Department for Environment, Food and Rural Affairs

The Expert Committee on Pesticide Residues in Food (PRiF)

School Fruit and Vegetable Scheme Report on Pesticide Residues Monitoring: Autumn Term 2016

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Contents

Summary Findings

During the 2016 Autumn term 59 samples of fruit and vegetables were analysed as part of the Department of Health's School Fruit and Vegetable Scheme testing programme. We surveyed 10 apple samples, 17 banana samples, 11 carrot samples, 13 pear samples, 4 raisin samples, 3 soft citrus samples and 1 sugarsnap pea sample.

The samples were collected between September and December 2016. The majority of samples either contained no detectable residues of any of the pesticides we were looking for or contained residues below the maximum residue level (MRL) for those pesticides. 10 samples did not contain any detectable pesticide residues. 48 samples contained residues at or below the relevant MRLs. 1 sample contained residues above the relevant MRLs. 44 samples contained residues of more than one pesticide. We did not find residues of pesticides, not approved for use in the UK, in any of the UK samples.

The Chemicals Regulation Division of the Health and Safety Executive (HSE) carried out a risk assessment screen for each residue and food combination to identify residue levels that would lead to intakes above the relevant reference doses. They then produced detailed assessments where the screen showed the actual residue level found may lead to an intake above the reference dose. We have looked carefully at all these findings including the risk assessments provided. In all cases we think the presence of the residues found would be unlikely to have had any effect on the health of anyone who ate the food.

PRiF have considered these results and have had an opportunity to comment on the findings and HSE risk assessments. None of the residues found was likely to result in any adverse health effects for school children.

Information on the pesticide residues found in produce from various points across the food supply chain can be found in the PRiF Quarterly and Annual Reports.

We would like to thank all those individuals and organisations who helped to put this report together. These include the PRiF Secretariat and scientific staff (both based at HSE), the suppliers who provided the samples, and the laboratory staff who undertook the analysis.

Dr Paul Brantom
Chairman Committee on Pesticide Residues in Food

Background to the School Fruit and Vegetable Scheme by the Deptarment of Health

The School Fruit & Vegetable Scheme entitles all four to six year old children in fully state funded infant, primary and special schools in England to a piece of fruit or vegetable each school day. The scheme is led by the Department of Health and is managed by NHS Supply Chain.

About NHS Supply Chain's relationship with suppliers

Procurement
The supply chain for fruit and vegetables supplied to the School Fruit and Vegetable Scheme (SF&VS) is managed by NHS Supply Chain on behalf of the Department of Health. Contracts are let in accordance with EU Public Procurement Directives. The contracts are for specified time periods, and for named commodities such as apples, pears, soft citrus, bananas, strawberries, cocktail tomatoes and carrots.

Supply Calendar
To ensure the quality remains high contracts have been awarded to a number of UK contractors from producer organisations to major producers and growers. Contractors will source products depending on seasonal availability, throughout the world. The supply calendar is provided to tenderers so that prospective contractors can quote based on realistic volumes. The calendar is seasonally based on the UK climate.

Specifications
Products are purchased from producers and importers who source in accordance with a strict specification designed to ensure safe and nutritious food is provided to schools. Producers work to Good Agriculture Practice standards. These standards incorporate Integrated Pest Management and Integrated Crop Management. The Schemes suppliers follow policy in relation to MRLs and any associated EU amendments. NHS Supply Chain request and receive written submissions from all the Scheme's suppliers to this effect. The specifications for supply to the SF&VS have been drawn up with advice from the Food Standards Agency and Department of Environment, Food and Rural Affairs, HSE, Horticultural Marketing Inspectorate, National Farmers Union and the Fresh Produce Consortium.

Monitoring by the suppliers
Separately to the results in this report, as a condition of their contracts all suppliers agree to undertake a monitoring programme to ensure that any pesticide residues in the produce supplied are below the Maximum Residue Level (MRL). Suppliers must be able to demonstrate 'due diligence' with regard to potential fruit or vegetable contamination with pesticide residues, for example, by complying with codes of practice such as the Fresh Produce Consortium's current Control of Pesticides Code of Practice. Suppliers must liaise closely with growers/packers and undertake appropriate risk-based pesticide residue testing. The minimum requirement for testing is one test per source (packhouse) per season. The laboratories used to conduct the test must be UKAS accredited and participate in the FAPAS proficiency scheme specific to fruit and vegetables.

About Department of Health's checks for pesticide residues

One of the key measures of quality control for produce supplied under the SF&VS relates to pesticide residues. In common with other produce supplied to the general public, these fruit and vegetables must comply with 'permitted levels' called Maximum Residue Levels (MRLs). MRLs are set for hundreds of different pesticides, although at most only a handful of these will be used on a particular fruit or vegetable. They are specified as a numeric value - typically in the range of 0.01 to 5 milligrams of pesticide per kilogram of fruit or vegetable.

Department of Health work with HSE to check that SF&VS produce complies with MRLs. Samples of scheme fruit and vegetables are obtained from contracted supply companies and subjected to a detailed scientific analysis. The sampling programme ensures that all suppliers contracted to supply fruit and vegetables under the Scheme for a particular term are targeted; samples are collected in approximate proportion to the number of designated 'consumption days'.

Each sample is tested for over 370 pesticides. Where possible the range of pesticide sought is the same as that being sought as part of the national monitoring programme overseen by the Expert Committee on Pesticide Residues in Food (PRiF). This list is updated each calendar year which means that direct comparisons with previous surveys is not possible for any new pesticides which have been added to the list.

The results for each sample are carefully scrutinised to determine whether any residues comply with MRLs and whether they would be likely to affect the health of consumers including schoolchildren.

MRLs are set to include residues found in the whole fruit and vegetable (skin and flesh). The samples, even of fruit or vegetables that would generally be peeled before consumption, are not peeled before analysis. The results reported are for the whole fruit and vegetable including the skin.

If a product is found to have exceeded the legal limits HSE will assess the risk to consumers from eating this produce. The result is reported immediately to NHS Supply Chain. They will notify the producer and the grower and ask for a full explanation of why the limit has been exceeded. NHS Supply Chain will assess the response from the producer, and with advice from HSE, will determine whether any future products from this grower should be sourced for the SF&VS.

Department of Health
February 2015

Part 1: Introduction

Pesticides and Food Safety
Food safety is important. Modern food production processes have given us plentiful supplies of a wide range of good quality and reasonably priced produce.

One of the ways to deliver plentiful supplies of reasonably priced, safe, nutritious, quality produce is to carefully control the environment in which foodstuffs are produced. In the food industry of today the production environment can be controlled from the preparation of seeds used for crops, through growth and harvesting to transport, preparation, packaging and retail of the produce.

One aspect of pest, disease or weed control can be the use of pesticides. They help farmers and growers improve the production of foodstuffs 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 enable storage of crops after they have been harvested.

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 crop 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.

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. It is known that the use of pesticides on crops may lead to traces (residues) of these chemicals in food and they are expected to be found in the monitoring programme.

The Government authority responsible for checking pesticides in foodstuffs is the Health and Safety Executive. The Expert Committee on Pesticide Residues in Food oversees and provides an independent check on this work. This work was done previously by the Pesticide Residues Committee.

The Defra Expert Committee on Pesticide Residues in Food
The Expert Committee on Pesticide Residues in Food (PRiF) was established in 2011. Members of the Committee 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.

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

Information on the membership of the PRIF is also available on the PRIF's website.

Since 1 January 2005 the Health and Safety Executive (HSE) has been contracted by the Department of Health to undertake pesticide residue monitoring of produce supplied under the School Fruit and Vegetable Scheme (SF&VS). In accordance with the supply calendar HSE arrange for suppliers to submit samples on a regular basis, making sure that each supplier is tested at least once per term. HSE has requested that PRiF consider the results and examine the risk assessments from this monitoring.

Part 2: Assessing the results

The sampling programme is designed 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.

Once the analytical results are completed, the findings are assessed to determine if the residues found pose a risk to consumers.

When assessments are carried out

Single Residues

- All results are screened by HSE to check for intakes above the Acute Reference Dose (ARfD)
- Where intakes above the ARfD are identified, we consider a detailed risk assessment prepared by HSE (at Appendix D of this report).
- Our observations and the follow-up action taken are summarised in the section for that food.

Multiple Residues

- Risk assessments are also carried out for residues of more than one pesticide from the same category/class of particular categories of pesticides, which have a similar toxicological mode of action (such as organophosphorus/carbamate, captan/folpet, triazoles or carbendazim/thiophanate methyl), 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 found 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. NHS Supply Chain would be informed before referral.
- 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.

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 in addition to NHS Supply Chain.

Brand Name Annex

- Full brand name details for every sample included in this report are published in a brand name annex. Within this annex, samples with results of interest are highlighted.

Part 3: The Results

Apples

Full details of pesticides sought and residues detected are in Table 2 at page 14
Suppliers details are in the Brand Name Annex at page 57

Results

- 10 samples were tested for up to 371 pesticide residues

Eating

- 2 samples came from the UK
- 2 samples were imported from non-EC countries
- 6 samples imported from the EC
- 1 sample tested did not contain any detectable residues
- 9 of the samples contained residues below the relevant MRLs
- 8 samples contained residues of more than one pesticide

Conclusions

The laboratory detected 18 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.

Banana

Full details of pesticides sought and residues detected are in Table 3 at page 19
Suppliers details are in the Brand Name Annex at page 58

Results

- 17 samples were tested for up to 370 pesticide residues
- 17 samples were imported from non-EC countries
- 5 samples tested did not contain any detectable residues
- 12 of the samples contained residues below the relevant MRLs
- 10 samples contained residues of more than one pesticide

Conclusions

The results are for bananas tested whole, including the peel. MRLs for bananas are set on that basis. The risk assessment also assumed that the whole fruit, including the peel, was eaten.

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.

Carrots

Full details of pesticides sought and residues detected are in Table 4 at page 24
Suppliers details are in the Brand Name Annex at page 60

Results

- 11 samples were tested for up to 368 pesticide residues

Fresh

- 11 samples came from the UK
- 3 samples tested did not contain any detectable residues
- 8 of the samples contained residues below the relevant MRLs
- 7 samples contained residues of more than one pesticide

Conclusions

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.

