) |
| carbaryl (0.01) | formothion (0.01) | propetamphos (0.01) |
| carbendazim (0.01) | fosthiazate (0.01) | propham (0.01) |
| carbetamide (0.01) | fuberidazole (0.01) | propiconazole (0.01) |
| carbofuran (sum) (0.01) | furalaxyl (0.01) | propoxur (0.01) |
| carboxin (0.01) | furathiocarb (0.001) | propyzamide (0.01) |
| chlorantraniliprole (0.01) | halofenozide (0.01) | proquinazid (0.01) |
| chlorbufam (0.01) | halosulfuron-methyl (0.01) | prosulfocarb (0.01) |
| chlordane (sum) (0.01) | haloxyfop (sum) (0.01) | prosulfuron (0.01) |
| chlorfenapyr (0.01) | Haloxyfop-R methyl (0.01) | prothioconazole (0.01) |
| chlorfenvinphos (0.01) | Heptachlor (sum) (0.01) | prothiofos (0.01) |
| chlorfluazuron (0.01) | heptenophos (0.01) | pymetrozine (0.01) |
| chloridazon (0.01) | hexachlorobenzene (0.01) | pyraclostrobin (0.01) |
| chlorobenzilate (0.01) | hexachlorocyclohexane (sum) (0.01) | pyrazophos (0.01) |
| chlorotoluron (0.01) | hexaconazole (0.01) | pyrethrins (0.01) |
| chlorpropham (sum) (0.05) | hexaflumuron (0.01) | pyridaben (0.01) |
| chlorpyrifos (0.01) | hexazinone (0.01) | pyridaphenthion (0.01) |
| chlorpyrifos-methyl (0.01) | hexythiazox (0.01) | pyrifenox (0.01) |
| chlorthal-dimethyl (0.01) | imazalil (0.01) | pyrimethanil (0.01) |

chlozolate (0.01)
 chromafenozide (0.01)
 cinidon-ethyl (0.01)
 clethodim (0.01)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 crufomate (0.01)
 cyanazine (0.01)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.01)
 cyflufenamid (0.01)
 cyfluthrin (0.01)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)

cypermethrin (0.01)
 cyproconazole (0.01)
 cyromazine (0.01)
 DDT (sum) (0.01)
 deltamethrin (0.01)
 desmedipham (0.01)
 desmetryn (0.01)
 diafenthiuron (0.01)
 diazinon (0.01)
 dichlofluanid (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.02)
 dicrotophos (0.01)
 diethofencarb (0.01)
 difenoconazole (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethoate (sum) (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinotefuran (0.01)
 dioxathion (0.01)
 diphenylamine (0.05)
 disulfoton (sum) (0.01)
 diuron (0.01)
 dodine (0.05)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.01)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)
 ethion (0.01)
 ethirimol (0.01)
 ethofumesate (0.01)
 ethoprophos (0.01)
 etofenprox (0.01)
 etoxazole (0.01)
 etrimfos (0.01)

imidacloprid (0.01)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocarb (0.01)
 isoprotiolane (0.01)
 isoproturon (0.01)
 isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 kresoxim-methyl (0.01)
 lambda-cyhalothrin (0.01)
 lenacil (0.01)

lindane (0.01)
 linuron (0.01)
 lufenuron (0.01)
 malathion (0.01)
 mandipropamid (0.01)
 MCPA (sum) (0.01)
 MCPA only (0.01)
 mecarbam (0.01)
 mepanipyrim (sum) (0.01)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.01)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.01)
 metconazole (0.02)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.01)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 myclobutanil (0.01)
 napropamide (0.01)
 neburon (0.01)
 nitenpyram (0.01)
 nitrothal-isopropyl (0.01)
 nuarimol (0.01)

pyriproxifen (0.01)
 pyroxsulam (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.01)
 Quinoclamine (0.01)
 quinoxifen (0.01)
 quintozene (sum) (0.01)
 Quizalofop, incl. quizalofop-P (0.01)
 rotenone (0.01)
 simazine (0.01)
 spinosad (0.01)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sum of butocarboxim and butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)
 tebutiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 terbacil (0.01)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbumeton (0.01)
 terbuthylazine (0.01)
 terbutryn (0.01)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.01)
 thiachloprid (0.01)
 thiamethoxam (sum) (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.01)
 triasulfuron (0.01)
 triazamate (0.01)
 triazamate (acid) (0.01)
 triazamate (ester) (0.01)
 triazophos (0.01)
 trichlorfon (0.01)
 triclopyr (0.05)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.05)
 triticonazole (0.01)
 tritosulfuron (0.01)
 vamidothion (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 29a. STRAWBERRIES: Residues detected in retail samples purchased between July and September 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--|----------------------------|
| STRAWBERRIES, UK: 23 samples analysed | | |
| azoxystrobin (MRL = 10) | <0.01 (i.e. not found) 0.01 - 0.2 | 14 9 |
| boscalid (MRL = 6) (MRL = 10) | <0.01 (i.e. not found) 0.02, 0.08 0.01 - 0.9 | 16 2 5 |
| bupirimate (MRL = 2) | <0.01 (i.e. not found) 0.01 - 0.1 | 11 12 |
| cyprodinil (MRL = 5) | <0.01 (i.e. not found) 0.02 - 0.2 | 13 10 |
| dimethomorph (MRL = 0.7) | <0.01 (i.e. not found) 0.01 | 22 1 |
| fenamidone (MRL = 0.04) | <0.01 (i.e. not found) 0.02, 0.03 | 21 2 |
| fenhexamid (MRL = 10) | <0.01 (i.e. not found) 0.01 - 0.8 | 6 17 |
| fenpropimorph (MRL = 1) | <0.01 (i.e. not found) 0.06 | 22 1 |
| fludioxonil (MRL = 4) | <0.01 (i.e. not found) 0.02 - 0.2 | 12 11 |
| iprodione (MRL = 20) | <0.01 (i.e. not found) 0.02 - 0.4 | 14 9 |
| kresoxim-methyl (MRL = 1.5) | <0.01 (i.e. not found) 0.01 | 22 1 |
| mepanipyrim (sum) (MRL = 3) | <0.01 (i.e. not found) 0.01 - 0.3 | 15 8 |
| myclobutanil (MRL = 1) | <0.01 (i.e. not found) 0.01 - 0.2 | 8 15 |
| penconazole (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 21 2 |
| pirimicarb (sum) (MRL = 3) | <0.01 (i.e. not found) 0.1 | 21 2 |
| pyraclostrobin (MRL = 1.5) | <0.01 (i.e. not found) 0.01 - 0.2 | 20 3 |
| pyrimethanil (MRL = 5) | <0.01 (i.e. not found) 0.05 - 0.8 | 13 10 |
| spinosad (MRL = 0.3) | <0.01 (i.e. not found) 0.02, 0.03 | 21 2 |
| thiacloprid (MRL = 1) | <0.01 (i.e. not found) 0.01 - 0.2 | 17 6 |

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|---|--------------------------------|----------------------------|
| STRAWBERRIES, Imported (EC): 1 sample analysed | | |
| boscalid (MRL = 6) | <0.01 (i.e. not found) 0.1 | 0 1 |
| bupirimate (MRL = 2) | <0.01 (i.e. not found) 0.03 | 0 1 |
| iprodione (MRL = 20) | <0.01 (i.e. not found) 0.02 | 0 1 |
| mepanipyrim (sum) (MRL = 3) | <0.01 (i.e. not found) 0.1 | 0 1 |
| pyraclostrobin (MRL = 1.5) | <0.01 (i.e. not found) 0.03 | 0 1 |
| quinoxifen (MRL = 0.3) | <0.01 (i.e. not found) 0.04 | 0 1 |
| thiacloprid (MRL = 1) | <0.01 (i.e. not found) 0.01 | 0 1 |

Imported (EC) samples of strawberries were from Ireland (1).
UK samples of strawberries (23).

