

Crop protection and pesticides data report 2021

This report includes full data on crop protection and pesticides for the past four years. It applies to Co-op own brand products. Data relates to the calendar year.

For more detail, including the actions we take based on our data, please read our [Crop Protection policy](#).

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Products tested

Products were selected for testing based on both the HSE pesticide testing survey and also products known to have potentially higher residue detections than others.

In 2021 90 different products were tested, with 380 samples in total. The table below is ordered by the most frequently tested products in 2021.

Products	2018	2019	2020	2021
Table Grapes	27	21	15	18
Apples	24	16	14	16
Beans with pod	17	16	9	13
Bananas	15	10	8	12
Tomatoes	8	13	10	12
Strawberries	15	15	9	11
Broccoli	12	13	8	10
Raspberries	15	12	10	10

Blueberries	19	14	10	9
Carrots	12	11	6	9
Pears	12	9	10	9
Potatoes	11	11	8	9
Spinach				9
Lettuce	12	8	8	7
Mangoes	10	7	7	7
Pineapples	10	8	5	7
Sweet Peppers	6	6	7	7
Mixed berries				7
Lemons	8	7	5	6
Melons	4	6	5	6
Oranges	8	8	6	6
Peas with pod	13	11	9	6
Plums	8	10	7	6
Asparagus		3	6	5
Bread				5
Limes	7	5	5	5
Mushrooms	8	6	4	5
Parsley	4	8	6	5
Parsnips	6	8	4	5
Apricots	2	4	3	4
Avocado	1	4	9	4
Butternut squash	2	5	6	4
Cherries	9	7	5	4
Coriander	8	8	6	4
Courgettes	6	6	6	4
Cabbage	6	9	7	4
Kiwi Fruit	2	5	4	4
Mandarins	10	10	8	4
Onions	2	4	6	4
Rocket		2	4	4
Spring Onions		4	3	4
Sweet Potatoes	1	3	5	4
Baby Leaves	8	10	7	3
Basil	6	5	6	3
Cauliflower	1	3	4	3
Cucumbers	2	3	4	3
Kale		3	2	3
Nectarines	10	5	4	3
Swedes		2	2	3
Sweetcorn	1	3	3	3
Thyme	2	4	3	3
Watermelons	5	6	5	3
Aubergines	2	3	5	2
Baby corn	1	2	2	2
Blackberries	17	10	9	2
Brussel Sprouts		2	4	2

Celery		2	3	2
Chilli Peppers	9	10	7	2
Fennel	1	2	2	2
Flour				2
Garlic		2	3	2
Ginger Root	3	5	5	2
Grapefruit	7	7	6	2
Leeks		3	3	2
Pak Choi	6	4	4	2
Peaches	3	4	2	2
Coconut oil				2
Rice				2
Walnuts				2
Wine				2
Cumin				1
Mint	6	3	6	1
Peas without pod	1	3	1	1
Radishes	4	3	4	1
Rosemary	1	2	3	1
Shallots		1	2	1
Spring Greens		1	3	1
Sultanas				1
Turmeric	1	1		1
Watercress	1	3	3	1
Apple juice			0	1
Beef				1
Brazil nuts				1
Butter				1
Coffee				1
Mandarin				1
Sage				1
Salmon				1
Tangerine				1
Tea				1
Beans without pod	1	2	1	
Cassava	3	1		
Chayotes	2	1		
Citrus				
Coconuts		2	1	
Cranberries		1	1	
Cress			1	
Dudhi	1	2		
Eddoes	2	1		
Figs	3	1		
Lemon Grass	1	1		
Mooli	4	2		
Okra	2	2	2	
Passion Fruit	4	8	3	

Persimmon	2	2	1	
Physalis	2	2		
Plantains	2	1		
Pomegranates	2		1	
Pumpkins	1	1	1	
Total	470	480	402	380

Detections by product

This table includes only those products that were tested and a residue was detected.

380 samples were tested for multiple-residues, resulting in 194923 test results. A single sample could have multiple residues of different active substances detected.

Sultanas had the highest average number of residues detected per sample (n=1, 26 detections).