Pears

Full details of pesticides sought and residues detected are in Table 5 at page 29
Risk assessments carried out by HSE are at page 54
Suppliers details are in the Brand Name Annex at page 61

Results

- 13 samples were tested for up to 372 pesticide residues
- 13 samples imported from the EC
- All samples contained residues
- 12 of the samples contained residues below the relevant MRLs
- 13 samples contained residues of more than one pesticide

Conclusions

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 Appendix D).

Raisins

Full details of pesticides sought and residues detected are in Table 6 at page 35
Suppliers details are in the Brand Name Annex at page 64

Results

- 4 samples were tested for up to 371 pesticide residues
- 4 samples were imported from non-EC countries
- 1 sample tested did not contain any detectable residues
- 3 of the samples contained residues below the relevant MRLs
- 3 samples contained residues of more than one pesticide

Conclusions

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.

Soft citrus

Full details of pesticides sought and residues detected are in Table 7 at page 40
Suppliers details are in the Brand Name Annex at page 66

Results

- 3 samples were tested for up to 369 pesticide residues

Clementine

- 3 samples imported from the EC
- All samples contained residues
- All of the samples contained residues below the relevant MRL
- 3 samples contained residues of more than one pesticide

Conclusions

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.

Sugarsnap peas

Full details of pesticides sought and residues detected are in Table 8 at page 45
Suppliers details are in the Brand Name Annex at page 67

Results

- 1 sample was tested for up to 369 pesticide residues
- 1 sample was imported from a non-EC country
- 1 sample contained a residue below the relevant MRL
- None of the samples contained residues of more than one pesticide

Conclusions

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

Appendix A: Summary of results

Table 1: Summary of Results

Commodity	Number of samples	Samples with no residues found	Samples with residues at or below MRL	Samples with residues above MRL	UK samples containing non-approved pesticide	Samples with multiple residues
Apples	10	1	9	0	0	8
Banana	17	5	12	0	0	10
Carrots	11	3	8	0	0	7
Pears	13	0	12	1	0	13
Raisins	4	1	3	0	0	3
Soft Citrus	3	0	3	0	0	3
Sugarsnap peas	1	0	1	0	0	0

N/A applies where either the commodity is not grown in the UK or no UK-grown samples were tested.

Maximum Residue Levels

Maximum Residue Levels (MRLs) reflect levels of pesticides expected in produce, which has been treated in accordance with good agricultural practice. Where pesticides do not give rise to readily detectable residues, or are not approved for use on particular commodities, MRLs are set at the lowest level which can be identified in routine laboratory analysis. Thus, they provide a mechanism for statutory controls on pesticides in produce which is put into circulation and for monitoring correct use of these chemicals.

MRLs are established by the EC Maximum Residues Regulation 396/2005/EC and are enforced in the UK under the Pesticides (Maximum Residue Levels) (England and Wales) Regulations 2008, the Pesticides (Maximum Residue Levels) (Scotland) Regulations 2008 and the Pesticides (Maximum Residue Levels) Regulations (Northern Ireland) 2008.

Appendix B: Summary of residues over the MRL and non-approved uses

Residues over the MRL

PRIF Sample ID	Commodity	Country of Origin	Pesticides detected	Residue detected (mg/kg)	MRL (mg/kg)	Residue over MRL after allowing for measurement uncertainty
4897/2016	Rocha Pears	Portugal	Carbendazim	0.3	0.2	No
			imazalil	2.4	2	No

The Health and Safety Executive have contacted the supplier of the sample with residues above the MRL. Any comments received are in Appendix E.

Measurement uncertainty

In 2009 the Pesticides Residues Committee agreed a policy of applying a default measurement uncertainty value of 50% to all results that measure above the MRL, unless there are particular safety reasons why a more accurate value should be used. If that is considered necessary we will explain why.

Using a measurement uncertainty value of 50% means the residue detected could be plus or minus 50% of the stated value. The PRiF will continue to apply this policy, so only when the lowest estimated level is above the MRL do the PRiF consider this result as an exceedance.

This uncertainty only applies to measurement of the size of residue. The identity of the pesticide detected has been confirmed.

Where the measured value does not exceed the MRL when measurement uncertainty is taken into account the value will not be highlighted as an exceedance in the Supplier Details section. The actual measured value will be used throughout the report and will be followed up with suppliers by HSE but with due reference to the implications of measurement uncertainty.

Further information about measurement uncertainty can be found on the PRiF website.

*** 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) where analytical methods can reasonably detect the presence of the pesticide. Either 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 the EU. However they may be permitted elsewhere.

UK Non-approved Uses

None.

Appendix C: Pesticides sought and found in individual commodities sampled between January and March 2016

Table 2a: Analysis of apples sampled from September - November 2016
Table 2b: Residues found in apples sampled from September - November 2016
Table 2c: Pesticides sought but not found in apples sampled from September - November 2016

Table 3a: Analysis of bananas sampled from September - December 2016
Table 3b: Residues found in bananas sampled from September – December 2016
Table 3c: Pesticides sought but not found in bananas sampled from September – December 2016

Table 4a: Analysis of carrots sampled from September - November 2016
Table 4b: Residues found in carrots sampled from September - November 2016
Table 4c: Pesticides sought but not found in carrots sampled from September - November 2016

Table 5a: Analysis of pears sampled from September - November 2016
Table 5b: Residues found in pears sampled from September - November 2016
Table 5c: Pesticides sought but not found in pears sampled from September - November 2016

Table 6a: Analysis of raisins sampled from October - November 2016
Table 6b: Residues found in raisins sampled from October - November 2016
Table 6c: Pesticides sought but not found in raisins sampled from October - November 2016

Table 7a: Analysis of soft citrus sampled in November 2016
Table 7b: Residues found in soft citrus sampled in November 2016
Table 7c: Pesticides sought but not found in soft citrus sampled in November 2016

Table 8a: Analysis of sugarsnap peas sampled in September
Table 8b: Residues found in sugarsnap peas sampled in September
Table 8c: Pesticides sought but not found in sugarsnap peas sampled in September

The quantity of produce sampled is determined by EC Commission Directive 2002/63/EC:

- A sample of apples must weigh a minimum 1.2kg and contain at least 12 apples.
- A sample of bananas must weigh a minimum 1.2kg and contain at least 12 bananas.
- A sample of carrots must weigh a minimum 1.2kg and contain at least 12 carrots.
- A sample of pears must weigh a minimum 1.2kg and contain at least 12 pears.
- A sample of raisins must weigh at least 1.2 kg.
- A sample of soft citrus must weigh a minimum 1.2kg and contain at least 12 soft citrus.
- A sample of sugar snap peas must weigh at least 1.2 kg.

All of the produce in a sample must be of the same variety and must be from the same batch of the commodity.
MRLs are set to include residues found in the whole fruit (skin and flesh). The samples are not peeled before analysis. The results reported are for the whole fruit including the skin.

Table 2a. Analysis of APPLES sampled from September to November 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
APPLES, EATING UK: 2 samples analysed		
cyprodinil	<0.02 (i.e. not found)	1
(MRL = 1.5)	0.06	1
fludioxonil	<0.01 (i.e. not found)	1
(MRL = 5)	0.03	1
indoxacarb	<0.01 (i.e. not found)	1
(MRL = 0.5)	0.02	1
methoxyfenozide	<0.01 (i.e. not found)	1
(MRL = 2)	0.02	1
myclobutanil	<0.01 (i.e. not found)	1
(MRL = 0.6)	0.03	1
APPLES, EATING Imported (Non-EC): 2 samples analysed		
chlorantraniliprole	<0.01 (i.e. not found)	1
(MRL = 0.5)	0.06	1
dithianon	<0.02 (i.e. not found)	1
(MRL = 3)	0.2	1
dithiocarbamates	<0.05 (i.e. not found)	1
(MRL = 5)	0.1	1
thiacloprid	<0.01 (i.e. not found)	0
(MRL = 0.3)	0.02, 0.03	2
APPLES, EATING Imported (EC): 6 samples analysed		
acetamiprid	<0.01 (i.e. not found)	5
(MRL = 0.8)	0.08	1
boscalid	<0.01 (i.e. not found)	2
(MRL = 2)	0.02 - 0.1	4
captan and folpet	<0.02 (i.e. not found)	2
(MRL = 3)	0.04 - 0.5	3
(MRL = 10)	0.04	1
chlorantraniliprole	<0.01 (i.e. not found)	4
(MRL = 0.5)	0.01	2
difenoconazole	<0.01 (i.e. not found)	4
(MRL = 0.8)	0.01, 0.02	2
dithianon	<0.02 (i.e. not found)	4
(MRL = 3)	0.06, 0.07	2
dodine	<0.02 (i.e. not found)	5
(MRL = 0.9)	0.09	1
flonicamid (sum)	<0.01 (i.e. not found)	5
(MRL = 0.3)	0.03	1

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
pyraclostrobin	<0.01 (i.e. not found)	2
(MRL = 0.5)	0.01 - 0.04	4
pyrimethanil	<0.01 (i.e. not found)	5
(MRL = 15)	0.05	1
thiamethoxam	<0.01 (i.e. not found)	5
(MRL = 0.2)	0.02	1

Imported (EC) samples of apples were from Belgium (4), France (1), Poland (1).
Imported (Non-EC) samples of apples were from South Africa (2).
UK samples of apples were (2).