Residues were distributed by country of origin, as follows:

| | |
|-------------------|----------------------|
| azoxystrobin | UK (9) |
| boscalid | Ireland (1), UK (7) |
| bupirimate | Ireland (1), UK (12) |
| cyprodinil | UK (10) |
| dimethomorph | UK (1) |
| fludioxonil | UK (11) |
| fenamidone | UK (2) |
| fenhexamid | UK (17) |
| fenpropimorph | UK (1) |
| iprodione | Ireland (1), UK (9) |
| kresoxim-methyl | UK (1) |
| mepanipyrim (sum) | Ireland (1), UK (8) |
| myclobutanil | UK (15) |
| pirimicarb (sum) | UK (2) |
| penconazole | UK (2) |
| pyraclostrobin | Ireland (1), UK (3) |
| pyrimethanil | UK (10) |
| quinoxifen | Ireland (1) |
| spinosad | UK (2) |
| thiacloprid | Ireland (1), UK (6) |

No residues were found in 1 of the 23 UK samples
Residues were found in all of the 1 Imported (EC) samples

Table 29b. STRAWBERRIES: Residues detected in retail samples purchased between July and September 2016

Residues (1-16 compounds) were found in 23 of the 24 samples as follows:

| Number of residues | Sample ID | Residues found (mg/kg) | | | | | | | | | | | | | | | | | | | Country of origin | |
|--------------------|-----------|------------------------|------|------|------|------|------|------|------|------|------|------|-------|------|-----|------|------|------|------|------|-------------------|---------|
| | | AZOX | BOS | BUP | CYD | DMR | FLUD | FMD | FNHX | FNPM | IPR | KREM | MEPSM | MYC | PIR | PNZ | PYC | PYM | QINO | SPN | | THC |
| (1) | 2053/2016 | - | - | - | - | - | - | - | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 2056/2016 | - | - | - | - | - | - | - | - | - | - | - | 0.09 | - | - | - | - | - | - | - | - | UK |
| (2) | 0649/2016 | - | - | - | - | - | - | - | 0.01 | - | 0.4 | - | - | - | - | - | - | - | - | - | - | UK |
| | 1717/2016 | - | 0.01 | - | - | - | - | - | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| | 1982/2016 | - | - | 0.1 | - | - | - | - | 0.4 | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| (3) | 0599/2016 | - | - | - | - | - | - | - | - | - | - | - | 0.02 | - | - | - | 0.09 | - | - | 0.01 | UK | |
| | 1566/2016 | 0.02 | - | - | 0.2 | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | UK |
| (5) | 0637/2016 | 0.02 | - | - | - | - | - | - | 0.06 | - | 0.4 | - | 0.09 | 0.04 | - | - | - | - | - | - | - | UK |
| | 0688/2016 | - | - | 0.1 | - | - | - | - | 0.2 | - | 0.02 | - | - | - | - | - | - | 0.08 | - | - | 0.05 | UK |
| | 2034/2016 | - | - | 0.04 | - | - | - | - | 0.1 | - | 0.1 | - | - | 0.02 | - | - | - | 0.05 | - | - | - | UK |
| (6) | 1183/2016 | 0.01 | - | 0.02 | - | - | 0.02 | - | 0.1 | - | - | - | 0.02 | 0.02 | - | - | - | - | - | - | - | UK |
| | 2125/2016 | - | - | - | - | - | - | - | 0.2 | - | 0.04 | - | 0.2 | 0.07 | - | 0.02 | - | 0.6 | - | - | - | UK |
| (7) | 0559/2016 | - | 0.9 | - | 0.2 | - | 0.2 | - | 0.09 | - | - | - | - | 0.1 | - | - | 0.2 | 0.7 | - | - | - | UK |
| | 2124/2016 | 0.07 | 0.02 | 0.04 | 0.02 | - | 0.04 | - | - | - | - | 0.01 | 0.04 | - | - | - | - | - | - | - | - | UK |
| | 2778/2016 | - | - | 0.02 | 0.02 | - | 0.03 | 0.03 | 0.5 | - | 0.4 | - | - | 0.01 | - | - | - | - | - | - | - | UK |
| | 2992/2016 | - | - | 0.01 | - | - | - | - | 0.2 | - | - | - | 0.3 | 0.07 | - | 0.02 | - | 0.6 | - | - | 0.2 | UK |
| | 0965/2016 | - | 0.1 | 0.03 | - | - | - | - | - | - | 0.02 | - | 0.1 | - | - | - | 0.03 | - | 0.04 | - | 0.01 | Ireland |
| (8) | 0237/2016 | 0.02 | 0.1 | 0.02 | 0.08 | - | 0.07 | - | 0.2 | - | - | - | 0.06 | - | - | 0.01 | - | - | - | - | UK | |
| | 1709/2016 | - | 0.1 | - | 0.02 | - | 0.02 | - | - | - | - | - | 0.06 | 0.1 | - | 0.03 | 0.3 | - | 0.03 | - | - | UK |
| (9) | 0966/2016 | 0.2 | - | 0.02 | 0.1 | - | 0.1 | - | 0.5 | - | 0.2 | - | - | 0.2 | - | - | - | 0.8 | - | - | 0.1 | UK |
| | 1670/2016 | 0.09 | 0.07 | 0.06 | 0.06 | - | 0.05 | - | 0.8 | - | - | - | 0.08 | 0.02 | 0.1 | - | - | - | - | - | - | UK |
| | 2033/2016 | 0.2 | - | 0.05 | 0.1 | - | 0.1 | - | 0.5 | - | 0.2 | - | - | 0.1 | - | - | - | 0.6 | - | - | 0.1 | UK |
| (16) | 2991/2016 | 0.2 | 0.08 | 0.04 | 0.2 | 0.01 | 0.1 | 0.02 | 0.2 | 0.06 | 0.4 | 0.01 | 0.08 | 0.2 | - | - | - | 0.3 | - | 0.02 | 0.08 | UK |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|----------------|------|------------------|-------|-------------------|
| AZOX | azoxystrobin | BOS | boscalid | BUP | bupirimate |
| CYD | cyprodinil | DMR | dimethomorph | FLUD | fludioxonil |
| FMD | fenamidone | FNHX | fenhexamid | FNPM | fenpropimorph |
| IPR | iprodione | KREM | kresoxim-methyl | MEPSM | mepanipyrim (sum) |
| MYC | myclobutanil | PIR | pirimicarb (sum) | PNZ | penconazole |
| PYC | pyraclostrobin | PYM | pyrimethanil | QINO | quinoxifen |
| SPN | spinosad | THC | thiacloprid | | |

Table 29c. STRAWBERRIES: Residues sought but not found in retail samples purchased between July and September 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.02) | ethirimol (0.01) | nitenpyram (0.01) |
| 2,4-DB (0.01) | ethofumesate (0.01) | nitrothal-isopropyl (0.01) |
| 2-phenylphenol (0.01) | ethoprophos (0.01) | nuarimol (0.01) |
| abamectin (sum) (0.01) | etofenprox (0.01) | ofurace (0.01) |
| acephate (0.01) | etoxazole (0.01) | Oxadiargyl (0.01) |
| acetamiprid (0.01) | etrimfos (0.01) | oxadiazon (0.01) |
| acetochlor (0.01) | famoxadone (0.01) | oxadixyl (0.01) |
| acibenzolar-s-methyl (0.01) | fenamiphos (sum) (0.01) | oxamyl (0.01) |
| aclonifen (0.01) | fenarimol (0.01) | oxasulfuron (0.01) |
| acrinathrin (0.01) | fenazaquin (0.01) | oxydemeton-methyl (sum) (0.01) |
| alachlor (0.01) | fenbuconazole (0.01) | oxyfluorfen (0.01) |
| aldicarb (sum) (0.01) | fenbutatin oxide (0.01) | paclobutrazol (0.01) |
| aldrin and dieldrin (0.01) | fenitrothion (0.01) | parathion (0.01) |
| allethrin (0.01) | fenoxycarb (0.01) | parathion-methyl (sum) (0.01) |
| alpha-HCH (0.01) | fenpropathrin (0.01) | pencycuron (0.01) |
| ametoctradin (0.01) | fenpropidin (0.01) | pendimethalin (0.01) |
| aminocarb (0.01) | fenpyrazamine (0.01) | penflufen (0.01) |
| amitraz (0.01) | fenpyroximate (0.01) | penhiopyrad (0.01) |
| atrazine (0.01) | fensulfothion (sum) (0.01) | permethrin (0.01) |
| azinphos-ethyl (0.01) | fenthion (partial sum) (0.01) | phenmedipham (0.01) |
| azinphos-methyl (0.01) | fenthion (sum) (0.01) | phenthoate (0.01) |
| BAC (sum) (0.01) | fenvalerate & esfenvalerate (all isomers) (0.01) | phorate (sum) (0.02) |
| benalaxyl (0.01) | fipronil (sum) (0.01) | phosalone (0.01) |
| bendiocarb (0.01) | flonicamid (sum) (0.01) | phosmet (sum) (0.01) |
| benthiavalicarb (sum) (0.01) | fluazifop-p-butyl (sum) (0.01) | phosphamidon (0.01) |
| beta-HCH (0.01) | fluazinam (0.01) | phoxim (0.01) |
| bifenthrin (0.01) | flubendiamide (0.01) | picolinafen (0.01) |
| biphenyl (0.01) | flucythrinate (0.01) | picoxystrobin (0.01) |
| bispyribac-sodium (0.01) | flufenacet (0.01) | pirimiphos-ethyl (0.01) |
| bitertanol (0.05) | flufenoxuron (0.01) | pirimiphos-methyl (0.01) |
| bromopropylate (0.01) | fluometuron (0.01) | prochloraz (parent only) (0.01) |
| bromoxynil (0.01) | fluopicolide (0.01) | procymidone (0.01) |
| bromuconazole (0.01) | fluopyram (0.01) | profenofos (0.01) |
| buprofezin (0.01) | fluoxastrobin (0.01) | promecarb (0.01) |
| butocarboxim (parent) (0.01) | fluquinconazole (0.01) | prometryn (0.01) |
| butoxycarboxim (0.01) | flusilazole (0.01) | propamocarb (0.01) |
| cadusafos (0.01) | flutolanil (0.01) | propanil (0.01) |
| captan and folpet (0.01) | flutriafol (0.01) | propaquizafop (0.01) |
| carbaryl (0.01) | fluxapyroxad (0.01) | propargite (0.01) |
| carbendazim (0.01) | fonofos (0.01) | propetamphos (0.01) |
| carbetamide (0.01) | formetanate (0.01) | propham (0.01) |
| carbofuran (sum) (0.01) | formothion (0.01) | propiconazole (0.01) |
| carboxin (0.01) | fosthiazate (0.01) | propoxur (0.01) |
| chlorantraniliprole (0.01) | fuberidazole (0.01) | propyzamide (0.01) |
| chlorbufam (0.01) | furalaxyl (0.01) | proquinazid (0.01) |
| chlordane (sum) (0.01) | furathiocarb (0.001) | prosulfocarb (0.01) |
| chlorfenapyr (0.01) | halofenozide (0.01) | prosulfuron (0.01) |
| chlorfenvinphos (0.01) | halosulfuron-methyl (0.01) | prothioconazole (0.01) |
| chlorfluazuron (0.01) | haloxyfop (sum) (0.01) | prothiofos (0.01) |
| chloridazon (0.01) | Haloxyfop-R methyl (0.01) | pymetrozine (0.01) |
| chlorobenzilate (0.01) | Heptachlor (sum) (0.01) | pyrazophos (0.01) |
| chlorothalonil (0.01) | heptenophos (0.01) | pyrethrins (0.01) |
| chlorotoluron (0.01) | hexachlorobenzene (0.01) | pyridaben (0.01) |
| chlorpropham (sum) (0.05) | hexachlorocyclohexane (sum) (0.01) | pyridaphenthion (0.01) |
| chlorpyrifos (0.01) | hexaconazole (0.01) | pyrifenoxy (0.01) |
| chlorpyrifos-methyl (0.01) | hexaflumuron (0.01) | pyriproxifen (0.01) |