Product	No. samples tested	No. samples with detection	No. detections	No. samples with 1 residue below MRL	No. samples with multiple residues below MRL	No. exceedances	% samples with residues detected	Average detections per sample
Sultanas	1	1	26		1		100	26.0
Sage	1	1	9		1		100	9.0
Mandarins	4	4	20		4		100	5.0
Grapefruit	2	2	9		2		100	4.5
Basil	3	3	13		3		100	4.3
Peas with pod	6	6	24	2	4		100	4.0
Cherries	4	4	16		4		100	4.0
Kale	3	3	12		3		100	4.0
Mandarin	1	1	4		1		100	4.0
Tangerine	1	1	4		1		100	4.0
Oranges	6	5	23		5		83	3.8
Baby leaves	3	3	11		3		100	3.7
Apples	16	12	58	4	8		75	3.6
Coriander	4	4	14	2	1	1	100	3.5
Rocket	4	3	14		3		75	3.5
Mixed berries	7	7	24		5	2	100	3.4
Parsley	5	4	16		4		80	3.2
Strawberries	11	9	34		9		82	3.1
Thyme	3	3	9		3		100	3.0
Peaches	2	1	6		1		50	3.0
Apple juice	1	1	3		1		100	3.0
Table grapes	18	15	47	4	11		83	2.6
Lemons	6	5	15	1	4		83	2.5
Blackberries	2	2	5		1	1	100	2.5
Limes	5	4	12		4		80	2.4
Nectarines	3	3	7	1	2		100	2.3
Apricots	4	3	9		3		75	2.3

Pears	9	5	20	1	4		56	2.2
Bananas	12	8	25		8		67	2.1
Raspberries	10	6	20	2	3	1	60	2.0
Melons	6	5	12	1	4		83	2.0
Watercress	1	1	2		1		100	2.0
Spinach	9	7	16	3	4		78	1.8
Tomatoes	12	6	18	1	5		50	1.5
Plums	6	6	9	3	3		100	1.5
Salad onions	4	2	6	1	1		50	1.5
Sweet peppers	7	4	10	2	2		57	1.4
Parsnips	5	4	7	3	1		80	1.4
Blueberries	9	3	10	1	2		33	1.1
Kiwi fruit	4	4	4	4			100	1.0
Fennel	2	2	2	2			100	1.0
Garlic	2	1	2			1	50	1.0
Cumin	1	1	1			1	100	1.0
Radishes	1	1	1	1			100	1.0
Mangoes	7	5	6	4	1		71	0.9
Broccoli	10	2	8	1	1		20	0.8
Lettuce	7	3	5	1	2		43	0.7
Pineapple	7	5	5	5			71	0.7
Beans with pod	13	5	9	2	2	1	38	0.7
Cucumbers	3	1	2		1		33	0.7
Watermelons	3	2	2	2			67	0.7
Bread	5	4	3	3		1	80	0.6
Courgettes	4	2	2	2			50	0.5
Sweet potatoes	4	2	2	2			50	0.5
Brussel sprouts	2	1	1	1			50	0.5
Celery	2	1	1	1			50	0.5
Flour	2	1	1	1			50	0.5
Ginger	2	1	1	1			50	0.5
Carrots	9	2	4	1	1		22	0.4
Potatoes	9	3	4	2	1		33	0.4
Mushrooms	5	2	2	2			40	0.4
Asparagus	5	2	1	1		1	40	0.2
Total	325	220	668	71	139	10		

Tests by product's region and country of origin

Region	Number of tests
UK	97

EU	84
Rest of world	98
Unspecified	101
Total	363

Unspecified covers samples that were for products that originated from a packhouse or company often located in the UK, but the origin of the product was not specified.

Country	2018	2019	2020	2021
Unspecified	12	6	13	101
UK	96	118	96	96
Spain	78	83	65	56
Italy	15	17	18	13
Peru	9	11	13	10
Kenya	17	14	9	10
Morocco	27	26	21	9
South Africa	25	27	18	9
Egypt	17	20	13	9
Brazil	12	13	12	7
Chile	14	14	12	7
Colombia	10	14	6	6
Guatemala	17	10	9	5
Netherlands	7	12	15	5
Portugal	6	4	10	5
Mexico	5	6	8	4
India	6	10	4	4
Dominican Republic	9	5	2	4
Costa Rica	18	10	4	3
Belgium	5	3	3	3
China	5	4	3	2
France		5	3	2
Senegal	1	1	3	2
Sri Lanka				2
Germany	3	4	2	1
Israel	7	3	5	1
USA	2	3	3	1
Ghana	2	2	3	1
Honduras		2	1	1
Indonesia				1
Jordan	4	5	3	
Zimbabwe	6	1	4	
Greece	4	3	2	
New Zealand	2	3	4	
Argentina	5	2	1	
Cote d'Ivoire	3	3	2	
Poland	6	1	1	
Turkey	2	3	1	