Residues were distributed by country of origin, as follows:

acetamiprid	Poland (1)
boscalid	Belgium (4)
captan and folpet	Belgium (3), Poland (1)
chlorantraniliprole	Belgium (2), South Africa (1)
cyprodinil	UK (1)
difenoconazole	Belgium (2)
dodine	Belgium (1)
dithiocarbamates	South Africa (1)
dithianon	Belgium (2), South Africa (1)
flonicamid (sum)	Poland (1)
fludioxonil	UK (1)
indoxacarb	UK (1)
methoxyfenozide	UK (1)
myclobutanil	UK (1)
pyraclostrobin	Belgium (4)
pyrimethanil	Belgium (1)
thiacloprid	South Africa (2)
thiamethoxam	Poland (1)

Residues were found in all of the 2 UK eating samples
Residues were found in all of the 2 Imported (Non-EC) eating samples
No residues were found in 1 of the 6 Imported (EC) eating samples

Table 2 b. Residues found in APPLES sampled from September to November 2016

Residues (1-8 compounds) were found in 9 of the 10 samples as follows:

Number of residues	Sample ID	Type of APPLES	Residues found (mg/kg)																		Country of origin
			ACET	BOS	CPFOL	CTP	CYD	DIFC	DOD	DTC	DTN	FLC	FLUD	IDX	MXF	MYC	PYC	PYM	THC	THM	
(1)	4901/2016	EATING	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	UK
(2)	4860/2016	EATING	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	0.02	-	South Africa
(3)	4534/2016	EATING	-	-	-	0.06	-	-	-	-	0.2	-	-	-	-	-	-	-	0.03	-	South Africa
	4537/2016	EATING	-	0.04	0.5	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	Belgium
	4862/2016	EATING	-	0.04	0.3	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	Belgium
(4)	4895/2016	EATING	-	-	-	-	0.06	-	-	-	-	-	0.03	0.02	0.02	-	-	-	-	-	UK
	4898/2016	EATING	0.08	-	0.04	-	-	-	-	-	-	0.03	-	-	-	-	-	-	-	0.02	Poland
(5)	4867/2016	EATING	-	0.02	-	0.01	-	0.02	-	-	0.06	-	-	-	-	-	0.01	-	-	-	Belgium
(8)	4865/2016	EATING	-	0.1	0.04	0.01	-	0.01	0.09	-	0.07	-	-	-	-	-	0.04	0.05	-	-	Belgium

The abbreviations used for the pesticide names are as follows:

ACET	acetamiprid	BOS	boscalid	CPFOL	captan and folpet
CTP	chlorantraniliprole	CYD	cyprodinil	DIFC	difenoconazole
DOD	dodine	DTC	dithiocarbamates	DTN	dithianon
FLC	flonicamid (sum)	FLUD	fludioxonil	IDX	indoxacarb
MXF	methoxyfenozide	MYC	myclobutanil	PYC	pyraclostrobin
PYM	pyrimethanil	THC	thiacloprid	THM	thiamethoxam

Table 2c. Residues sought but not found in APPLES sampled from September to November 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
azoxystrobin (0.01)
BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
bifenthrin (0.01)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
buprofezin (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorbufam (0.01)
chlordane (sum) (0.01)
chlorfenapyr (0.01)
chlorfenvinphos (0.01)
chloridazon (0.01)
chlorobenzilate (0.02)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluopyram (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Heptachlor (sum) (0.01)
heptenophos (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
nitrothal-isopropyl (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)
phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)
pymetrozine (0.01)
pyrazophos (0.01)
pyrethrins (0.01)

chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)

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)
emamectin (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)
ethephon (0.05)
ethiofencarb (parent) (0.01)
ethion (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)
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)

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)
quinoxyfen (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)
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)
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 3a. Analysis of BANANA sampled from September to December 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
BANANA, Imported (Non-EC): 17 samples analysed		
azoxystrobin	<0.01 (i.e. not found)	7
(MRL = 2)	0.03 - 1.5	10
bifenthrin	<0.01 (i.e. not found)	14
(MRL = 0.1)	0.01 - 0.02	3
boscalid	<0.01 (i.e. not found)	15
(MRL = 0.6)	0.01, 0.02	2
buprofezin	<0.01 (i.e. not found)	16
(MRL = 0.5)	0.02	1
dithiocarbamates	<0.05 (i.e. not found)	16
(MRL = 2)	0.06	1
fenpropimorph	<0.01 (i.e. not found)	14
(MRL = 2)	0.01 - 0.03	3
imazalil	<0.02 (i.e. not found)	10
(MRL = 2)	0.2 - 1	7
myclobutanil	<0.01 (i.e. not found)	14
(MRL = 2)	0.03 - 0.2	3
thiabendazole	<0.02 (i.e. not found)	16
(MRL = 5)	0.2	1

Imported (Non-EC) samples of banana were from Cameroon (1), Costa Rica (3), Cote d'Ivoire (8), Dominican Republic (4), Ghana (1).

Residues were distributed by country of origin, as follows:

azoxystrobin	Cameroon (1), Costa Rica (3), Cote d'Ivoire (5), Ghana (1)
bifenthrin	Costa Rica (2), Cote d'Ivoire (1)
boscalid	Cote d'Ivoire (2)
buprofezin	Costa Rica (1)
dithiocarbamates	Cote d'Ivoire (1)
fenpropimorph	Costa Rica (2), Cote d'Ivoire (1)
imazalil	Costa Rica (1), Cote d'Ivoire (5), Ghana (1)
myclobutanil	Costa Rica (3)
thiabendazole	Costa Rica (1)

No residues were found in 5 of the 17 Imported (Non-EC) samples

Table 3b. Residues found in BANANA sampled from September to December 2016

Residues (1-6 compounds) were found in 12 of the 17 samples as follows:

Number of residues	Sample ID	Residues found (mg/kg)									Country of origin
		AZOX	BIF	BOS	BUF	DTC	FNPM	IMZ	MYC	TBZ	
(1)	4855/2016	0.3	-	-	-	-	-	-	-	-	Cameroon
	4854/2016	-	-	0.01	-	-	-	-	-	-	Cote d'Ivoire
(2)	4506/2016	0.07	-	-	-	-	-	0.2	-	-	Cote d'Ivoire
	4600/2016	0.06	-	-	-	-	-	0.2	-	-	Cote d'Ivoire
	4604/2016	1.5	-	-	-	-	-	0.4	-	-	Cote d'Ivoire
	4605/2016	0.2	-	-	-	-	-	0.8	-	-	Cote d'Ivoire
	4599/2016	0.8	-	-	-	-	-	1	-	-	Ghana
(3)	4851/2016	0.06	-	-	-	-	0.02	-	0.1	-	Costa Rica
	4603/2016	0.03	-	-	-	-	0.03	0.4	-	-	Cote d'Ivoire
	4853/2016	-	0.02	0.02	-	0.06	-	-	-	-	Cote d'Ivoire
(4)	4852/2016	0.05	0.02	-	0.02	-	-	-	0.03	-	Costa Rica
(6)	4513/2016	0.05	0.01	-	-	-	0.01	0.2	0.2	0.2	Costa Rica

The abbreviations used for the pesticide names are as follows:

AZOX	azoxystrobin	BIF	bifenthrin	BOS	boscalid
BUF	buprofezin	DTC	dithiocarbamates	FNPM	fenpropimorph
IMZ	imazalil	MYC	myclobutanil	TBZ	thiabendazole

Table 3c. Residues sought but not found in BANANA sampled from September to December 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)

BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
captan (0.02)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
chlorbufam (0.01)
chlordane (sum) (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
fludioxonil (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluopyram (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)

phosalone (0.01)
phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)

chlorfenapyr (0.01)
chlorfenvinphos (0.01)
chloridazon (0.01)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)
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)

Heptachlor (sum) (0.01)
heptenophos (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (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 (0.02)
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)

pymetrozine (0.01)
pyraclostrobin (0.01)
pyrazophos (0.01)
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)
quinomethionate (0.02)
quinoxyfen (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)
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)
thiacloprid (0.01)
thiamethoxam (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)

emamectin (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)
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)
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 4a. Analysis of CARROT sampled from September to November 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
CARROT, FRESH UK: 11 samples analysed		
azoxystrobin	<0.01 (i.e. not found)	9
(MRL = 1)	0.01	2
boscalid	<0.01 (i.e. not found)	3
(MRL = 2)	0.01 - 0.2	8
iprodione	<0.01 (i.e. not found)	8
(MRL = 10)	0.01 - 0.02	3
isopyrazam	<0.01 (i.e. not found)	10
(MRL = 0.2)	0.01	1
linuron	<0.01 (i.e. not found)	8
(MRL = 0.2)	0.01 - 0.02	3
tebuconazole	<0.01 (i.e. not found)	7
(MRL = 0.4)	0.01 - 0.09	4

UK samples of carrot were (11).

Residues were distributed by country of origin, as follows:

azoxystrobin	UK (2)
boscalid	UK (8)
iprodione	UK (3)
isopyrazam	UK (1)
linuron	UK (3)
tebuconazole	UK (4)

No residues were found in 3 of the 11 UK fresh samples

Table 4b. Residues found in CARROT sampled from September to November 2016

Residues (1-4 compounds) were found in 8 of the 11 samples as follows:

Number of residues	Sample ID	Type of CARROT	Residues found (mg/kg)						Country of origin
			AZOX	BOS	IPR	IPZM	LNR	TBC	
(1)	4549/2016	FRESH	-	0.07	-	-	-	-	UK
(2)	4385/2016	FRESH	0.01	0.05	-	-	-	-	UK
	4609/2016	FRESH	-	0.03	-	-	0.01	-	UK
(3)	4384/2016	FRESH	0.01	0.07	-	-	-	0.01	UK
	4551/2016	FRESH	-	0.03	0.02	-	-	0.03	UK
	4558/2016	FRESH	-	0.1	0.01	-	-	0.03	UK
	4612/2016	FRESH	-	0.01	-	0.01	0.02	-	UK
(4)	4550/2016	FRESH	-	0.2	0.02	-	0.02	0.09	UK

The abbreviations used for the pesticide names are as follows:

AZOX	azoxystrobin	BOS	boscalid	IPR	iprodione
IPZM	isopyrazam	LNR	linuron	TBC	tebuconazole