chlorthal-dimethyl (0.01)
 chlozolate (0.01)
 chromafenozide (0.01)
 cinidon-ethyl (0.01)
 clethodim (0.01)
 clofentezine (0.01)
 clomazone (0.01)
 clothianidin (0.01)
 coumaphos (0.01)
 crufomate (0.01)
 cyanazine (0.01)
 cyazofamid (0.01)
 cycloate (0.01)
 cycloxydim (0.01)

cyflufenamid (0.01)
 cyfluthrin (0.01)
 cyhalofop-butyl (sum) (0.01)
 cymoxanil (0.01)
 cypermethrin (0.01)
 cyproconazole (0.01)
 cyromazine (0.01)
 DDAC (sum) (0.01)
 DDT (sum) (0.01)
 deltamethrin (0.01)
 desmedipham (0.01)
 desmetryn (0.01)
 diafenthiuron (0.01)
 diazinon (0.01)
 dichlofluanid (0.01)
 dichlorprop (0.01)
 dichlorvos (0.01)
 diclobutrazol (0.01)
 dicloran (0.01)
 dicofol (sum) (0.02)
 dicrotophos (0.01)
 diethofencarb (0.01)
 difenoconazole (0.01)
 diflubenzuron (0.01)
 diflufenican (0.01)
 dimethoate (sum) (0.01)
 dimoxystrobin (0.01)
 diniconazole (0.01)
 dinocap (0.01)
 dinotefuran (0.01)
 dioxathion (0.01)
 diphenylamine (0.05)
 disulfoton (sum) (0.01)
 dithiocarbamates (0.05)
 diuron (0.01)
 dodine (0.05)
 emamectin benzoate (0.01)
 endosulfan (sum) (0.01)
 endrin (0.01)
 EPN (0.01)
 epoxiconazole (0.01)
 EPTC (0.01)
 ethiofencarb (parent) (0.01)
 ethion (0.01)

hexazinone (0.01)
 hexythiazox (0.01)
 imazalil (0.01)
 imidacloprid (0.01)
 indoxacarb (0.01)
 ioxynil (0.01)
 iprovalicarb (0.01)
 isazophos (0.01)
 isocarbophos (0.01)
 isofenphos (0.01)
 isofenphos-methyl (0.01)
 isoprocab (0.01)
 isoprothiolane (0.01)
 isoproturon (0.01)

isopyrazam (0.01)
 isoxaben (0.01)
 isoxaflutole (0.01)
 lambda-cyhalothrin (0.01)
 lenacil (0.01)
 lindane (0.01)
 linuron (0.01)
 lufenuron (0.01)
 malathion (0.01)
 mandipropamid (0.01)
 MCPA (sum) (0.01)
 MCPA only (0.01)
 mecarbam (0.01)
 mepronil (0.01)
 mesosulfuron-methyl (0.01)
 metaflumizone (0.01)
 metalaxyl (0.01)
 metamitron (0.01)
 metazachlor (0.01)
 metconazole (0.02)
 methabenzthiazuron (0.01)
 methacrifos (0.01)
 methamidophos (0.01)
 methidathion (0.01)
 methiocarb (sum) (0.01)
 methomyl (sum) (0.01)
 methoxychlor (0.01)
 methoxyfenozide (0.01)
 metobromuron (0.01)
 metolachlor (0.01)
 metolcarb (0.01)
 metosulam (0.01)
 metoxuron (0.01)
 metrafenone (0.01)
 metribuzin (0.01)
 metsulfuron-methyl (0.01)
 mevinphos (0.01)
 molinate (0.01)
 monocrotophos (0.01)
 monolinuron (0.01)
 Monuron (0.01)
 napropamide (0.01)
 neburon (0.01)

pyroxsulam (0.01)
 quassia (0.01)
 quinalphos (0.01)
 quinmerac (0.01)
 Quinoclamine (0.01)
 quintozene (sum) (0.01)
 Quizalofop, incl. quizalofop-P (0.01)
 rotenone (0.01)
 simazine (0.01)
 spirodiclofen (0.01)
 spiromesifen (0.01)
 spirotetramat (sum) (0.01)
 spiroxamine (0.01)
 sum of butocarboxim and butocarboxim sul (0.01)
 tau-fluvalinate (0.01)
 tebuconazole (0.01)
 tebufenozide (0.01)
 tebufenpyrad (0.01)
 tebuthiuron (0.01)
 tecnazene (0.01)
 teflubenzuron (0.01)
 tefluthrin (0.01)
 terbacil (0.01)
 terbufos (0.01)
 Terbufos (sum not defintion) (0.01)
 terbumeton (0.01)
 terbuthylazine (0.01)
 terbutryn (0.01)
 tetrachlorvinphos (0.01)
 tetraconazole (0.01)
 tetradifon (0.01)
 tetramethrin (0.01)
 thiabendazole (0.01)
 thiamethoxam (sum) (0.01)
 thiophanate-methyl (0.01)
 tolclofos-methyl (0.01)
 tolfenpyrad (0.01)
 tolylfluanid (sum) (0.01)
 triadimefon & triadimenol (0.01)
 triallate (0.01)
 triasulfuron (0.01)
 triazamate (0.01)
 triazamate (acid) (0.01)
 triazamate (ester) (0.01)
 triazophos (0.01)
 trichlorfon (0.01)
 triclopyr (0.05)
 tricyclazole (0.01)
 trifloxystrobin (0.01)
 triflumuron (0.01)
 trifluralin (0.01)
 triforine (0.05)
 triticonazole (0.01)
 tritosulfuron (0.01)
 vamidothion (0.01)
 vinclozolin (sum) (0.01)
 zoxamide (0.01)

Table 30a. TOMATOES: Residues detected in retail samples purchased between July and August 2016

| Commodity/Pesticide | Concentration range (mg/kg) | Number of samples in range |
|--|--------------------------------------|----------------------------|
| PLUM UK: 2 samples analysed | | |
| None found | - | 2 |
| ROUND UK: 2 samples analysed | | |
| isopyrazam (MRL = 0.5) | <0.01 (i.e. not found) 0.03 | 1 1 |
| VINE UK: 5 samples analysed | | |
| isopyrazam (MRL = 0.5) | <0.01 (i.e. not found) 0.02 | 4 1 |
| spiromesifen (MRL = 1) | <0.01 (i.e. not found) 0.03 | 4 1 |
| PLUM Imported (EC): 1 sample analysed | | |
| thiacloprid (MRL = 0.5) | <0.01 (i.e. not found) 0.01 | 0 1 |
| ROUND Imported (EC): 5 samples analysed | | |
| boscalid (MRL = 3) | <0.01 (i.e. not found) 0.05 | 4 1 |
| chlorantraniliprole (MRL = 0.6) | <0.01 (i.e. not found) 0.01 | 3 2 |
| fluopyram (MRL = 0.9) | <0.01 (i.e. not found) 0.01, 0.02 | 3 2 |
| pyraclostrobin (MRL = 0.3) | <0.01 (i.e. not found) 0.03 | 4 1 |
| pyridalyl (MRL = 1) | <0.01 (i.e. not found) 0.02, 0.04 | 3 2 |
| VINE Imported (EC): 3 samples analysed | | |
| azoxystrobin (MRL = 3) | <0.01 (i.e. not found) 0.07 | 2 1 |
| fluopyram (MRL = 0.9) | <0.01 (i.e. not found) 0.01 | 2 1 |

Imported (EC) samples of tomato were from Belgium (1), the Netherlands (8).
UK samples of tomato (9).