Viet Nam	3	2	1	
Thailand	2	2	1	
Namibia	1	1	2	
Puerto Rico	2	1	1	
Ecuador	2	1		
Jersey		1	1	
Lebanon		1	1	
Tunisia		1	1	
Croatia		1		
Cyprus	1			
Hungary			1	
Ireland	1			
Mozambique	1			
Panama		1		
Zambia			1	
Total	470	480	402	380

2021 Country summary statistics

Country	No. samples	No. detections	No. exceedances	No. samples with a detection	Percentage of samples with a detection	Average detections per sample
UK	96	168	3	54	56	1.8
Unspecified	101	120	1	38	38	1.2
Spain	56	107	1	33	59	1.9
South Africa	9	25	0	6	67	2.8
Italy	13	25	0	11	85	1.9
Chile	7	23	0	6	86	3.3
Kenya	10	23	0	6	60	2.3
Colombia	6	21	0	7	117	3.5
Brazil	7	21	0	6	86	3.0
Morocco	9	21	0	8	89	2.3
Guatemala	5	17	0	5	100	3.4
Egypt	9	17	1	5	56	1.9
Belgium	3	16	0	3	100	5.3
Peru	10	12	0	5	50	1.2
Portugal	5	11	0	4	80	2.2
Mexico	4	9	3	4	100	2.3
Germany	1	8	0	1	100	8.0
Netherlands	5	8	0	4	80	1.6
Honduras	1	3	0	1	100	3.0
Costa Rica	3	3	0	3	100	1.0
Ghana	1	2	0	1	100	2.0
France	2	2	1	2	100	1.0

Dominican Republic	4	2	0	1	25	0.5
USA	1	1	0	1	100	1.0
China	2	1	0	1	50	0.5
Senegal	2	1	0	1	50	0.5
India	4	1	0	1	25	0.3
Indonesia	1	0	0	0	0	0.0
Israel	1	0	0	0	0	0.0
Sri Lanka	2	0	0	0	0	0.0
Total	380	668	10	218		

Same table as above but ordered by Average detections per sample.

Country	No. samples	No. detections	No. exceedances	No. samples with a detection	Percentage of samples with a detection	Average detections per sample
Germany	1	8	0	1	100	8.0
Belgium	3	16	0	3	100	5.3
Colombia	6	21	0	7	117	3.5
Guatemala	5	17	0	5	100	3.4
Chile	7	23	0	6	86	3.3
Brazil	7	21	0	6	86	3.0
Honduras	1	3	0	1	100	3.0
South Africa	9	25	0	6	67	2.8
Morocco	9	21	0	8	89	2.3
Kenya	10	23	0	6	60	2.3
Mexico	4	9	3	4	100	2.3
Portugal	5	11	0	4	80	2.2
Ghana	1	2	0	1	100	2.0
Italy	13	25	0	11	85	1.9
Spain	56	107	1	33	59	1.9
Egypt	9	17	1	5	56	1.9
UK	96	168	3	54	56	1.8
Netherlands	5	8	0	4	80	1.6
Peru	10	12	0	5	50	1.2
Unspecified	101	120	1	38	38	1.2
Costa Rica	3	3	0	3	100	1.0
France	2	2	1	2	100	1.0
USA	1	1	0	1	100	1.0
Dominican Republic	4	2	0	1	25	0.5
China	2	1	0	1	50	0.5
Senegal	2	1	0	1	50	0.5
India	4	1	0	1	25	0.3
Indonesia	1	0	0	0	0	0.0
Israel	1	0	0	0	0	0.0
Sri Lanka	2	0	0	0	0	0.0
Total	380	668	10	218		