Table 4c. Residues sought but not found in CARROT sampled from September to November 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
bifenthrin (0.01)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
buprofezin (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
captan (0.02)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
chlorbufam (0.01)
chlordane (sum) (0.01)
chlorfenapyr (0.01)
chlorfenvinphos (0.01)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
fludioxonil (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluopyram (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Heptachlor (sum) (0.01)
heptenophos (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)
phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)
pymetrozine (0.01)
pyraclostrobin (0.01)
pyrazophos (0.01)
pyrethrins (0.01)

chloridazon (0.01)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)
deltamethrin (0.02)
demeton-S-methyl (0.01)
desmedipham (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 (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (0.01)
imazalil (0.02)
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)
isoprothiolane (0.01)
isoproturon (0.01)
isoxaben (0.01)
isoxaflutole (0.01)
kresoxim-methyl (0.01)
lambda-cyhalothrin (0.02)
lenacil (0.01)
lindane (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)
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)
quinomethionate (0.02)
quinoxyfen (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)
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)
thiamethoxam (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)

ethiofencarb (parent) (0.01)
ethion (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)
zoxamide (0.01)

Table 5a. Analysis of PEARS sampled from September to November 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
PEARS, Imported (EC): 13 samples analysed		
Boscalid	<0.01 (i.e. not found)	5
(MRL = 1.5)	0.02 - 0.1	8
captan and folpet	<0.02 (i.e. not found)	9
(MRL = 3)	0.1 - 0.5	3
(MRL = 10)	0.02	1
Carbendazim	<0.01 (i.e. not found)	12
(MRL = 0.2)	0.3	1
Cyprodinil	<0.02 (i.e. not found)	11
(MRL = 2)	0.04, 0.05	2
difenoconazole	<0.01 (i.e. not found)	10
(MRL = 0.8)	0.02	3
diflubenzuron	<0.01 (i.e. not found)	11
(MRL = 5)	0.01, 0.06	2
dithiocarbamates	<0.05 (i.e. not found)	4
(MRL = 5)	0.05 - 1.5	9
Fenoxycarb	<0.01 (i.e. not found)	8
(MRL = 1)	0.01 - 0.06	5
Fludioxonil	<0.01 (i.e. not found)	6
(MRL = 5)	0.01 - 1.3	7
Fluopyram	<0.01 (i.e. not found)	7
(MRL = 0.5)	0.01 - 0.2	6
Imazalil	<0.02 (i.e. not found)	12
(MRL = 2)	2.4	1
Imidacloprid	<0.01 (i.e. not found)	11
(MRL = 0.5)	0.01, 0.03	2
Iprodione	<0.01 (i.e. not found)	11
(MRL = 6)	0.02	2
lambda-cyhalothrin	<0.02 (i.e. not found)	11
(MRL = 0.1)	0.02	2
paclobutrazol	<0.01 (i.e. not found)	12
(MRL = 0.5)	0.02	1
phosmet (parent)	<0.01 (i.e. not found)	12
(MRL = 0.5)	0.02	1
pyraclostrobin	<0.01 (i.e. not found)	8
(MRL = 0.5)	0.02 - 0.08	5
tebuconazole	<0.01 (i.e. not found)	6
(MRL = 0.3)	0.02 - 0.2	7

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
Thiacloprid	<0.01 (i.e. not found)	6
(MRL = 0.3)	0.01 - 0.2	7
trifloxystrobin	<0.01 (i.e. not found)	9
(MRL = 0.7)	0.02 - 0.2	4

Imported (EC) samples of pears were from Belgium (3), Portugal (9), Spain (1).

Residues were distributed by country of origin, as follows:

Boscalid	Belgium (3), Portugal (4), Spain (1)
Carbendazim	Portugal (1)
captan and folpet	Belgium (3), Portugal (1)
Cyprodinil	Belgium (2)
diflubenzuron	Portugal (2)
difenoconazole	Belgium (1), Portugal (2)
dithiocarbamates	Belgium (2), Portugal (7)
Fenoxycarb	Portugal (5)
Fludioxonil	Belgium (3), Portugal (4)
Fluopyram	Belgium (1), Portugal (5)
Imidacloprid	Portugal (2)
Imazalil	Portugal (1)
Iprodione	Portugal (2)
lambda-cyhalothrin	Portugal (2)
paclobutrazol	Portugal (1)
phosmet (parent)	Portugal (1)
pyraclostrobin	Belgium (3), Portugal (1), Spain (1)
tebuconazole	Portugal (7)
Thiacloprid	Portugal (6), Spain (1)
trifloxystrobin	Portugal (4)

Residues were found in all of the 13 Imported (EC) samples

Table 5b. Residues found in PEARS sampled from September to November 2016

Residues (2-11 compounds) were found in 13 of the 13 samples as follows:

Number of residues	Sample ID	Residues found (mg/kg)																			Country of origin
		BOS	CBZ	CPFOL	CYD	DIF	DIFC	DTC	FEO	FLUD	FPYM	IMI	IMZ	IPR	LCY	PAC	PMT_P	PYC	TBC	THC	TRFL	
(2)	4520/2016	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	-	Portugal
(3)	4538/2016	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	-	0.01	-	Spain
(4)	4519/2016	-	-	-	-	-	-	0.07	-	-	0.06	-	-	-	-	-	-	-	0.02	0.02	-	Portugal
(5)	4896/2016	0.06	-	0.1	-	-	-	-	-	0.01	0.02	-	-	-	-	-	-	0.03	-	-	-	Belgium
(6)	4866/2016	0.04	-	0.02	0.04	-	-	0.06	-	0.04	-	-	-	-	-	-	-	0.02	-	-	-	Belgium
	4845/2016	-	-	-	-	-	-	0.4	-	0.07	0.2	-	-	-	-	-	-	-	0.08	0.1	0.02	Portugal
(7)	4864/2016	0.03	-	0.1	0.05	-	0.02	0.05	-	0.02	-	-	-	-	-	-	-	0.02	-	-	-	Belgium
	4521/2016	-	-	0.5	-	0.06	-	-	0.02	0.02	0.01	-	-	0.02	-	-	-	-	0.03	-	-	Portugal
	4535/2016	0.05	-	-	-	-	0.02	1.5	0.06	-	-	0.01	-	-	-	-	-	-	0.2	-	0.2	Portugal
	4844/2016	-	-	-	-	0.01	-	0.2	-	1.3	-	-	-	-	0.02	-	-	-	0.09	0.09	0.02	Portugal
	4861/2016	0.06	-	-	-	-	0.02	0.09	0.03	0.1	-	-	-	-	-	-	-	0.02	-	0.05	-	Portugal
	4900/2016	-	-	-	-	-	-	0.5	0.01	-	0.1	-	-	0.02	-	-	-	-	0.2	0.2	0.1	Portugal
(11)	4897/2016	0.04	0.3	-	-	-	-	0.3	0.04	-	0.04	0.03	2.4	-	0.02	-	0.02	-	0.02	0.03	-	Portugal

The abbreviations used for the pesticide names are as follows:

BOS	boscalid	CBZ	carbendazim	CPFOL	captan and folpet
CYD	cyprodinil	DIF	diflubenzuron	DIFC	difenoconazole
DTC	dithiocarbamates	FEO	fenoxycarb	FLUD	fludioxonil

FPYM	fluopyram	IMI	imidacloprid	IMZ	imazalil
IPR	iprodione	LCY	lambda-cyhalothrin	PAC	paclobutrazol
PMT_P	phosmet (parent)	PYC	pyraclostrobin	TBC	tebuconazole
THC	thiacloprid	TRFL	trifloxystrobin		

Table 5c. Residues sought but not found in PEARS sampled from September to November 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
azoxystrobin (0.01)
BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
bifenthrin (0.01)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
buprofezin (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
carbaryl (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
chlorbufam (0.01)
chlordane (sum) (0.01)
chlorfenapyr (0.01)
chlorfenvinphos (0.01)
chloridazon (0.01)
ethion (0.01)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Heptachlor (sum) (0.01)
heptenophos (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)
pymetrozine (0.01)
pyrazophos (0.01)
pyrethrins (0.01)
pyridaben (0.01)

chlormequat (0.02)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)

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)
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 (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)
ethiofencarb (parent) (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (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)
isoprothiolane (0.01)
isoproturon (0.01)
isopyrazam (0.01)
isoxaben (0.01)
isoxaflutole (0.01)
kresoxim-methyl (0.01)
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)
napropamide (0.02)
nitenpyram (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)
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)
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)
thiamethoxam (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)
triflumizole (0.01)
triflumuron (0.01)
trifluralin (0.01)
triforine (0.01)
triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 6a. Analysis of SFVS RAISINS sampled from October to November 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
SFVS RAISINS, Imported (Non-EC): 4 samples analysed		
azoxystrobin	<0.01 (i.e. not found)	2
(MRL = 10)	0.01	2
bifenthrin	<0.01 (i.e. not found)	2
(MRL = 1)	0.02, 0.03	2
boscalid	<0.01 (i.e. not found)	1
(MRL = 25)	0.01 - 0.02	3
buprofezin	<0.01 (i.e. not found)	2
(MRL = 5)	0.02	2
chlorpyrifos	<0.01 (i.e. not found)	2
(MRL = 0.05)	0.03	2
cypermethrin	<0.02 (i.e. not found)	2
(MRL = 2.5)	0.03	2
cyprodinil	<0.02 (i.e. not found)	1
(MRL = 15)	0.03 - 0.1	3
fluopyram	<0.01 (i.e. not found)	2
(MRL = 7.5)	0.03	2
imidacloprid	<0.01 (i.e. not found)	2
(MRL = 5)	0.02, 0.03	2
indoxacarb	<0.01 (i.e. not found)	1
(MRL = 10)	0.02 - 0.03	3
iprodione	<0.01 (i.e. not found)	1
(MRL = 100)	0.2 - 0.5	3
lambda-cyhalothrin	<0.02 (i.e. not found)	1
(MRL = 1)	0.02 - 0.05	3
metalaxyl	<0.01 (i.e. not found)	2
(MRL = 10)	0.02, 0.03	2
methoxyfenozide	<0.01 (i.e. not found)	1
(MRL = 5)	0.03 - 0.1	3
metrafenone	<0.01 (i.e. not found)	3
(MRL = 35)	0.01	1
penconazole	<0.01 (i.e. not found)	2
(MRL = 1)	0.01, 0.03	2
pyrimethanil	<0.02 (i.e. not found)	1
(MRL = 25)	0.1	3
tebuconazole	<0.01 (i.e. not found)	2
(MRL = 2.5)	0.03	2
tebufenpyrad	<0.01 (i.e. not found)	2
(MRL = 2.5)	0.02	2
triadimefon & triadimenol	<0.01 (i.e. not found)	3

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
(MRL = 10)	0.01	1

Imported (Non-EC) samples of sfvs raisins were from Turkey (4).