Residues were distributed by country of origin, as follows:

| | |
|---------------------|---------------------|
| azoxystrobin | the Netherlands (1) |
| boscalid | the Netherlands (1) |
| chlorantraniliprole | the Netherlands (2) |
| fluopyram | the Netherlands (3) |
| isopyrazam | UK (2) |
| pyraclostrobin | the Netherlands (1) |
| pyridalyl | the Netherlands (2) |
| spiromesifen | UK (1) |
| thiacloprid | Belgium (1) |

No residues were found in any of the UK plum samples
No residues were found in 1 of the 2 UK round samples
No residues were found in 3 of the 5 UK vine samples
Residues were found in all of the 1 Imported (EC) plum samples
No residues were found in 1 of the 5 Imported (EC) round samples
No residues were found in 1 of the 3 Imported (EC) vine samples

Table 30b. TOMATOES: Residues detected in retail samples purchased between July and August 2016

Residues (1-3 compounds) were found in 10 of the 18 samples as follows:

| Number of residues | Sample ID | Type of TOMATO | Residues found (mg/kg) | | | | | | | | | Country of origin |
|--------------------|-----------|----------------|------------------------|------|------|------|------|------|------|------|------|-------------------|
| | | | AZOX | BOS | CTP | FPYM | IPZM | PYC | PYDL | SPM | THC | |
| (1) | 0762/2016 | ROUND | - | - | - | - | 0.03 | - | - | - | - | UK |
| | 1724/2016 | VINE | - | - | - | - | 0.02 | - | - | - | - | UK |
| | 2671/2016 | VINE | - | - | - | - | - | - | - | 0.03 | - | UK |
| | 1922/2016 | PLUM | - | - | - | - | - | - | - | - | 0.01 | Belgium |
| | 0909/2016 | VINE | 0.07 | - | - | - | - | - | - | - | - | the Netherlands |
| | 1882/2016 | ROUND | - | - | 0.01 | - | - | - | - | - | - | the Netherlands |
| | 2644/2016 | ROUND | - | - | - | 0.02 | - | - | - | - | - | the Netherlands |
| | 2920/2016 | VINE | - | - | - | 0.01 | - | - | - | - | - | the Netherlands |
| (3) | 1831/2016 | ROUND | - | 0.05 | - | - | - | 0.03 | 0.04 | - | - | the Netherlands |
| | 2864/2016 | ROUND | - | - | 0.01 | 0.01 | - | - | 0.02 | - | - | the Netherlands |

The abbreviations used for the pesticide names are as follows:

| | | | | | |
|------|--------------|------|--------------|-----|---------------------|
| AZOX | azoxystrobin | BOS | boscalid | CTP | chlorantraniliprole |
| FPYM | fluopyram | IPZM | isopyrazam | PYC | pyraclostrobin |
| PYDL | pyridalyl | SPM | spiromesifen | THC | thiacloprid |

Table 30c. TOMATOES: Residues sought but not found in retail samples purchased between July and August 2016

The following pesticide(s) were actively sought but not found at or above their reporting limits (in parentheses in mg/kg):

| | | |
|------------------------------|--|---------------------------------|
| 2,4-D (sum) (0.01) | ethiofencarb (parent) (0.01) | myclobutanil (0.01) |
| 2,4-DB (0.01) | ethion (0.01) | napropamide (0.02) |
| 2-phenylphenol (0.02) | ethirimol (0.01) | nitenpyram (0.01) |
| 6-benzyladenine (0.01) | ethofumesate (0.01) | nitrofen (0.02) |
| abamectin (sum) (0.01) | ethoprophos (0.01) | nitrothal-isopropyl (0.01) |
| acephate (0.01) | etofenprox (0.01) | Novaluron (0.01) |
| acetamiprid (0.01) | etoxazole (0.01) | nuarimol (0.01) |
| acetochlor (0.01) | etridiazole (0.02) | ofurace (0.01) |
| acibenzolar-s-methyl (0.01) | etrimfos (0.01) | Oxadiargyl (0.01) |
| aclonifen (0.02) | famoxadone (0.01) | oxadiazon (0.02) |
| acrinathrin (0.02) | fenamidone (0.01) | oxadixyl (0.01) |
| alachlor (0.01) | fenamiphos (sum) (0.01) | oxamyl (0.01) |
| aldicarb (sum) (0.01) | fenarimol (0.01) | oxasulfuron (0.01) |
| aldrin and dieldrin (0.01) | fenazaquin (0.01) | oxydemeton-methyl (sum) (0.01) |
| allethrin (0.02) | fenbuconazole (0.01) | oxyfluorfen (0.02) |
| alpha-HCH (0.01) | fenbutatin oxide (0.02) | paclobutrazol (0.01) |
| ametoctradin (0.01) | fenhexamid (0.02) | parathion (0.01) |
| amidosulfuron (0.01) | fenitrothion (0.01) | parathion-methyl (sum) (0.01) |
| amitraz (0.01) | fenoxycarb (0.01) | penconazole (0.01) |
| asulam (0.02) | fenpropathrin (0.01) | pencycuron (0.01) |
| atrazine (0.01) | fenpropidin (0.01) | pendimethalin (0.01) |
| azinphos-ethyl (0.02) | fenpropimorph (0.01) | penflufen (0.01) |
| azinphos-methyl (0.02) | fenpyrazamine (0.01) | pentanochlor (0.01) |
| BAC (sum) (0.05) | fenpyroximate (0.01) | penthiopyrad (0.01) |
| benalaxyl (0.01) | fensulfiothion (sum) (0.01) | permethrin (0.01) |
| bendiocarb (0.01) | fenthion (partial sum) (0.01) | phenmedipham (0.02) |
| benfuracarb (0.001) | fenvalerate & esfenvalerate (all isomers) (0.01) | phenthoate (0.01) |
| benthiavalicarb (sum) (0.01) | fipronil (sum) (0.005) | phorate (partial sum) (0.01) |
| beta-HCH (0.01) | flonicamid (sum) (0.01) | phosalone (0.01) |
| bifenox (0.02) | fluazifop-p-butyl (sum) (0.01) | phosmet (sum) (0.01) |
| bifenthrin (0.01) | fluazinam (0.01) | phosphamidon (0.01) |
| biphenyl (0.01) | flubendiamide (0.01) | phoxim (0.01) |
| bispyribac-sodium (0.01) | flucythrinate (0.01) | picolinafen (0.01) |
| bitertanol (0.01) | fludioxonil (0.01) | picoxystrobin (0.01) |
| bixafen (0.01) | flufenacet (0.01) | piperonyl butoxide (0.01) |
| bromophos-ethyl (0.01) | flufenoxuron (0.02) | pirimicarb (sum) (0.01) |
| bromopropylate (0.01) | fluometuron (0.01) | pirimiphos-ethyl (0.01) |
| bromoxynil (0.01) | fluopicolide (0.01) | pirimiphos-methyl (0.01) |
| bromuconazole (0.01) | fluoxastrobin (0.01) | prochloraz (parent only) (0.01) |
| bupirimate (0.01) | fluquinconazole (0.01) | procymidone (0.01) |
| buprofezin (0.01) | flurochloridone (0.02) | profenofos (0.01) |
| butachlor (0.01) | fluroxypyr (sum) (0.02) | promecarb (0.01) |
| butocarboxim (parent) (0.01) | flusilazole (0.01) | prometryn (0.01) |
| butoxycarboxim (0.01) | flutolanil (0.01) | propachlor (0.01) |
| cadusafos (0.01) | flutriafol (0.01) | propamocarb (0.01) |
| carbaryl (0.01) | fluxapyroxad (0.01) | propanil (0.02) |
| carbendazim (0.01) | fonofos (0.01) | propaquizafop (0.02) |
| carbetamide (0.02) | formetanate (0.01) | propargite (0.01) |
| carbofuran (sum) (0.001) | fosthiazate (0.01) | propetamphos (0.01) |
| carbosulfan (0.001) | furalaxyl (0.01) | propham (0.02) |
| carboxin (0.02) | furathiocarb (0.001) | propiconazole (0.01) |
| chlorbufam (0.01) | furmecycloz (0.01) | propoxur (0.01) |
| chlordane (sum) (0.01) | halofenozide (0.01) | propyzamide (0.01) |
| chlorfenapyr (0.01) | halosulfuron-methyl (0.01) | proquinazid (0.01) |
| chlorfenvinphos (0.01) | haloxyfop (sum) (0.01) | prosulfocarb (0.01) |
| chloridazon (0.01) | Heptachlor (sum) (0.01) | prosulfuron (0.01) |
| chlormequat (0.02) | heptenophos (0.01) | prothioconazole (0.01) |
| chlorobenzilate (0.02) | hexachlorobenzene (0.01) | prothiofos (0.01) |