Products tested by country

Region	Country	Apple juice	Apples	Apricots	Asparagus	Aubergines	Avocado	Baby corn	Baby leaves	Bananas	Basil	Beans with pod	Beef	Blackberries	Blueberries	Brazil nuts	Bread	Broccoli	Brussel sprouts	Butter	Butternut squash	Cabbage	Carrots	Cauliflower	Celery	Cherries	Chillies	Coconut oil	Coffee	Coriander	Courgettes	Cucumbers	Cumin	Fennel	Flour	Garlic	Ginger	Grapefruit	Kale	Kiwi fruit	Leeks	Lemons	Lettuce	Limes	Mandarin	Mandarins									
UK			20	2					6	6	4			3	1			0	1	0		0	4	0	1	4				12	0				1			12	0		0														
EU	Belgium																																																						
	France		1																																																				
	Germany		8																																																				
	Italy		1																							3					1				2						2		0												
	Netherlands																																																						
	Portugal														2																																								
	Spain		14	7		0										0		0				0				3				1	1	0				2		3			12	3						11							
Rest of world	Brazil		10																																																				
	Chile		4												0										6																														
	China																																																						
	Colombia									21																																													
	Costa Rica																																																						
	Dominican Republic						0			2																																													
	Egypt											1																																											
	Ghana									2																																													
	Guatemala											1																																											
	Honduras																																																						
	India							0																																															
	Indonesia																																																						
	Israel						0																																																
	Kenya							0			7	0						8																																					
	Mexico				1																																																		
	Morocco											3				4																																							
	Peru				0		0																																																
	Senegal																																																						
	South Africa																		0								0																												
	Sri Lanka																												0																										
USA																																																							
Unspecified		3	0	0	0	0		5	0		0	0		5	0	3					0		0	0	0		0			1	0					0		6		2		3	2	5											
Total		3	58	9	1	0	0	11	25	13	9	0	5	10	0	3	8	1	0	0	0	0	4	0	1	16	0	0	0	14	2	2	1	2	1	2	1	9	12	4	0	15	5	12	4	20									

Table continued. Part 2.

Region	Country	Mangoes	Melons	Mint	Mixed berries	Mushrooms	Nectarines	Onions	Oranges	Pak choi	Parsley	Parsnips	Peaches	Pears	Peas with pod	Peas without pod	Pineapple	Plums	Potatoes	Radishes	Raspberries	Rice	Rocket	Rosemary	Sage	Salad onions	Salmon	Shallots	Spinach	Spring greens	Strawberries	Sultanas	Swede	Sweet peppers	Sweet potatoes	Sweetcorn	Table grapes	Tangerine	Tea	Thyme	Tomatoes	Turmeric	Walnuts	Watercress	Watermelons	Wine	Grand Total			
UK				0	14	2		0			14	7		0			5	4		4		7		9	1		0		0	17		0	1	0				2	4							168				
EU	Belgium													16																																	16			
	France																																																2	
	Germany																																																8	
	Italy																						7	0					1								4						4						25	
	Netherlands							0							3																																	8		
	Portugal																					9																											11	
	Spain		6					0	0	2			6									0							6	2			6				4	4			3	8		2	1	0		107		
Rest of world	Brazil	2																																														21		
	Chile					4											2																																23	
	China																																																1	
	Colombia																																																21	
	Costa Rica	1															2																															3		
	Dominican Republic																																															2		
	Egypt								8																		5				3					0													17	
	Ghana																																															2		
	Guatemala				2										14																																	17		
	Honduras		3																																													3		
	India																																																1	
	Indonesia																	0																															0	
	Israel																																																0	
	Kenya														4																																		23	
	Mexico				8																																													9
	Morocco																					2									3																			21
	Peru		2													3																																	12	
	Senegal																																																1	
	South Africa					2			9									2																																25
	Sri Lanka																																																	0
USA																																																1		
Unspecified		1	3		0		1	0	6	0				1	3	0	3	0	0		5	0					0		9	7	26	0	2	1		17			0	0	0				0		120			
Total		6	12	0	24	2	7	0	23	0	16	7	6	20	24	0	5	9	4	1	20	0	14	0	9	6	0	0	16	0	34	26	0	10	2	0	47	4	0	9	18	0	0	2	2	0				