Residues were distributed by country of origin, as follows:

azoxystrobin	Turkey (2)
bifenthrin	Turkey (2)
boscalid	Turkey (3)
buprofezin	Turkey (2)
chlorpyrifos	Turkey (2)
cyprodinil	Turkey (3)
cypermethrin	Turkey (2)
fluopyram	Turkey (2)
indoxacarb	Turkey (3)
imidacloprid	Turkey (2)
iprodione	Turkey (3)
lambda-cyhalothrin	Turkey (3)
metrafenone	Turkey (1)
metalaxyl	Turkey (2)
methoxyfenozide	Turkey (3)
penconazole	Turkey (2)
pyrimethanil	Turkey (3)
tebuconazole	Turkey (2)
tebufenpyrad	Turkey (2)
triadimefon & triadimenol	Turkey (1)

No residues were found in 1 of the 4 Imported (Non-EC) samples

Table 6b. Residues found in SFVS RAISINS sampled from October to November 2016

Residues (8-20 compounds) were found in 3 of the 4 samples as follows:

Number of residues	Sample ID	Residues found (mg/kg)																			Country of origin
		AZOX	BIF	BOS	BUF	CPF	CYD	CYP	FPYM	IDX	IMI	IPR	LCY	MTF	MTX	MXF	PNZ	PYM	TBC	TEBF	TRSP	
(8)	4890/2016	-	-	0.01	-	-	0.03	0.03	-	0.03	-	0.2	0.02	-	-	0.03	-	0.1	-	-	-	Turkey
(17)	4894/2016	0.01	0.03	0.01	0.02	0.03	0.07	-	0.03	0.02	0.03	0.5	0.04	-	0.02	0.05	0.01	0.1	0.03	0.02	-	Turkey
(20)	4893/2016	0.01	0.02	0.02	0.02	0.03	0.1	0.03	0.03	0.02	0.02	0.4	0.05	0.01	0.03	0.1	0.03	0.1	0.03	0.02	0.01	Turkey

The abbreviations used for the pesticide names are as follows:

AZOX	azoxystrobin	BIF	bifenthrin	BOS	boscalid
BUF	buprofezin	CPF	chlorpyrifos	CYD	cyprodinil
CYP	cypermethrin	FPYM	fluopyram	IDX	indoxacarb
IMI	imidacloprid	IPR	iprodione	LCY	lambda-cyhalothrin
MTF	metrafenone	MTX	metalaxyl	MXF	methoxyfenozide
PNZ	penconazole	PYM	pyrimethanil	TBC	tebuconazole
TEBF	tebufenpyrad	TRSP	triadimefon & triadimenol		

Table 6c. Residues sought but not found in SFVS RAISINS sampled from October to November 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
captan (0.02)
captan and folpet (0.02)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
chlorbufam (0.01)
chlordane (sum) (0.01)
chlorfenapyr (0.01)
chlorfenvinphos (0.01)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
ETU (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
fludioxonil (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Heptachlor (sum) (0.01)
heptenophos (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)
phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)
PTU (0.01)
pymetrozine (0.01)
pyraclostrobin (0.01)
pyrazophos (0.01)

chloridazon (0.01)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)
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 (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)

hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (0.01)
imazalil (0.02)
inorganic bromide (20)
ioxynil (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)
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)
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)
Monuron (0.01)
myclobutanil (0.01)
napropamide (0.02)
nitenpyram (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)

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)
quinomethionate (0.02)
quinoxyfen (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) (0.05)
spiroxamine (0.01)
sulcotrione (0.02)
sum of butocarboxim and butocarboxim sul (0.01)
tau-fluvalinate (0.01)
tebufenozide (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)
thiamethoxam (0.01)
thiamethoxam (sum) (0.01)
thiophanate-methyl (0.01)
tolclofos-methyl (0.01)
tolfenpyrad (0.01)
tolylfluanid (sum) (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 7a. Analysis of SOFT CITRUS sampled during November 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
SOFT CITRUS, CLEMENTINE Imported (EC): 3 samples analysed		
chlorpyrifos	<0.01 (i.e. not found)	2
(MRL = 1.5)	0.02	1
etofenprox	<0.01 (i.e. not found)	2
(MRL = 1)	0.02	1
etoxazole	<0.01 (i.e. not found)	2
(MRL = 0.1)	0.01	1
fludioxonil	<0.01 (i.e. not found)	2
(MRL = 10)	1.5	1
imazalil	<0.01 (i.e. not found)	0
(MRL = 5)	0.7 - 1.6	3

Imported (EC) samples of soft citrus were from Spain (3).

Residues were distributed by country of origin, as follows:

chlorpyrifos	Spain (1)
etofenprox	Spain (1)
etoxazole	Spain (1)
fludioxonil	Spain (1)
imazalil	Spain (3)

Residues were found in all of the 3 Imported (EC) clementine samples

Table 7b. Residues found in SOFT CITRUS sampled during November 2016

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

Number of residues	Sample ID	Type of SOFT CITRUS	Residues found (mg/kg)					Country of origin
			CPF	EFX	EXZ	FLUD	IMZ	
(2)	4872/2016	CLEMENTINE	0.02	-	-	-	0.7	Spain
	4918/2016	CLEMENTINE	-	-	-	1.5	0.7	Spain
(3)	4917/2016	CLEMENTINE	-	0.02	0.01	-	1.6	Spain

The abbreviations used for the pesticide names are as follows:

CPF	chlorpyrifos	EFX	etofenprox	EXZ	etoxazole
FLUD	fludioxonil	IMZ	imazalil		

Table 7c. Residues sought but not found in SOFT CITRUS sampled during November 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
azoxystrobin (0.01)

BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
bifenthrin (0.01)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
boscalid (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
buprofezin (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
captan (0.02)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
chlorbufam (0.01)
chlordane (sum) (0.01)
ethion (0.01)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluopyram (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
haloxyfop (sum) (0.01)
Heptachlor (sum) (0.01)
heptenophos (0.01)
hexachlorobenzene (0.01)
hexachlorocyclohexane (sum) (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)

phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)
pymetrozine (0.01)
pyraclostrobin (0.01)
pyrazophos (0.01)
pyrethrins (0.01)

chlorfenapyr (0.01)
chlorfenvinphos (0.01)
chloridazon (0.01)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)
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 (0.01)
endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
hexaconazole (0.01)
hexazinone (0.02)
hexythiazox (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 (0.02)
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)
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)
quinomethionate (0.02)
quinoxyfen (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)
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)
thiamethoxam (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)

epoxiconazole (0.01)
EPTC (0.01)
ethiofencarb (parent) (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Table 8a. Analysis of SUGARSNAP PEAS sampled during September 2016

Commodity/Pesticide	Concentration range (mg/kg)	Number of samples in range
SUGARSNAP PEAS, Imported (Non-EC): 1 samples analysed		
tebuconazole	<0.01 (i.e. not found)	0
(MRL = 2)	0.03	1

Imported (Non-EC) samples of sugarsnap peas were from Peru (1).

Residues were distributed by country of origin, as follows:
tebuconazole Peru (1)

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

Table 8b. Residues found in SUGARSNAP PEAS sampled during September 2016

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

Number of residues	Sample ID	Residues found (mg/kg) TBC	Country of origin
(1)	4536/2016	0.03	Peru

The abbreviations used for the pesticide names are as follows:

TBC tebuconazole

Table 8b. Residues found in SUGARSNAP PEAS sampled during September 2016

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

Number of residues	Sample ID	Residues found (mg/kg) TBC	Country of origin
(1)	4536/2016	0.03	Peru

The abbreviations used for the pesticide names are as follows:

TBC tebuconazole

Table 8c. Residues sought but not found in SUGARSNAP PEAS sampled during 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)
2,4-DB (0.01)
2-phenylphenol (0.02)
6-benzyladenine (0.01)
abamectin (sum) (0.01)
acephate (0.01)
acetamiprid (0.01)
acetochlor (0.01)
acibenzolar-s-methyl (0.01)
aclonifen (0.02)
acrinathrin (0.02)
alachlor (0.01)
aldicarb (sum) (0.01)
aldrin and dieldrin (0.01)
allethrin (0.02)
alpha-HCH (0.01)
ametoctradin (0.01)
amidosulfuron (0.01)
amitraz (0.01)
asulam (0.02)
atrazine (0.01)
azinphos-ethyl (0.02)
azinphos-methyl (0.02)
azoxystrobin (0.01)
BAC (sum) (0.05)
benalaxyl (0.01)
bendiocarb (0.01)
benfuracarb (0.001)
benthiavalicarb (sum) (0.01)
beta-HCH (0.01)
bifenox (0.02)
bifenthrin (0.01)
biphenyl (0.01)
bispyribac-sodium (0.01)
bitertanol (0.01)
bixafen (0.01)
boscalid (0.01)
bromophos-ethyl (0.01)
bromopropylate (0.01)
bromoxynil (0.01)
bromuconazole (0.01)
bupirimate (0.01)
buprofezin (0.01)
butachlor (0.01)
butocarboxim (parent) (0.01)
butoxycarboxim (0.01)
cadusafos (0.01)
captan (0.02)
carbaryl (0.01)
carbendazim (0.01)
carbetamide (0.02)
carbofuran (sum) (0.001)
carbosulfan (0.001)
carboxin (0.02)
chlorantraniliprole (0.01)
ethion (0.01)
ethirimol (0.01)
ethofumesate (0.01)
ethoprophos (0.01)
etofenprox (0.01)
etoxazole (0.01)
etridiazole (0.02)
etrimfos (0.01)
famoxadone (0.01)
fenamidone (0.01)
fenamiphos (sum) (0.01)
fenarimol (0.01)
fenazaquin (0.01)
fenbuconazole (0.01)
fenbutatin oxide (0.02)
fenhexamid (0.02)
fenitrothion (0.01)
fenoxycarb (0.01)
fenpropathrin (0.01)
fenpropidin (0.01)
fenpropimorph (0.01)
fenpyrazamine (0.01)
fenpyroximate (0.01)
fensulfothion (sum) (0.01)
fenthion (partial sum) (0.01)
fenvalerate & esfenvalerate (all isomers (0.01)
fipronil (sum) (0.005)
flonicamid (sum) (0.01)
fluazifop-p-butyl (sum) (0.01)
fluazinam (0.01)
flubendiamide (0.01)
flucythrinate (0.01)
fludioxonil (0.01)
flufenacet (0.01)
flufenoxuron (0.02)
fluometuron (0.01)
fluopicolide (0.01)
fluopyram (0.01)
fluoxastrobin (0.01)
fluquinconazole (0.01)
flurochloridone (0.02)
fluroxypyr (sum) (0.02)
flusilazole (0.01)
flutolanil (0.01)
flutriafol (0.01)
fluxapyroxad (0.01)
folpet (0.01)
fonofos (0.01)
formetanate (0.01)
fosthiazate (0.01)
furalaxyl (0.01)
furathiocarb (0.001)
furmecyclox (0.01)
halofenozide (0.01)
halosulfuron-methyl (0.01)
nitrofen (0.02)
nitrothal-isopropyl (0.01)
Novaluron (0.01)
nuarimol (0.01)
ofurace (0.01)
Oxadiargyl (0.01)
oxadiazon (0.02)
oxadixyl (0.01)
oxamyl (0.01)
oxasulfuron (0.01)
oxydemeton-methyl (sum) (0.01)
oxyfluorfen (0.02)
paclobutrazol (0.01)
parathion (0.01)
parathion-methyl (sum) (0.01)
penconazole (0.01)
pencycuron (0.01)
pendimethalin (0.01)
penflufen (0.01)
pentanochlor (0.01)
penthiopyrad (0.01)
permethrin (0.01)
phenmedipham (0.02)
phenthoate (0.01)
phorate (partial sum) (0.01)
phosalone (0.01)
phosmet (sum) (0.01)
phosphamidon (0.01)
phoxim (0.01)
picolinafen (0.01)
picoxystrobin (0.01)
piperonyl butoxide (0.01)
pirimicarb (sum) (0.01)
pirimiphos-ethyl (0.01)
pirimiphos-methyl (0.01)
prochloraz (parent only) (0.01)
procymidone (0.01)
profenofos (0.01)
promecarb (0.01)
prometryn (0.01)
propachlor (0.01)
propamocarb (0.01)
propanil (0.02)
propaquizafop (0.02)
propargite (0.01)
propetamphos (0.01)
propham (0.02)
propiconazole (0.01)
propoxur (0.01)
propyzamide (0.01)
proquinazid (0.01)
prosulfocarb (0.01)
prosulfuron (0.01)
prothioconazole (0.01)
prothiofos (0.01)

chlorbufam (0.01)
chlordane (sum) (0.01)
chlorfenapyr (0.01)
chlorfenvinphos (0.01)
chloridazon (0.01)
chlorobenzilate (0.02)
chlorothalonil (0.01)
chlorotoluron (0.01)
chlorpropham (sum) (0.01)
chlorpyrifos (0.01)
chlorpyrifos-methyl (0.01)
chlorthal-dimethyl (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)
deltamethrin (0.02)

demeton-S-methyl (0.01)
desmedipham (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 (0.01)
haloxyfop (sum) (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)
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)
pymetrozine (0.01)
pyraclostrobin (0.01)
pyrazophos (0.01)
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)
quinomethionate (0.02)
quinoxyfen (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)
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)
thiamethoxam (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)

endosulfan (sum) (0.01)
endrin (0.02)
EPN (0.01)
epoxiconazole (0.01)
EPTC (0.01)
ethiofencarb (parent) (0.01)
monocrotophos (0.01)
monolinuron (0.01)
Monuron (0.01)
myclobutanil (0.01)
napropamide (0.02)
nitenpyram (0.01)
trifluralin (0.01)
triforine (0.01)
triticonazole (0.01)
vinclozolin (sum) (0.01)
zoxamide (0.01)

Appendix D: HSE Assessment of Risk

The sampling 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.

The reference doses (ADI, ARfD) are set by the Expert Committee on Pesticides (ECP), 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 also available on the EU website.

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 intakes 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 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 PRiF 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 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 in 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. PRiF 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 PRiF 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, bitertanol, buprofezin, dicloran, diphenylamine, ethoxyquin, furalaxyl, imazalil, iprodione, kresoxim-methyl, myclobutanil, permethrin, pendimethalin, propargite, propyzamide, quintozene, thiabendazole and tolclofos-methyl.

Dithiocarbamate residues

Dithiocarbamate residues are determined as carbon disulphide which is a common product from different dithiocarbamate pesticides; for the risk assessment a precautionary approach is taken: the worse case dithiocarbamate residue is calculated by assuming the residue is derived from ziram ((a molecular weight conversion is applied to estimate the level of residue based on ziram) and this is compared to the ARfD for ziram. Where it can be confirmed that a specific dithiocarbamate was applied the equivalent residue of the specific active substance is estimated and the intake compared to the appropriate reference dose. We only present a detailed risk assessment when either the worst case assessment of intake (based on ziram) leads to an exceedance of the ziram ARfD and it has not been possible to further identify the dithiocarbamate source of the residues, or, when further refined assessments based on a specific knowledge of the dithiocarbamate pesticide applied in practice still lead to an exceedance of the ARfD for the known dithiocarbamate pesticide.

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 C). 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. A number of research projects have been commissioned by the FSA to help progress. Details can be found here.

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. Details can be found here.

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 international level. The European Food Safety Authority (EFSA) held a colloquium in 2014.

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

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/pesticides/eu-pesticides-database/public/?event=homepage&language=EN

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.hse.gov.uk/pesticides/topics/pesticide-approvals/pesticides-registration/data-requirements-handbook/consumer-exposure.htm.

For these autumn term 2016 assessments, the following approaches have been taken to refine the NESTI according to case-by-case issues:

- 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).

Pear risk assessment

Crop	Pesticide	Highest residue (mg/kg)	Intake (mg/kg bw/day)			ARfD (mg/kg bw/day)	Source
			4-6 year old child	7-10 year old child	Critical group†		
Pears	Carbendazim	0.3	0.018	0.012	0.025 (toddler) 0.022 (infant)	0.02	EU 2006

The intakes for toddlers and infants exceeded the ARfD. The highest intake was for toddlers.

If toddlers ate large portions of pears containing carbendazim at 0.3 mg/kg, their intake of carbendazim could be 127% of the Acute Reference Dose. This intake is 400 times lower than a dose which caused no observed adverse in a rabbit developmental study. The European Food Safety Authority used this study as the basis of the ARfD. The ARfD incorporates a larger than normal safety factor of 500 due to the steep dose-response relationship for adverse reproductive /developmental toxicity effects with carbendazim. These reproductive effects are only relevant for pregnant and breast-feeding females, although carbendazim also has other effects which would be relevant to the general population.

The intakes for consumer groups which might include pregnant and breast-feeding females do not exceed the ARfD.

For the general population and the relevant studies for the case of carbendazim for these consumers, toxicologists usually apply a lower factor of 100 to take into account the uncertainties caused by using animal data and possible differences in susceptibility between people. Applying this factor of 100 would give an ARfD of 0.1 mg/kg bw/day for these groups. This ARfD would be both 100 times lower than a dose level which caused no maternal toxicity in developmental studies in rabbits and rats and 500 times lower than a dose level which caused no observed effects on chromosomes in several studies.
The intakes for infants and toddlers are all below this level of 0.1 mg/kg bw/day.

Based on this risk assessment and taking account of the separate considerations for different consumers, the different forms of possible toxic effect and the levels at which these effects were shown in studies, it is considered that the overall reduction in the factor of 500 to 400 is still sufficient to account for the uncertainties associated with the use of animal data and possible differences in susceptibility between people. Based on this assessment an effect on health is unlikely.

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

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

Some of the samples contained residues of more than one pesticide. Whenever toxicologists expect these to add to each other's affect, (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 the samples, which contained more than one pesticide from the above groups, did not indicate any exceedances of the ARfD.

Appendix E: Statements and Supplier Details

Pear sample 4897/2016: Residues of carbendazim and imazalil above the MRL

Statement from Minor, Weir & Willis

Minor Weir & Willis have been supplying the SFVS successfully with fresh fruit and vegetables since 2002 and has never had a breah of an EU MRL on any of it's products. Since 2009 we have had 302 samples tested as part of the national monitoring programme and therefore this recent issue represents 0.33% of total number of tests carried out over this time frame. All results are collated into a SFVS risk assessment which as the above statistics indicates show our suppliers and products to all be low risk. Further to the findinfs of recent residue testing by HSE, a full investigation has been carried out with the supplier and grower involved leading to them being suspended from future supply to the SFVS program. The supplier and therefore all fruit was all removed from the supply chain in November 2016 on quality grounds 4 months before we were informed of the residue results.

Statement from the Department of Health

While the risk assessment undertaken by the HSE indicates that adverse effects on health were unlikely, the Department of Health, their contract managers the NHS Business Services Authority and NHS Supply Chain, who run the Scheme on a day-to-day- basis, nevertheless take any findings of non-compliance very seriously. Immediately on being advised of this result, NHS Supply Chain were asked to undertake an investigation of Minor Weir and Willis, and other suppliers to the Scheme, to ensure that no other produce from either the grower or the particular farm was currently being supplied. This confirmed that only a small amount of produce from the grower in question was supplied to the Scheme, and none was supplied after 7 November 2016. All but one of the Scheme's other suppliers were able to demonstrate that they had not used this grower or the farm to supply to the Scheme, and the one supplier who had has agreed to suspend supplies from the farm in question until NHS Supply Chain investigations are complete.

The Department, the NHS Business Services Authority and NHS Supply Chain have begun a full review of Scheme produce pesticide testing procedures, to ensure that these procedures can provide assurance to the Department, parents and the public that the produce supplied under the Scheme is safe and of a high quality.