| | | |
|-------------------------------|--|---|
| chlorothalonil (0.01) | hexachlorocyclohexane (sum) (0.01) | pymetrozine (0.01) |
| chlorpropham (sum) (0.01) | hexaconazole (0.01) | pyrazophos (0.01) |
| chlorpyrifos (0.01) | hexazinone (0.02) | pyrethrins (0.01) |
| chlorpyrifos-methyl (0.01) | hexythiazox (0.01) | pyridaben (0.01) |
| chlorthal-dimethyl (0.01) | imazalil (0.02) | pyridaphenthion (0.01) |
| chlortoluron (0.01) | imidacloprid (0.01) | pyrifenoxy (0.02) |
| chlozolinate (0.01) | indoxacarb (0.01) | pyrimethanil (0.01) |
| chromafenozide (0.01) | inorganic bromide (20) | pyriproxifen (0.01) |
| clethodim (0.02) | ioxynil (0.01) | quassia (0.01) |
| clofentezine (0.01) | iprodione (0.01) | quinalphos (0.01) |
| clomazone (0.01) | iprovalicarb (0.01) | quinmerac (0.02) |
| clothianidin (0.01) | isazophos (0.01) | Quinoclamine (0.01) |
| coumaphos (0.01) | isocarboxiphos (0.01) | quinoxifen (0.01) |
| cyanazine (0.02) | isofenphos (0.01) | quintozene (sum) (0.01) |
| cyazofamid (0.01) | isofenphos-methyl (0.01) | resmethrin (0.02) |
| cycloate (0.01) | isoprocarb (0.01) | rimsulfuron (0.01) |
| cycloxydim (0.02) | isoprothiolane (0.01) | rotenone (0.01) |
| cyflufenamid (0.01) | isoproturon (0.01) | simazine (0.02) |
| cyfluthrin (0.02) | isoxaben (0.01) | spinosad (0.01) |
| cyhalofop-butyl (sum) (0.01) | isoxaflutole (0.01) | spirodiclofen (0.01) |
| cymoxanil (0.01) | kresoxim-methyl (0.01) | spirotetramat (sum) (0.01) |
| cypermethrin (0.02) | lambda-cyhalothrin (0.02) | spiroxamine (0.01) |
| cyproconazole (0.01) | lenacil (0.01) | sulcotrione (0.02) |
| cyprodinil (0.02) | lindane (0.01) | sum of butocarboxim and butocarboxim sul (0.01) |
| cyromazine (0.02) | linuron (0.01) | tau-fluvalinate (0.01) |
| DDAC (sum) (0.05) | lufenuron (0.02) | tebuconazole (0.01) |
| DDT (sum) (0.01) | malathion (0.01) | tebufenozide (0.01) |
| deltamethrin (0.02) | mandipropamid (0.01) | tebufenpyrad (0.01) |
| demeton-S-methyl (0.01) | MCPA only (0.01) | tebuthiuron (0.01) |
| desmedipham (0.02) | MCPA, MCPB and MCPA thioethyl expressed (0.01) | tecnazene (0.01) |
| diafenthiuron (0.02) | mecarbam (0.01) | teflubenzuron (0.01) |
| diazinon (0.01) | mepanipyrim (sum) (0.01) | tefluthrin (0.01) |
| dichlobenil (0.01) | mephosfolan (0.02) | tepraloxymid (0.02) |
| dichlofluanid (0.01) | mepiquat (0.02) | terbufos (0.01) |
| dichlofluanid and DMSA (0.01) | mepronil (0.01) | Terbufos (sum not definition) (0.01) |
| dichlorprop (0.01) | mesosulfuron-methyl (0.01) | terbutylazine (0.02) |
| dichlorvos (0.01) | metaflumizone (0.02) | terbutryn (0.02) |
| diclobutrazol (0.01) | metalaxyl (0.01) | tetrachlorvinphos (0.01) |
| dicloran (0.01) | metamitron (0.01) | tetraconazole (0.01) |
| dicofol (sum) (0.01) | metazachlor (0.02) | tetradifon (0.01) |
| dicrotophos (0.01) | metconazole (0.01) | tetramethrin (0.01) |
| diethofencarb (0.01) | methabenzthiazuron (0.01) | thiabendazole (0.02) |
| difenoconazole (0.01) | methacrifos (0.01) | thiamethoxam (sum) (0.01) |
| diflubenzuron (0.01) | methamidophos (0.01) | thiophanate-methyl (0.01) |
| diflufenican (0.01) | methidathion (0.01) | tolclofos-methyl (0.01) |
| dimethenamid (0.01) | methiocarb (sum) (0.01) | tolfenpyrad (0.01) |
| dimethoate (sum) (0.01) | methomyl (sum) (0.01) | tolyfluanid (sum) (0.01) |
| dimethomorph (0.01) | methoxychlor (0.01) | triadimefon & triadimenol (0.01) |
| dimoxystrobin (0.01) | methoxyfenozide (0.01) | triallate (0.02) |
| diniconazole (0.01) | metobromuron (0.01) | triasulfuron (0.02) |
| dinotefuran (0.01) | metolachlor (0.01) | triazamate (0.01) |
| diphenylamine (0.02) | metolcarb (0.01) | triazophos (0.01) |
| disulfoton (sum) (0.01) | metosulam (0.01) | triclopyr (0.02) |
| dithiocarbamates (0.05) | metoxuron (0.01) | tricyclazole (0.01) |
| diuron (0.01) | metrafenone (0.01) | trifloxystrobin (0.01) |
| dodine (0.02) | metribuzin (0.02) | triflumizole (0.01) |
| emamectin benzoate (0.01) | metsulfuron-methyl (0.01) | triflumuron (0.01) |
| endosulfan (sum) (0.01) | mevinphos (0.01) | trifluralin (0.01) |
| endrin (0.02) | molinate (0.01) | triforine (0.01) |
| EPN (0.01) | monocrotophos (0.01) | triconazole (0.01) |
| epoxiconazole (0.01) | monolinuron (0.01) | vinclozolin (sum) (0.01) |
| EPTC (0.01) | Monuron (0.01) | zoxamide (0.01) |
| ethephon (0.05) | | |

Appendix D: Additional Action Taken

Action taken by HSE

HSE wrote to:

- the suppliers of all samples containing residues above the MRL
- the authorities of the exporting countries of all samples containing residues above the MRL
- The suppliers of UK samples that contained residues that were not approved for that crop.
- the Organics branch of Defra about samples that were labelled as organic and contained residues of pesticides not approved for organic production
- The suppliers and certification organisation of all organic samples containing residues of pesticides not approved for organic production.

Recipients of the letters are given 4 weeks to provide a statement for inclusion in the report. The Expert Committee on Pesticide Residues in Food reviews any replies received.

Sample number 0767/2016: Prepared fresh fruit with a residue of chlorate above the MRL Response from Asda

Thank you for making us aware of the detection of Chlorate above the current MRL in Asda Melon Slices. The growers' application records did not indicate the use of Chlorate-related products within the production of their melons.

The UK manufacturer of the melon slices is working collaboratively with the Chilled Foods Association on the EU review of chlorates. Also, they are reviewing chlorine alternatives within their production, but mindful that their current washing process is effective at producing a food safe product.

I would like to emphasise that ASDA is committed to selling produce that has been produced in line with good manufacturing and good hygiene practices and where appropriate, pesticide legislation.

Sample number 0605/2016: Cheese with a residue of BAC above the MRL Response from The Co-operative Group

The Co-operative Group takes all instances of non-compliance with EU MRLs very seriously. The supplier of the goat's cheese had implemented a system that made use of BAC, as an approved disinfectant, whilst ensuring that there was no contact with the food, backed up by residues monitoring. The process is now under review and corrective actions will be implemented.

Appendix E: Pesticides analysed as multi-component analytes and their reporting limits

Why some results cover more than one substance

Both the legal controls and our analytical tests are aimed at checking food for the presence of residues of specific pesticides. Residues are the chemical traces left behind after pesticides are used. In most cases the residue of a pesticide is measured by first identifying the pesticide and then measuring the quantity of that pesticide in the food itself. But for some pesticides the residue remaining in the food is known to be chemically different from the original pesticide and so the laboratory needs to look for more than one component. There are various reasons why this happens, for example:

- the animal or plant can change the pesticide into related chemicals
- the pesticide can change in the environment into related chemicals
- some pesticides are mixtures of chemicals, so the relevant components of the mixture need to be checked for
- in the laboratory sample preparation and/or analysis may change pesticides into related chemicals
- related chemicals may be pesticides in their own right

The MRL setting process takes account of all these issues. The EU may set a complex residue definition to ensure that the identity and quantity of the residue found is representative of the pesticide present. A complex residue definition may be set where it is necessary for safety reasons or to be able to accurately identify the pesticide residue present in the food. This definition usually includes the actual pesticide, plus other related chemicals. These residues are usually reported together as a “sum”. Sometimes different foods need different definitions because different pesticide residues are known to occur in that food. For instance, plants and animals may metabolise a pesticide differently, which forms different residues.