Residue statistics

All countries	2018	2018 (%)	2019	2019 (%)	2020	2020 (%)	2021	2021 (%)
Number of samples	470		480		402		380	
Samples with zero residues	133	28	168	35	126	31	160	42.1
Samples with 1 residue below MRL	110	23	110	23	82	20	71	18.7
Samples with multiple residues all below MRL	218	46	191	40	181	45	139	36.6
Samples with at least 1 MRL exceedence	9	2	11	2	13	3	10	2.6
Number of detections	949		842		748		668	
Average detections per sample	2.02		1.75		1.86		1.76	
UK (including Jersey)	2018	2018 (%)	2019	2019 (%)	2020	2020 (%)	2021	2021 (%)
Number of samples	96	20.4	119	24.8	97	24.1	97	
Samples with zero residues	30	31.3	52	43.7	42	43.3	43	44.3
Samples with 1 residue below MRL	29	30.2	34	28.6	22	22.7	19	19.6
Samples with multiple residues all below MRL	36	37.5	32	26.9	30	30.9	32	33.0
Samples with at least 1 MRL exceedence	1	1	1	0.8	3	3.1	3	3.1
Number of detections	190		166		152		168	
Average detections per sample	1.98		1.39		1.57		1.73	
EU	2018	2018 (%)	2019	2019 (%)	2020	2020 (%)	2021	2021 (%)
Number of samples	126	26.8	133	27.7	120	29.9	84	
Samples with zero residues	37	29.4	43	32.3	37	30.8	26	31.0
Samples with 1 residue below MRL	28	22.2	21	15.8	22	18.3	18	21.4
Samples with multiple residues all below MRL	61	48.4	69	51.9	59	49.2	38	45.2
Samples with at least 1 MRL exceedence	0	0	0	0	2	1.7	2	2.4
Number of detections	241		255		223		177	
Average detections per sample	1.91		1.92		1.86		2.11	
Rest of world	2018	2018 (%)	2019	2019 (%)	2020	2020 (%)	2021	2021 (%)

Number of samples	236	50.2	222	46.3	172	42.8	98	
Samples with zero residues	62	26.3	70	31.5	41	23.8	29	29.6
Samples with 1 residue below MRL	51	21.6	54	24.3	36	20.9	19	19.4
Samples with multiple residues all below MRL	115	48.7	88	39.6	89	51.7	46	46.9
Samples with at least 1 MRL exceedence	8	3.4	10	4.5	6	3.5	4	4.1
Number of detections	491		414		352		203	
Average detections per sample	2.08		1.86		2.05		2.07	
Unspecified	2018	2018 (%)	2019	2019 (%)	2020	2020 (%)	2021	2021 (%)
Number of samples	12	2.6	6	1.3	13	3.2	101	
Samples with zero residues	4	33.3	3	50	6	46.2	62	61.4
Samples with 1 residue below MRL	2	16.7	1	16.7	2	15.4	15	14.9
Samples with multiple residues all below MRL	6	50	2	33.3	3	23.1	23	22.8
Samples with at least 1 MRL exceedence	0	0	0	0	2	15.4	1	1.0
Number of detections	27		7		21		120	
Average detections per sample	2.25		1.17		1.62		1.19	

WHO1a/1b and PAN HHP detections over time

This is the number of residue detections for active substances that are classified as WHO1a or WHO 1b or PAN Highly Hazardous Pesticides (HHP).

	2019	2020	2021
WHO 1a	0	0	0
WHO 1b	4	4	2
PAN HHP	228	167	208

Active substance detections over time with WHO1a/1b and PAN HHP designation.

Active	2018	2019	2020	2021	Total	WHO 1a, 1b	PAN HHP	Comments
Fludioxonil	73	67	56	52	248	No	No	
Boscalid	68	55	51	39	213	No	No	
Azoxystrobin	48	42	41	30	161	No	No	
Dithiocarbamates	44	29	33	30	136	No	No	
Fluopyram	27	26	33	29	115	No	No	
Pyrimethanil	33	46	32	25	136	No	No	
Acetamiprid	20	20	24	22	86	No	No	
Imazalil	37	36	30	21	124	No	Yes	
Captan	24	14	11	19	68	No	Yes	Added to PAN HHP list in 2021.
Thiabendazole	21	20	21	19	81	No	Yes	Added to PAN HHP list in 2021.
Cyprodinil	32	29	27	18	106	No	No	
Spinosad	13	7	11	17	48	No	Yes	Includes A and B forms
Difenoconazole	16	26	21	15	78	No	No	
Fenhexamid	23	20	11	15	69	No	Yes	Added to PAN HHP list in 2021.
cis-1,2,3,6-Tetrahydrophthalimide				13	13	No	No	
Deltamethrin	9	11	8	13	41	No	Yes	
Pyraclostrobin	28	26	27	13	94	No	No	
Tebuconazole	17	13	14	13	57	No	Yes	
Chlorantraniliprole	15	19	10	12	56	No	Yes	
Propamocarb	12	12	13	11	48	No	No	
Fluopicolide	4	1	3	10	18	No	No	
Mandipropamid	11	12	10	10	43	No	No	
Dimethomorph	7	7	8	9	31	No	No	Includes E and Z forms
Metalaxyl	9	4	4	9	26	No	No	
Pyriproxyfen	4	5	9	9	27	No	No	
Trifloxystrobin	9	14	9	9	41	No	No	
Ethephon	11	4	7	7	29	No	No	
Metrafenone	4	9	5	7	25	No	No	
Aclonifen		4	3	6	13	No	No	
Fenpyroximate	1	1		6	8	No	Yes	
Fluxapyroxad	4	2	1	6	13	No	No	
Imidacloprid	21	12	7	6	46	No	Yes	
Pendimethalin	9	3	6	6	24	No	Yes	
Chlorates			13	5	18	No	No	
Chloridazon			1	5	6	No	No	
Chlorothalonil	5	8	4	5	22	No	Yes	
Cyantraniliprole		3	6	5	14	No	No	
Myclobutanil	9	10	10	5	34	No	No	
2-Phenylphenol	5	10	7	4	26	No	No	
Bifenazate	5	3	2	4	14	No	No	
Flupyradifurone		1	5	4	10	No	Yes	