Supplier details

The Government has decided that brand name information should be published as part of the Government chemical surveillance programme for food. Brand names have been published for most pesticide residue surveys since 1998. This policy was reviewed in 2000/1, when Ministers agreed to its continuation. This policy is employed for the SF&VS monitoring.

The tables give the name and address of the distribution depots from which the produce was collected. The suppliers/brand name is not always available. Similar produce from the same supplier may have been available from other depots. The choice of supplier for each area lies with the Department of Health and not the distributor.

This Appendix lists information for each sample analysed with details of the levels of residues detected.

Apples: residues found between September and December 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4534/2016	14/09/2016	Apples	South Africa	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	chlorantraniliprole 0.06 (MRL = 0.5) dithianon 0.2 (MRL = 3) thiacloprid 0.03 (MRL = 0.3)
4537/2016	26/09/2016	Apples	Belgium	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	boscalid 0.04 (MRL = 2) captan and folpet 0.5 (MRL = 3) pyraclostrobin 0.01 (MRL = 0.5)
4895/2016	06/10/2016	Apples	UK	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	cyprodinil 0.06 (MRL = 1.5) fludioxonil 0.03 (MRL = 5) indoxacarb 0.02 (MRL = 0.5) methoxyfenozide 0.02 (MRL = 2)
4898/2016	02/11/2016	Apples Gala	Poland	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	acetamiprid 0.08 (MRL = 0.8) captan and folpet 0.04 (MRL = 10) flonicamid (sum) 0.03 (MRL = 0.3) thiamethoxam 0.02 (MRL = 0.2)
4899/2016	14/11/2016	Apples	France	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	None were detected above the set RL
4901/2016	28/11/2016	Apples	UK	Altitude	206, Deykin Avenue, Birmingham, West Midlands B6 7BH	None stated	myclobutanil 0.03 (MRL = 0.6)
4860/2016	14/09/2016	Golden delicious	South Africa	Greencell UK Ltd	West Marsh Road Pinchbeck PE11 3UW	None stated	dithiocarbamates 0.1 (MRL = 5) thiacloprid 0.02 (MRL = 0.3)
4862/2016	21/09/2016	Apple Empire	Belgium	Greencell UK Ltd	West Marsh Road Pinchbeck PE11 3UW	None stated	boscalid 0.04 (MRL = 2) captan and folpet 0.3 (MRL = 3) pyraclostrobin 0.01 (MRL = 0.5)
4865/2016	30/09/2016	Apples Delbane	Belgium	Greencell UK Ltd	West Marsh Road Pinchbeck PE11 3UW	None stated	boscalid 0.1 (MRL = 2) captan and folpet 0.04 (MRL = 3) chlorantraniliprole 0.01 (MRL = 0.5) difenoconazole 0.01 (MRL = 0.8) dodine 0.09 (MRL = 0.9) dithianon 0.07 (MRL = 3) pyraclostrobin 0.04 (MRL = 0.5) pyrimethanil 0.05 (MRL = 15)
4867/2016	09/11/2016	Apples Epstan	Belgium	Greencell UK Ltd	West Marsh Road Pinchbeck PE11 3UW	None stated	boscalid 0.02 (MRL = 2) chlorantraniliprole 0.01 (MRL = 0.5) difenoconazole 0.02 (MRL = 0.8) dithianon 0.06 (MRL = 3) pyraclostrobin 0.01 (MRL = 0.5)

Bananas: residues found between September and December 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4513/2016	28/11/2016	Banana	Costa Rica	G W Price Ltd	13 High Street, Eckington, Sheffield S21 4DH	None stated	azoxystrobin 0.05 (MRL = 2) bifenthrin 0.01 (MRL = 0.1) fenpropimorph 0.01 (MRL = 2) imazalil 0.2 (MRL = 2) myclobutanil 0.2 (MRL = 2) thiabendazole 0.2 (MRL = 5)
4505/2016	13/09/2016	Banana	Dominican Republic	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	None were detected above the set RL
4506/2016	13/09/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 0.07 (MRL = 2) imazalil 0.2 (MRL = 2)
4599/2016	10/10/2016	Banana	Ghana	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 0.8 (MRL = 2) imazalil 1 (MRL = 2)
4600/2016	10/10/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 0.06 (MRL = 2) imazalil 0.2 (MRL = 2)
4601/2016	10/10/2016	Banana	Dominican Republic	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	None were detected above the set RL
4602/2016	07/11/2016	Banana	Dominican Republic	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	None were detected above the set RL
4603/2016	07/11/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 0.03 (MRL = 2) fenpropimorph 0.03 (MRL = 2) imazalil 0.4 (MRL = 2)
4604/2016	07/11/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 1.5 (MRL = 2) imazalil 0.4 (MRL = 2)
4605/2016	05/12/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	azoxystrobin 0.2 (MRL = 2) imazalil 0.8 (MRL = 2)
4606/2016	05/12/2016	Banana	Dominican Republic	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	None were detected above the set RL

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4607/2016	05/12/2016	Banana	Ivory Coast (Cote d'Ivoire)	JN Fox & Sons UK Ltd	Unit A, The Ridgeway, Iver, Buckinghamshire SL0 9HX	None stated	None were detected above the set RL
4851/2016	11/09/2016	Banana	Costa Rica	Winfresh	Stanstead Ripening Centre, Geest Industries Ltd, High Cross Lane East, Little Canfield, Essex Dunmow CM6 1TH	None stated	azoxystrobin 0.06 (MRL = 2) fenpropimorph 0.02 (MRL = 2) myclobutanil 0.1 (MRL = 2)
4852/2016	27/09/2016	Banana	Costa Rica	Winfresh	Stanstead Ripening Centre, Geest Industries Ltd, High Cross Lane East, Little Canfield, Essex Dunmow CM6 1TH	None stated	azoxystrobin 0.05 (MRL = 2) bifenthrin 0.02 (MRL = 0.1) buprofezin 0.02 (MRL = 0.5) myclobutanil 0.03 (MRL = 2)
4853/2016	10/10/2016	Banana	Ivory Coast (Cote d'Ivoire)	Winfresh	Stanstead Ripening Centre, Geest Industries Ltd, High Cross Lane East, Little Canfield, Essex Dunmow CM6 1TH	None stated	bifenthrin 0.02 (MRL = 0.1) boscalid 0.02 (MRL = 0.6) dithiocarbamates 0.06 (MRL = 2)
4854/2016	07/11/2016	Banana	Ivory Coast (Cote d'Ivoire)	Winfresh	Stanstead Ripening Centre, Geest Industries Ltd, High Cross Lane East, Little Canfield, Essex Dunmow CM6 1TH	None stated	boscalid 0.01 (MRL = 0.6)
4855/2016	15/11/2016	Banana	Cameroon	Winfresh	Stanstead Ripening Centre, Geest Industries Ltd, High Cross Lane East, Little Canfield, Essex Dunmow CM6 1TH	None stated	azoxystrobin 0.3 (MRL = 2)

Carrots: residues found Between September and November 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4609/2016	08/09/2016	Nairobi Carrots	UK	Alan Bartlett & Sons	Great Acre Fen, Chatteris, Cambridgeshire PE16 6EG	None stated	boscalid 0.03 (MRL = 2) linuron 0.01 (MRL = 0.2)
4610/2016	22/09/2016	Nairobi Carrots	UK	Alan Bartlett & Sons	Great Acre Fen, Chatteris, Cambridgeshire PE16 6EG	None stated	None were detected above the set RL
4611/2016	05/10/2016	Nairobi Carrots	UK	Alan Bartlett & Sons	Great Acre Fen, Chatteris, Cambridgeshire PE16 6EG	None stated	None were detected above the set RL
4612/2016	11/11/2016	Nairobi Carrots	UK	Alan Bartlett & Sons	Great Acre Fen, Chatteris, Cambridgeshire PE16 6EG	None stated	boscalid 0.01 (MRL = 2) isopyrazam 0.01 (MRL = 0.2) linuron 0.02 (MRL = 0.2)
4613/2016	25/11/2016	Nairobi Carrots	UK	Alan Bartlett & Sons	Great Acre Fen, Chatteris, Cambridgeshire PE16 6EG	None stated	None were detected above the set RL
4384/2016	05/10/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	azoxystrobin 0.01 (MRL = 1) boscalid 0.07 (MRL = 2) tebuconazole 0.01 (MRL = 0.4)
4385/2016	13/10/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	azoxystrobin 0.01 (MRL = 1) boscalid 0.05 (MRL = 2)
4549/2016	18/10/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	boscalid 0.07 (MRL = 2)
4550/2016	14/11/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	boscalid 0.2 (MRL = 2) iprodione 0.02 (MRL = 10) linuron 0.02 (MRL = 0.2) tebuconazole 0.09 (MRL = 0.4)
4551/2016	28/11/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	boscalid 0.03 (MRL = 2) iprodione 0.02 (MRL = 10) tebuconazole 0.03 (MRL = 0.4)
4558/2016	07/11/2016	Chantenay Carrots	UK	Capespan International Ltd	The Maidstone Studios, New Cut Road, Vinters Park, Maidstone, Kent ME14 5NZ	None stated	boscalid 0.1 (MRL = 2) iprodione 0.01 (MRL = 10) tebuconazole 0.03 (MRL = 0.4)