The full definitions of pesticides that we have found in our surveys are described in the table below. If you would like more detail about a particular residue definition, please get in touch. You can email us at prif@hse.gov.uk and other contact details are on the back cover.

Where the detailed individual analysis results tell us something useful, we mention that in our conclusions.

How we calculate sums

Unless the definition says otherwise, the summed result is a simple addition. For individual components that are not detected that result is treated as a zero.

Where a residue definition says “expressed as”, that means that the individual component results are adjusted by molecular weight before being added together. The residue definition is set this way so that the final calculated result for the whole definition is an expression of the level of the most toxic component, and so that value can be used directly in consumer risk assessment without further adjustment.

The EU Reference Laboratories for pesticide residues have an e-learning package aimed at analytical chemists on this very technical subject at <http://www.eupt.es/e-learning/>.

Complex residue definitions used in our reports

There are a large number of pesticides used and types of food in the world. So other complex residue definitions may apply to food/pesticide combinations not yet considered by PRiF. You can look up all the EU MRL definitions for pesticide residues at the European Commission's pesticide database at http://ec.europa.eu/food/plant/pesticides/pesticides_database/index_en.htm

| Short name we use in our reports | Legal residue definition – These definitions apply to all foods unless otherwise stated |
|--|---|
| 2,4-D (sum) | 2,4-D (sum of 2,4-D and its esters expressed as 2,4-D) |
| abamectin (sum) | Abamectin (sum of Avermectin B1a, AvermectinB1b and delta-8,9 isomer of Avermectin B1a) |
| aldicarb (sum) | Aldicarb (sum of Aldicarb, its sulfoxide and its sulfone, expressed as Aldicarb) |
| aldrin and dieldrin | Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin), aka dieldrin (sum) |
| amitraz | Amitraz (amitraz including the metabolites containing the 2,4 - dimethylaniline moiety expressed as amitraz) |
| BAC (sum) | Benzalkonium chloride (mixture of alkylbenzyltrimethylammonium chlorides with alkyl chain lengths of C ₈ , C ₁₀ , C ₁₂ , C ₁₄ , C ₁₆ and C ₁₈) |
| benthiavalicarb (sum) | Benthiavalicarb (Benthiavalicarb-isopropyl (KIF-230 R-L) and its enantiomer (KIF-230 S-D) and diastereomers (KIF-230 R-L and KIF-230 S-D)) |
| bixan (animal products) | Sum of bixafen and desmethyl bixafen expressed as bixafen This definition applies to animal products only |
| captan and folpet | Sum of captan and folpet aka captan/folpet This definition applies only to pome fruit (fruits such as apples and pears), strawberries, raspberries, currants, tomatoes and beans. For all other foods there are separate MRLs for captan only and for folpet only. |
| carbendazim (animal products) | Carbendazim and thiophanate-methyl, expressed as carbendazim |
| Carbendazim (sum) | Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim) |
| carbofuran (sum) | Carbofuran (sum of carbofuran and 3-hydroxy-carbofuran expressed as carbofuran) |
| chlordane (animal products) | Chlordane (sum of cis- and trans-isomers and oxychlordane expressed as chlordane) This definition applies to animal products only |
| chlordane (sum) | Chlordane (sum of cis- and trans- isomers) This definition applies to all foods except animal products |
| chlorpropham (potatoes) | Chlorpropham only This definition applies only to potatoes |
| chlorpropham (sum for animal products) | Chlorpropham and 4-hydroxychlorpropham-O-sulphonic acid (4-HSA), expressed as chlorpropham This definition applies only to animal products |
| chlorpropham (sum) | Chlorpropham (Chlorpropham and 3-chloroaniline, expressed as Chlorpropham) This definition applies to all foods except potatoes and animal products |

| Short name we use in our reports | Legal residue definition – These definitions apply to all foods unless otherwise stated |
|---|--|
| DDAC (sum) | Didecyldimethylammonium chloride (mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C ₈ , C ₁₀ and C ₁₂) |
| DDT (sum) | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) |
| dichlorprop | Sum of Dichlorprop, including dichlorprop-p and its conjugates, expressed as dichlorprop |
| dicofol (sum) | Dicofol (sum of p, p' and o,p' isomers) |
| dimethenamid | Dimethenamid-p (Dimethenamid-p including other mixtures of constituent isomers (sum of isomers)) |
| dimethoate (sum) | Dimethoate (sum of dimethoate and omethoate expressed as dimethoate) |
| disulfoton (sum) | Disulfoton (sum of disulfoton, disulfoton sulfoxide and disulfoton sulfone expressed as disulfoton) |
| dithiocarbamates | Dithiocarbamates are a group of pesticides that are chemically similar. Testing for them individually in routine analysis is not possible, so MRLs are set for a test for the group. |
| endosulfan (sum) | Endosulfan (sum of alpha- and beta-isomers and endosulfan-sulphate expressed as endosulfan) |
| fenamiphos (sum) | Fenamiphos (sum of fenamiphos and its sulphoxide and sulphone expressed as fenamiphos) |
| fenchlorphos (sum) | Fenchlorphos (sum of fenchlorphos and fenchlorphos oxon expressed as fenchlorphos) |
| fensulfothion (sum) | Fensulfothion (sum of fensulfothion, its oxygen analogue and their sulfones, expressed as fensulfothion). |
| fenthion (sum) | Fenthion (fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent) |
| fenvalerate & esfenvalerate (all isomers) | Fenvalerate (any ratio of constituent isomers (RR, SS, RS & SR) including esfenvalerate) |
| fipronil (infant food) | Sum of fipronil and fipronil-desulfinyl, expressed as fipronil This definition applies to foods for babies only Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil) |
| fipronil (sum) | This definition applies to all foods except foods for babies Fonicamid (sum of fonicamid, TNFG and TNFA) |
| fonicamid (sum) | This definition applies to all food except animal products |
| fluazifop-p-butyl (sum) | Fluazifop-P-butyl (fluazifop acid (free and conjugate)) |
| haloxyfop (sum) | Haloxifop including haloxyfop-R (Haloxifop-R methyl ester, haloxyfop-R and conjugates of haloxyfop-R expressed as haloxyfop-R) Sum of heptachlor and trans heptachlor epoxide |
| Heptachlor (infant food) | This definition applies to foods for babies only Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor) |
| Heptachlor (sum) | This definition applies to all foods except infant foods |

| Short name we use in our reports | Legal residue definition – These definitions apply to all foods unless otherwise stated |
|---|---|
| | Hexachlorocyclohexane (HCH), sum of isomers, except the gamma isomer |
| hexachlorocyclohexane (sum) | This definition applies to all foods except animal products (For animal products the alpha and beta isomers have separate MRIs) |
| malathion | Malathion (sum of malathion and malaoxon expressed as malathion) |
| MCPA (animal products) | [Residue definition, animal products] MCPA, MCPB and MCPA thioethyl expressed as MCPA |
| | This definition applies to animal products only |
| MCPA (sum) | MCPA and MCPB (MCPA, MCPB including their salts, esters and conjugates expressed as MCPA) |
| | This definition applies to all foods except animal products |
| mepanipyrim (sum) | Mepanipyrim and its metabolite (2-anilino-4-(2-hydroxypropyl)-6-methylpyrimidine) expressed as mepanipyrim |
| methiocarb (sum) | Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb) |
| methomyl (sum) | Sum of methomyl and thiodicarb expressed as methomyl |
| oxydemeton-methyl (sum) | Oxydemeton-methyl (sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl) |
| parathion-methyl (sum) | Parathion-methyl (sum of Parathion-methyl and paraoxon-methyl expressed as Parathion-methyl) |
| Permethrin | Permethrin (sum of isomers) |
| phorate (sum) | Phorate (sum of phorate, its oxygen analogue and their sulfones expressed as phorate) |
| | Phosmet (phosmet and phosmet oxon expressed as phosmet) |
| phosmet (sum) | This definition applies to all foods except animal products |
| pirimicarb (sum) | Pirimicarb (sum of Pirimicarb and Desmethyl pirimicarb expressed as Pirimicarb) |
| | Prothioconazole (sum of prothioconazole-desthio and its glucuronide conjugate, expressed as prothioconazoledesthio) |
| Prothioconazole (sum) | This definition applies to animal products only |
| | Sum of PTU and propineb |
| PTU & propineb | This definition applies to food for babies only |
| quintozene (sum) | Quintozene (sum of quintozene and pentachloro-aniline expressed as quintozene) |
| Prochloraz (sum) | Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz) |
| | Terbufos (sum of terbufos, its sulfoxide and sulfone) |
| Terbufos (sum) | This definition applies only to foods for babies |
| | Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam) |
| thiametoxam (sum) | There are <u>also</u> separate clothianidin MRLs |
| tolyfluanid (sum) | Tolyfluanid (Sum of tolyfluanid and dimethylaminosulfotoluidide expressed as tolyfluanid) |

| Short name we use in our reports | Legal residue definition – These definitions apply to all foods unless otherwise stated |
|---|---|
| triadimefon & triadimenol | Triadimefon and triademenol |
| vinclozolin (animal products) | Vinclozolin, iprodione, procymidone, sum of compounds and all metabolites containing the 3,5-dichloroaniline moiety expressed as 3,5-dichloroaniline This definition applies to animal products only |
| vinclozolin (sum) | Vinclozolin (sum of vinclozolin and all metabolites containing the 3,5-dichloroaniline moiety, expressed as vinclozolin) This definition applies to all foods except animal products |

Glossary

This is a 'standard' glossary which defines the key terms used in the PRiF reports. Not all the terms listed here are used in this particular report.