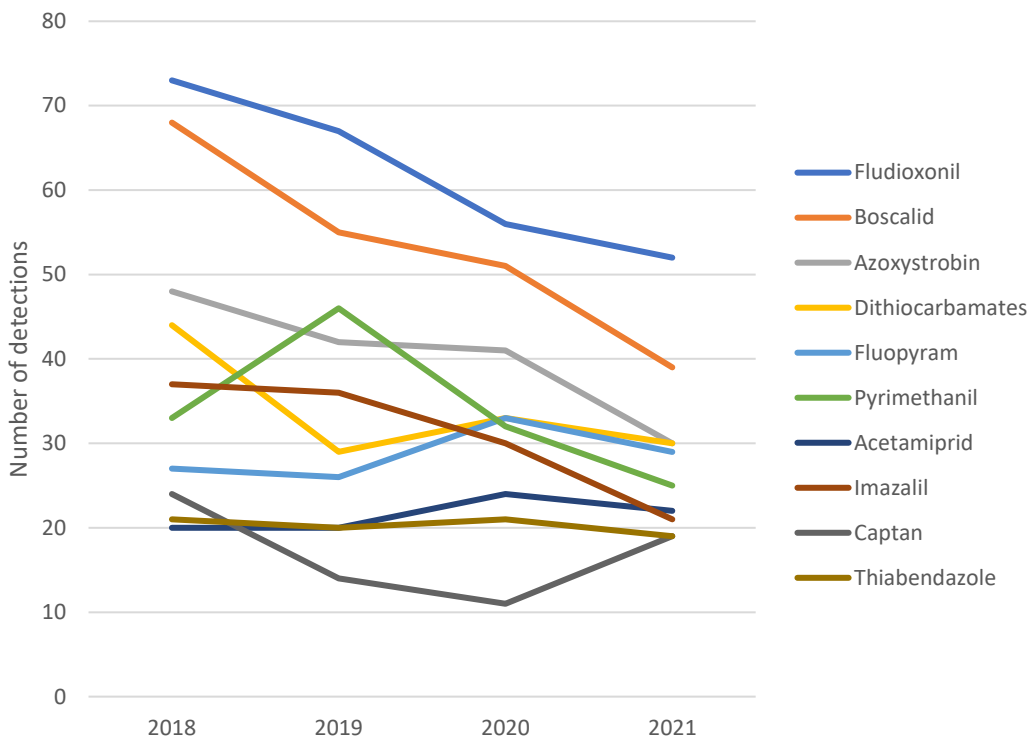
Fosetyl				4	4	No	No
Fosetyl-Al		22	6	4	32	No	No
Lambda-cyhalothrin	19	20	9	4	52	No	Yes
Ametoctradin		1	2	3	6	No	No
Cypermethrin	22	10	8	3	43	No	Yes
Flonicamid	1		1	3	5	No	No
Hexythiazox	1	3	1	3	8	No	Yes
Perchlorate				3	3	No	No
Phenmedipham		1	1	3	5	No	No
Spirodiclofen	4	3		3	10	No	Yes
Spirotetramat	6	2	5	3	16	No	No
Bifenthrin	9	4	4	2	19	No	Yes
Copper	17	9	13	2	41	No	No
Dodine				2	2	No	Yes
Ethylene oxide				2	2	No	Yes
Etofenprox	6	2	1	2	11	No	Yes
Fenpropimorph	1	1	1	2	5	No	No
Fenpyrazamine			1	2	3	No	No
Indoxacarb	9	7	11	2	29	No	Yes
Isopyrazam	2	1	4	2	9	No	Yes
Mepanipyrim		2		2	4	No	Yes
Methoxyfenozide	8	3	6	2	19	No	No
Penconazole	4	3	1	2	10	No	No
Phosmet	4	1		2	7	No	Yes
Phthalimide	4			2	6	No	No
Propiconazole		6	3	2	11	No	Yes
Proquinazid		1	1	2	4	No	No
Pyridaben	1			2	3	No	Yes
Spinetoram	1	4	3	2	10	No	Yes
Spiromesifen	3	1	2	2	8	No	No
Triallate	3		1	2	6	No	Yes
2,4,6-Trichlorophenol			1	1	2	No	No
Abamectin	2	1	1	1	5	WHO 1b	Yes
Carbendazim	7	6	5	1	19	No	Yes
Chlormequat				1	1	No	No
Cymoxanil				1	1	No	No
Dimethoate		1		1	2	No	Yes
Emamectin				1	1	No	Yes
Famoxadone	2	2	1	1	6	No	No
Fenpropathrin				1	1	No	Yes
Fenpropidin				1	1	No	No
Fenvalerate				1	1	No	Yes
Flutriafol	3	3	1	1	8	No	No
Glyphosate				1	1	No	Yes
Malathion	1	1	1	1	4	No	Yes
Maleic hydrazide	1			1	2	No	No
Metaflumizone		1		1	2	No	Yes