Pears: residues found Between September and November 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4535/2016	20/09/2016	Rocha pears	Portugal	Altitude	206 Deykin Avenue, Witton, Birmingham B6 7BH	None stated	boscalid 0.05 (MRL = 1.5)
							difenoconazole 0.02 (MRL = 0.8)
							dithiocarbamates 1.5 (MRL = 5)
							fenoxycarb 0.06 (MRL = 1)
							imidacloprid 0.01 (MRL = 0.5)
							tebuconazole 0.2 (MRL = 0.3)
							trifloxystrobin 0.2 (MRL = 0.7)
4538/2016	04/10/2016	Conference pears	Spain	Altitude	206 Deykin Avenue, Witton, Birmingham B6 7BH	None stated	boscalid 0.1 (MRL = 1.5)
							pyraclostrobin 0.08 (MRL = 0.5)
							thiacloprid 0.01 (MRL = 0.3)
4896/2016	17/10/2016	Conference pears	Belgium	Altitude	206 Deykin Avenue, Witton, Birmingham B6 7BH	None stated	boscalid 0.06 (MRL = 1.5)
							captan and folpet 0.1 (MRL = 3)
							fludioxonil 0.01 (MRL = 5)
							fluopyram 0.02 (MRL = 0.5)
							pyraclostrobin 0.03 (MRL = 0.5)
4897/2016	**02/11/2016**	**Rocha pears**	**Portugal**	**Altitude**	**206 Deykin Avenue, Witton, Birmingham B6 7BH**	**None stated**	boscalid 0.04 (MRL = 1.5)
							carbendazim 0.3 (MRL = 0.2)
							dithiocarbamates 0.3 (MRL = 5)
							fenoxycarb 0.04 (MRL = 1)
							fluopyram 0.04 (MRL = 0.5)
							imidacloprid 0.03 (MRL = 0.5)
							imazalil 2.4 (MRL = 2)
							lambda-cyhalothrin 0.02 (MRL = 0.1)
							phosmet (parent) 0.02 (MRL = 0.5)
							tebuconazole 0.02 (MRL = 0.3)
							thiacloprid 0.03 (MRL = 0.3)
4900/2016	28/11/2016	Rocha pears	Portugal	Altitude	206 Deykin Avenue, Witton, Birmingham B6 7BH	None stated	dithiocarbamates 0.5 (MRL = 5)
							fenoxycarb 0.01 (MRL = 1)
							fluopyram 0.1 (MRL = 0.5)
							iprodione 0.02 (MRL = 6)
							tebuconazole 0.2 (MRL = 0.3)
							thiacloprid 0.2 (MRL = 0.3)
							trifloxystrobin 0.1 (MRL = 0.7)
4519/2016	13/09/2016	Rocha pears	Portugal	Chingford Fruit	Thames House,Thames Road, Crayford, Kent DA1 4QP	None stated	dithiocarbamates 0.07 (MRL = 5)
							fluopyram 0.06 (MRL = 0.5)
							tebuconazole 0.02 (MRL = 0.3)
							thiacloprid 0.02 (MRL = 0.3)

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4520/2016	04/10/2016	Rocha pears	Portugal	Chingford Fruit	Thames House,Thames Road, Crayford, Kent DA1 4QP	None stated	boscalid 0.02 (MRL = 1.5)
							paclobutrazol 0.02 (MRL = 0.5)
4521/2016	18/10/2016	Rocha pears	Portugal	Chingford Fruit	Thames House,Thames Road, Crayford, Kent DA1 4QP	None stated	captan and folpet 0.5 (MRL = 3)
							diflubenzuron 0.06 (MRL = 5)
							fenoxycarb 0.02 (MRL = 1)
							fludioxonil 0.02 (MRL = 5)
							fluopyram 0.01 (MRL = 0.5)
							iprodione 0.02 (MRL = 6)
							tebuconazole 0.03 (MRL = 0.3)
4844/2016	02/11/2016	Rocha pears	Portugal	Chingford Fruit	Thames House,Thames Road, Crayford, Kent DA1 4QP	None stated	diflubenzuron 0.01 (MRL = 5)
							dithiocarbamates 0.2 (MRL = 5)
							fludioxonil 1.3 (MRL = 5)
							lambda-cyhalothrin 0.02 (MRL = 0.1)
							tebuconazole 0.09 (MRL = 0.3)
							thiacloprid 0.09 (MRL = 0.3)
							trifloxystrobin 0.02 (MRL = 0.7)
4845/2016	28/11/2016	Rocha pears	Portugal	Chingford Fruit	Thames House,Thames Road, Crayford, Kent DA1 4QP	None stated	dithiocarbamates 0.4 (MRL = 5)
							fludioxonil 0.07 (MRL = 5)
							fluopyram 0.2 (MRL = 0.5)
							tebuconazole 0.08 (MRL = 0.3)
							thiacloprid 0.1 (MRL = 0.3)
							trifloxystrobin 0.02 (MRL = 0.7)
4861/2016	14/09/2016	Rocha pears	Portugal	Greencell UK Ltd	West Marsh Road Pinchbeck Spalding Lincolnshire PE11 3UW	None stated	boscalid 0.06 (MRL = 1.5)
							difenoconazole 0.02 (MRL = 0.8)
							dithiocarbamates 0.09 (MRL = 5)
							fenoxycarb 0.03 (MRL = 1)
							fludioxonil 0.1 (MRL = 5)
							pyraclostrobin 0.02 (MRL = 0.5)
							thiacloprid 0.05 (MRL = 0.3)
4864/2016	30/09/2016	Conference pears	Belgium	Greencell UK Ltd	West Marsh Road Pinchbeck Spalding Lincolnshire PE11 3UW	None stated	boscalid 0.03 (MRL = 1.5)
							captan and folpet 0.1 (MRL = 3)
							cyprodinil 0.05 (MRL = 2)
							difenoconazole 0.02 (MRL = 0.8)
							dithiocarbamates 0.05 (MRL = 5)
							fludioxonil 0.02 (MRL = 5)
							pyraclostrobin 0.02 (MRL = 0.5)

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4866/2016	21/10/2016	Conference pears	Belgium	Greencell UK Ltd	West Marsh Road Pinchbeck Spalding Lincolnshire PE11 3UW	None stated	boscalid 0.04 (MRL = 1.5) captan and folpet 0.02 (MRL = 10) cyprodinil 0.04 (MRL = 2) dithiocarbamates 0.06 (MRL = 5) fludioxonil 0.04 (MRL = 5) pyraclostrobin 0.02 (MRL = 0.5)

Raisins: residues found between October and November 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4893/2016	06/10/2016	Raisins & Sultanas	Turkey	Altitude	206 Deykin Avenue, Witton, Birmingham B6 7BH	Fruity Packs	azoxystrobin 0.01 (MRL = 10) bifenthrin 0.02 (MRL = 1) boscalid 0.02 (MRL = 25) buprofezin 0.02 (MRL = 5) chlorpyrifos 0.03 (MRL = 0.05) cyprodinil 0.1 (MRL = 15) cypermethrin 0.03 (MRL = 2.5) fluopyram 0.03 (MRL = 7.5) indoxacarb 0.02 (MRL = 10) imidacloprid 0.02 (MRL = 5) iprodione 0.4 (MRL = 100) lambda-cyhalothrin 0.05 (MRL = 1) metrafenone 0.01 (MRL = 35) metalaxyl 0.03 (MRL = 10) methoxyfenozide 0.1 (MRL = 5) penconazole 0.03 (MRL = 1) pyrimethanil 0.1 (MRL = 25) tebuconazole 0.03 (MRL = 2.5) tebufenpyrad 0.02 (MRL = 2.5) triadimefon & triadimenol 0.01 (MRL = 10)
4894/2016	06/10/2016	Raisins & Sultanas	Turkey	Altitude	206 Deykin Ave, Birmingham B6 7BL	Fruity Packs	azoxystrobin 0.01 (MRL = 10) bifenthrin 0.03 (MRL = 1) boscalid 0.01 (MRL = 25) buprofezin 0.02 (MRL = 5) chlorpyrifos 0.03 (MRL = 0.05) cyprodinil 0.07 (MRL = 15) fluopyram 0.03 (MRL = 7.5) indoxacarb 0.02 (MRL = 10) imidacloprid 0.03 (MRL = 5) iprodione 0.5 (MRL = 100) lambda-cyhalothrin 0.04 (MRL = 1) metalaxyl 0.02 (MRL = 10) methoxyfenozide 0.05 (MRL = 5) penconazole 0.01 (MRL = 1) pyrimethanil 0.1 (MRL = 25) tebuconazole 0.03 (MRL = 2.5) tebufenpyrad 0.02 (MRL = 2.5)

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4889/2016	22/11/2016	Fruity Packs Sultana & Raisins	Turkey	Fruity Packs	Guyhirn, Wisbech, PE13 4AG	Fruity Packs	None were detected above the set RL
4890/2016	22/11/2016	Fruity Packs Sultanas & Raisins	Turkey	Fruity Packs	Guyhirn, Wisbech, PE13 4AG	Fruity Packs	boscalid 0.01 (MRL = 25) cyprodinil 0.03 (MRL = 15) cypermethrin 0.03 (MRL = 2.5) indoxacarb 0.03 (MRL = 10) iprodione 0.2 (MRL = 100) lambda-cyhalothrin 0.02 (MRL = 1) methoxyfenozide 0.03 (MRL = 5) pyrimethanil 0.1 (MRL = 25)

Soft Citrus: residues found during November 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4917/2016	28/11/2016	Clemenules	Spain	Capespan International Ltd	Maidstone Studios, New Cut Road, Maidstone ME14 5NZ	None stated	etofenprox 0.02 (MRL = 1) etoxazole 0.01 (MRL = 0.1) imazalil 1.6 (MRL = 5)
4918/2016	28/11/2016	Clemenules	Spain	Capespan International Ltd	Maidstone Studios, New Cut Road, Maidstone ME14 5NZ	None stated	fludioxonil 1.5 (MRL = 10) imazalil 0.7 (MRL = 5)
4872/2016	09/11/2016	Clementines Oronules	Spain	Greencell UK Ltd	West Marsh Road Pinchbeck Spalding Lincolnshire PE11 3UG	None stated	chlorpyrifos 0.02 (MRL = 1.5) imazalil 0.7 (MRL = 5)

Sugarsnap peas: residues found during September 2016

Sample ID	Date of Sampling	Description	Country of Origin	Distributor	Address	Brand Name	Pesticide residues found in mg/kg (MRL)
4536/2016	26/09/2016	Sugar Snap	Peru	Altitude	206 Deykin Avenue Witton Birmingham B6 7BH	None stated	tebuconazole 0.03 (MRL = 2)

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About the SF&VS: Visit the Scheme's website at:

www.nhs.uk/Livewell/5ADAY/Pages/Schoolscheme.aspx

or email:

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About PRiF: Visit PRiF's website at:

https://www.gov.uk/government/collections/pesticide-residues-in-food-results-of-monitoring-programme

Or email:

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