Acceptable Daily Intake (ADI): This is the amount of a chemical which can be consumed every day for a lifetime in the practical certainty, on the basis of all known facts, that no harm will result. It is expressed in milligrams of the chemical per kilogram of body weight of the consumer. The starting point for the derivation of the ADI is usually the 'no observed adverse effect level' (NOAEL) that has been observed in animal studies for toxicity. This is then divided by an uncertainty factor (most often 100) to allow for the possibility that animals may be less sensitive than humans and also to account for possible variation in sensitivity between individuals. The studies from which NOAELs and hence ADIs are derived take into account any impurities in the pesticide active substance as manufactured, and also any toxic breakdown products of the pesticide.

Acute Reference Dose (ARfD): The definition of the ARfD is similar to that of the ADI, but it relates to the amount of a chemical that can be taken in at one meal or on one day without appreciable health risk to the consumer. It is normally derived by applying an appropriate uncertainty factor to the lowest NOAEL in studies that assess acute toxicity or developmental toxicity.

As a matter of policy the EU does not use NOAELs from tests that involve deliberate administration of pesticides to humans to determine ADIs and ARfDs. However, where such data have been ethically and scientifically derived some authorities, e.g. the World Health Organization, do consider such data. Where human data are used there is usually less uncertainty in the resulting reference value compared to extrapolating from animal tests to humans, and a lower uncertainty factor (most often 10) is used to account for the variation in sensitivity between individuals.

The initial risk assessments in PRiF reports use the agreed EU reference values. However, where intakes are above the EU value and a reference value based on acceptable human data is available a refined assessment, which is a more appropriate indicator of the risk, is also reported.

Analyte: This is the name for the substance that the PRiF surveys look for and measure if present; it could be a pesticide itself or a product from a pesticide when it is degraded, or metabolised.

COLEACP (Europe-Africa-Caribbean-Pacific Liaison Committee): It aims to promote the competitive export of fresh fruit, vegetables, flowers and ornamental plants from the ACP. Its specialised information and advisory services are open to all ACP companies in the horticultural export sector and are financed by the European Commission. It has two overriding objectives to enable ACP companies to comply with European food safety and traceability requirements and to consolidate the position of small-scale producers in the ACP horticultural export sector.

Cholinergic: In relation to the animal nervous system, processes and structures are cholinergic if they release or use acetylcholine. Acetylcholine is a neurotransmitter, a chemical that carries signals through the nervous system.

Cryogenic Milling: Processing of commodities at very low temperatures can be achieved by milling/grinding pre-frozen samples in the presence of dry ice, a procedure known as 'cryogenic milling'.

Good Agricultural Practice in the Use of Pesticides (GAP): The nationally authorised safe uses of pesticides under conditions necessary for effective and reliable pest control (the way products should be used according to the statutory conditions of approval which are stated on the label). GAP encompasses a range of pesticide applications up to the highest authorised rates of use, applied in a manner which leaves a residue which is the smallest practicable. Authorised safe uses are determined at the national level and include nationally registered recommended uses, which take into account public and occupational health and environmental safety considerations. Actual conditions include any stage in the production, storage, transport, distribution and processing of food commodities and animal feed.

High-level Consumer: A term used in UK risk assessment calculations to describe the amount of food consumed by a person. In line with internationally agreed approaches, the PRiF uses the 97.5th percentile value, which is generally about three times the average amount consumed. This takes account of different eating patterns that may occur throughout the population.

Human Data: See under Acute Reference Dose

Import Tolerance: an MRL set for imported products where the use of the active substance in a plant protection product on a commodity is not authorised in the European Community (EC) or an existing EC MRL is not sufficient to meet the needs of international trade. All import tolerances are assessed for consumer safety.

Imported: The tables in the reports record whether the sample was of UK origin, or imported. This can mean different things depending on the commodity. See also 'Origin'. The PRiF report the country from where the produce has been imported only if this is clear from the packaging or labelling.

JMPR: Joint FAO/WHO Meeting on Pesticide Residues, which conducts scientific evaluations of pesticide residues in food.

Limit of Quantification (LOQ): The limit of quantification is the lowest concentration of a pesticide residue or contaminant that can be routinely identified and quantitatively measured in a specified food, agricultural commodity or animal feed with an acceptable degree of certainty by the method of analysis.

Maximum Residue Level (MRL): The maximum concentration of a pesticide residue (expressed as mg/kg) legally permitted in or on food commodities and animal feeds. MRLs are based on good agricultural practice data and residues in foods derived from commodities that comply with the respective MRLs are intended to be toxicologically acceptable.

MRLs are intended primarily as a check that GAP is being followed and to assist international trade in produce treated with pesticides. **MRLs are not in themselves 'safety limits'**, and exposure to residues in excess of an MRL does not automatically imply a hazard to health.

The MRLs applicable in the UK are now largely set under EC legislation.

Further information on MRLs can be found at:

www.pesticides.gov.uk/guidance/industries/pesticides/topics/food-safety/maximum-residue-levels

Maximum Residue Limits (CODEX or CAC): In cases where there is no UK or EC MRLs, the acceptability of residues may be judged against Codex Maximum Residue Limits. Although not embodied in UK statute, Codex limits are taken as presumptive standards. These limits give an indication of the likely highest residue that should occur in edible crops. These are based on worldwide uses and the residues trials data to support those uses, at the time of evaluation (date of setting the limits is specified and thus the Maximum Residue Limit applicable up to that year, but will not take into account subsequent approved uses.)

There are occasions where the MRL that has been set by Codex may not reflect current UK Good Agricultural Practice (e.g. the Codex MRLs for dithiocarbamates and propamocarb on lettuce). In such circumstances it is possible to exceed the Codex MRL through a UK approved use. This factor needs to be taken into account when assessing results.

Maximum Residue Levels set at the LOD (LOD MRL): For some pesticides and commodities, insufficient trials data are available on which to set a maximum residue level or there may be no use of the pesticide on that crop. In these cases, the MRL may be set at a default level, i.e. at the limit of determination (LOD) where analytical methods can reasonably detect the presence of the pesticide. **These MRLs are not based on Good Agricultural Practice (GAP).**

MRL exceedances: When a residue is found at a level higher than that set for the MRL.

MRL Exceedances and Relationship with the Acceptable Daily Intake (ADI): Before permitting any use of a pesticide, a detailed assessment is made to ensure that residues in foods derived from commodities comply with MRLs and will not give rise to unacceptable risks to consumers. MRLs do take account of consumer safety aspects and, in effect, are set at levels below safety limits. However, MRLs must not be confused with safety limits, which are expressed in terms of the acceptable daily intake (ADI) of a particular pesticide residue from all sources. The ADI (expressed as mg/kg bw/day) is the amount of chemical that can be consumed every day of an individual's entire lifetime in the practical certainty, on the basis of all known facts, that no harm will result. See ADI for further information.

Whenever unexpectedly high or unusual residues occur during monitoring, the risk to consumers, from exposure to residues at the highest levels found, is assessed by comparison of predicted intakes with the ADI or ARfD as appropriate.

No MRL: For certain pesticides an MRL may not have been set.

UKT MRL: For certain pesticide a temporary national MRL has been set. UKT MRLs are worked out by HSE. The level indicates the amount of residue expected when the pesticide is applied in accordance with good agricultural practice (GAP). The UK has a number of UKT MRLs, these take precedence over provisional EC levels.

Extraneous Residue Limit (ERL): An ERL refers to a pesticide residue or a contaminant arising from environmental sources (including former agricultural uses) other than the use of a pesticide or a contaminant substance directly or indirectly on the commodity. It is the maximum concentration of a pesticide residue or contaminant that is recommended by the Codex Alimentarius Commission (CAC) to be legally permitted or recognised as acceptable in or on a food, agricultural commodity or animal feed.

Metabolite: A degradation or conversion product from a pesticide when it is metabolised.

Multiple Residues: In this report this term is used to describe when more than one pesticide is found in an individual food sample. It may have arisen because the crop was treated at different times with pesticides applied singularly, or when pesticides are applied as mixtures (several pesticides mixed in the spray tank at the same time) or the marketed pesticide product contains more than one pesticide or any combination of these three situations. Mixtures may be used in response to specific pest pressures and also as part of strategies to minimise pesticide resistance building up on pest populations.