Methamidophos	2			1	3	WHO 1b	Yes	
Piperonyl butoxide	2	2	2	1	7	No	No	
Pirimicarb	6	4	1	1	12	No	Yes	
Prochloraz	6	4	2	1	13	No	No	
Propyzamide		1	1	1	3	No	No	
Prosulfocarb	3	1	4	1	9	No	No	
Pyrethrin I	3			1	4	No	Yes	Added to PAN HHP list in 2021.
Pyridalyl		1	1	1	3	No	Yes	
Sulfoxaflor				1	1	No	Yes	
Tebufenozide	1			1	2	No	No	
Tetraconazole	2		1	1	4	No	Yes	Added to PAN HHP list in 2021.
TFNA				1	1	No	No	
Zoxamide				1	1	No	No	
2,4-D			1		1	No	Yes	Added to PAN HHP list in 2021.
Acephate	2		1		3	No	Yes	
Azadirachtin		1			1	No	No	
Benfluralin	1				1	No	No	
Benzalkonium chloride C12					0	No	No	
Benzalkonium chloride C16					0	No	No	
Biphenyl					0	No	Yes	
Bromuconazole					0	No	No	
Bupirimate	6	2			8	No	No	
Buprofezin	5	2			7	No	No	
Chlorpropham	7	4	1		12	No	Yes	Added to PAN HHP list in 2021.
Chlorpyrifos	6	3	2		11	No	Yes	
Chlorpyrifos-methyl	3	4			7	No	Yes	
Clofentezine	1				1	No	No	
Clothianidin		1	2		3	No	Yes	
Cyazofamid		2	2		4	No	No	
Cyflufenamid					0	No	No	
Cyflumetofen					0	No	No	
Cyfluthrin	2		3		5	WHO 1b	Yes	
Cyromazine	9	2	2		13	No	No	
DDT					0	No	Yes	
Diazinon			2		2	No	Yes	
Didecyldimethylammonium chloride					0	No	No	
Dieldrin	1		1		2	No	No	
Emamectin benzoate	3	1	1		5	No	Yes	
Ethirimol	3				3	No	Yes	
Etoxazol	1	3			4	No	No	