NEDI: National Estimate of Daily Intake. An estimate of intake of pesticide in the diet over the long-term to compare to the ADI. The NEDI is based on median or mean residue levels and a high level consumption (97.5th percentile value) for the daily amounts of the food item consumed over the long term. For further details on the calculation of NEDIs please refer to section 3 of the data requirements handbook: www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/pesticides-registration/applicant-guide/the-applicant-guide-contents.

NESTI: National Estimate of Short Term Intake. An estimate of peak intake of pesticide in the diet to compare to the ARfD. The NESTI is based on the highest residue found multiplied by a variability factor (see glossary description) and a high level consumption (97.5th percentile value) for the amount of the food item consumed over a single day. For further details on the calculation of NESTIs please refer to section 3 of the data requirements handbook: www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/pesticides-registration/applicant-guide/the-applicant-guide-contents.

Neurotoxicity: Neurotoxicity is the effect of substances (called neurotoxins) which alter the normal working of an animal's nervous systems and/or damage the nervous tissue.

No Observed Adverse Effect Level (NOAEL): The greatest concentration or amount of a substance, found by experiment or observation, which causes no detectable adverse alteration of morphology, functional capacity, growth, development or life span of the target organism under defined conditions of exposure.

Origin: The brand name annex reports the origins of the samples tested. This can mean different things depending on the commodity. For example, butter is often labelled as 'UK origin'; however, the majority of it comes in bulk from New Zealand and is split into smaller blocks and packaged in the UK. Lettuce is a fresh produce and 'UK origin' usually means that it has been grown and packaged in the UK. Processed commodities such as cereal bars often contain multiple raw ingredients, each of which may come from a different source/origin. Therefore, the origin of the produce usually reflects the place where it was manufactured. The PRiF report the origin as stated on the packaging or labelling of the commodity concerned, unless other more accurate information is available to indicate that the origin is from elsewhere. Some products are listed as 'unknown origin' because the labelling does not give this information.

Parent: The chemical form of a pesticide as applied to plants, as opposed to metabolites and breakdown products.

Percentile: A percentile is a value that divides a sample of measurements at a specific point when they are listed in ascending order of magnitude. For example, the 97.5th percentile from a food consumption survey is a value that is equal to or more than 97.5% of the measurements and equal to or less than 2.5% of the measurements. So in a sample of 40 daily food consumption values, the 97.5th percentile is equal to or more than 39 of the measurements. Such high percentile estimates of food consumption are used in risk assessments as they are more protective than using average consumption levels.

Permitted Level (PL): The permitted levels (expressed as mg/kg), in specific commodities, of some substances which can be classified as pesticides but are controlled under the Miscellaneous Food Additives Regulations 1995 (S.I. 1995 No. 3187).

Pesticide: A pesticide is any substance, preparation or organism prepared or used for destroying any pest. The majority of pesticides sought by the PRiF in its monitoring are those used to control pests in agricultural crops, although non-agricultural products may be included where there is a specific reason for doing so, e.g. where there are implications in terms of possible intakes of residues.

Probabilistic Modelling: The usual estimates of consumer exposure use single high values for both consumption amounts and residue levels. Whilst these are based on realistic UK dietary survey data and residue levels, they tend to overestimate most representative intakes. This is because they do not take into account actual variations in both amounts consumed and residue levels. Probabilistic modelling is a technique that considers all the possible different combinations of consumption and residue levels. This provides information on the probability of particular intakes occurring.

Rapid Alert System for Food and Feed (RASFF): The European Commission operates an EU rapid alert system for food, which was set up in 1992. This provides the competent authorities in the Member States of the European Union with the means of notifying cases where high residues of pesticides have been found in imported samples. Since its introduction this system has proved a successful method for disseminating information between Member States allowing swift action where necessary. HSE notify the Food Standards Agency of any residues where the predicted intakes are above the ARfD. RASFFs are only raised when a potential consumer risk has been identified. In general, for intakes exceeding the ARfD by more than 1.1 times, the FSA will raise a RASFF. If a significant consumer health concern has been identified, then the product will be withdrawn/recalled and the FSA will also issue a food alert.

Relationship between GAP and MRLs: The MRL can be defined as the maximum concentration of a pesticide residue (expressed as mg/kg) likely to occur in or on food commodities and animal feeds, after the use of the pesticide according to the GAP.

Reporting Limit: The reporting limit is the lowest calibrated level employed during analysis to detect residues. The reporting limit may vary slightly from laboratory to laboratory depending on the equipment available and operating procedures used.

'None were detected above the Set RL': This term is used in the Brand Name Annex, where no residues were found above their reporting limit.

Residue: Residues may be present in vegetable and animal products following the application(s) of a pesticide(s). They may not only include the pesticide that was applied but other degradation or reaction products and metabolites that may be of toxicological significance. The levels or amounts of residues present are expressed in milligrams of the chemical in a kilogram of crop/food/commodity (mg/kg), or parts per million.

Risk Assessment: A risk assessment is carried out when residues are found in foods to determine whether, at the levels found, they present a concern for consumer health or not. Consumer risk assessments are routinely conducted as part of the approval process for pesticides and are based on residue trials. Approval of a pesticide is only recommended when the consumer risk is acceptable.

Safety Factor: Values used in extrapolation from experimental studies in animals (usually 100) or humans (usually 10) to the population: for PRiF assessments this represents a value by which the NOAEL is divided to derive an ADI or ARfD. The value depends on the nature of the effect, the dose-response relationship, and the quality of the toxicological information available. The use of such a factor accounts for possible differences in susceptibility between the animal species tested and humans, and for variation between different individuals in the population. The terms 'uncertainty factor' and 'assessment factor' are also sometimes used for this factor; the PRiF will use 'safety factor'.

Sample: The nature of all samples is as designated in the EC's 'sampling' Directive – 2002/63/EC. Examples are: apple – at least 10 apples weighing at least 1 kg; grapes – at least 5 bunches, weighing at least 2 kg.

Specific Off-Label Approval (SOLA): For many reasons, label recommendations of approved pesticides do not cover the control of every problem which may arise. This is particularly true for crops that are grown on a comparatively small scale in the UK as well as for sporadic pests and diseases. It is for this reason that the extrapolations presented in the Long Term Arrangements for Extension of Use have been developed. If these do not address particular needs growers or their representatives may apply to HSE for a specific off-label approval (SOLA).

Technical Exceedances: When an MRL has been set at the LOD because there have been no data to support a higher level. In the context of this report, 'technical exceedances' always relate to produce from third countries.

Variability Factor: A value that describes the variation in residue levels between the highest unit level and the average level in samples made up of many units. Internationally this is agreed to be the 97.5th percentile unit residue level divided by the average of the sum. The variability factor multiplied by the measured residue level from a composite sample (i.e. a sample made up by mixing several units before analysis) gives an estimate of the likely higher residue levels that may have occurred in individual units. These estimated higher levels are used in short-term risk assessments involving fruit and vegetables where consumers eat only a portion of a single item, e.g. melon, or a small number of units e.g. apples and potatoes.

Ware: Ware potatoes, sometimes referred to as main crop potatoes, are harvested between August and November, and are available throughout the period August to June because they are stored under controlled temperature after October.

Follow-up from Previous Reports

Quarter 1 2016

Lettuce

Cypermethrin: Sample number 0150/2016

We passed details of a sample of lettuce from UK that contained cypermethrin to HSE. HSE's enquiries are not yet complete; an update will appear in a future report.

Potatoes

MCPS, MSPB and MCPA thioethyl expressed as MCPA: Sample number 4308/2016

We passed details of a sample of potatoes from UK that contained MCPA to HSE. HSE's enquiries are not yet complete; an update will appear in a future report.

Quarter 2 2016

Strawberries

Fluopyram: Sample number 2520/2016

We passed details of a sample of strawberry from UK that contained fluopyram to HSE. HSE's enquiries are not yet complete; an update will appear in a future report.

Quarter 4 of 2016 will look at residues in:

| | | |
|--------------------------------|------------------|-----------------------|
| Apples | Apricots | Beans with Pods |
| Bread | Cabbage | Cashew Nuts |
| Cheese (buffalo, goats & ewes) | Cooked Meat | Fish (sea) |
| Grapefruit | Grapes | Leeks |
| Lettuce | Milk | Non-dairy milk |
| Okra | Pasta | Peaches & Nectarines |
| Pears | Peppers | Popcorn |
| Pork | Pork (processed) | Potatoes |
| Prepared Fresh Fruit | Rye | Speciality Vegetables |
| Strawberries | Tomatoes | Tomatoes (tinned) |
| Wine | | |

For further details on information contained in this report, previous surveys or information concerning pesticide residues in food

Please contact:

Expert Committee on Pesticide Residues in Food
HSE's Chemicals Regulation Division
Mallard House
Kings Pool
Peasholme Green
York YO1 7PX

prif@hse.gov.uk

Or visit our website at:

<https://www.gov.uk/government/groups/expert-committee-on-pesticide-residues-in-food-prif>