Fenamidone	1				1	No	No	
Fenazaquin	2				2	No	Yes	
Fenbuconazole	2	3			5	No	Yes	Added to PAN HHP list in 2021.
Flufenoxuron					0	No	Yes	
Folpet		1			1	No	Yes	
Furmecyclox					0	No	No	
Iprodione	7	2	1		10	No	Yes	
Iprovalicarb			1		1	No	Yes	
Kresoxim-methyl	1	1	1		3	No	Yes	
Linuron	10	7			17	No	Yes	
Lufenuron		1			1	No	Yes	
Mepiquat					0	No	No	
Methiocarb	1	1			2	WHO 1b	Yes	
Metribuzin			1		1	No	Yes	
Nicotine		1			1	WHO 1b	Yes	
Omethoate		1			1	WHO 1b	Yes	
p,p'-DDE					0	No	No	
Penthiopyrad			1		1	No	No	
Perchlorates			6		6	No	No	
Phosphorous Acid					0	No	No	
Profenofos					0	No	Yes	
Prothioconazole	1	2	1		4	No	No	
Pymetrozine	4	5			9	No	Yes	
Quinoxifen	2	1	2		5	No	Yes	
Quizalofop					0	No	Yes	
Spiroxamine	2				2	No	No	
Tau-Fluvalinate					0	No	Yes	
Tebufenpyrad	1	1			2	No	No	
Teflubenzuron		2	1		3	No	No	
Thiacloprid	16	14	10		40	No	Yes	
Thiamethoxam	4	5	3		12	No	Yes	
Thiophanate-methyl		1			1	No	Yes	
Tolfenpyrad		1			1	No	Yes	
Triadimenol	1	1	1		3	No	Yes	
TOTAL	949	842	748	668	3207	6	79	

		2021
Actives substances	No. Actives detected	101
	WHO 1a 1b	2
	PAN HHP	44
Residue detections	Detections	668
	WHO 1a 1b	2
	PAN HHP	208

Ten most detected active substances over time.



Ten most detected active substances and the products detected in

Active substance	Apple juice	Apples	Apricots	Baby leaves	Bananas	Basil	Beans with pod	Blackberries	Blueberries	Broccoli	Brussel sprouts	Carrots	Cherries	Coriander	Courgettes	Grapefruit	Kale	Kiwi fruit	Lemons	Lettuce	Limes	Mandarin	Mandarins	Mangoes	Melons	Mixed berries	Nectarines	Oranges	Parsley	Parsnips	Peaches	Pears	Peas with pod	Pineapple	Plums	Potatoes	Radishes	Raspberries	Rocket	Sage	Salad onions	Spinach	Strawberries	Sultanas	Sweet peppers	Sweet potatoes	Table grapes	Tangerine	Thyme	Tomatoes	Grand Total	
Fludioxonil		4					1	2			1	4						3						5			2	2	1	1	1	4		5	4			2	1					1	1	2	3			2	52	
Boscalid		3		3	2		1	1			1	2	1				1		1						1	3				2		2					1	2	1			1	1	1	1		7					39
Azoxystrobin					8	1	1							2						1	1			1		1		1	2	1			3		1			1				2	1					1			30	
Dithiocarbamates		5	1	1		3				1						1	1		1	1					1				1			5		1									3			1	1		1	30		
Fluopyram		1	3				1	1	2				1		1												1				3			1				1				5	1	1		5				29		
Pyrimethanil	1	4														1			2		1	1	2			1	1	4						1				1							1					25		
Acetamiprid		5						1					3	1	1										1	1	1		1	1													1			2		1	1	22		
Imazalil																2			4		4	1	3		1			5																		1				21		
Captan	1	13																													4																			19		
Thiabendazole					6											1			2		1		4					5																							19	
Grand Total	2	35	4	4	16	4	4	2	5	1	1	3	9	3	1	6	2	3	10	2	7	2	9	6	4	6	5	#	5	4	3	10	11	5	7	1	1	7	6	1	2	1	10	7	3	2	#	3	2	4		

Exceedances

2021 exceedances details

There were 10 exceedances in 2021. 4 of these were active substances that are on the PAN HHP list: Ethylene oxide, dimethoate and methamidophos.

Date sampled	Crop or Crop Group	Country	Pesticide	Level Found (mg/kg)	UK MRL (mg/kg)
15/06/2021	Raspberries	UK	Flonicamid	0.06	0.03
27/08/2021	Bread	Unspecified	Ethylene oxide	0.083	0.02
27/08/2021	Cumin	France	Ethylene oxide	1.3	0.1
03/09/2021	Asparagus	Mexico	TFNA	0.076	0.03
04/09/2021	Dwarf beans	Egypt	Fosetyl-Al	2.56	2
24/09/2021	Coriander	UK	Propyzamide	0.29	0.2
02/11/2021	Mixed berries	Mexico	Dimethoate	0.05	0.01
02/11/2021	Mixed berries	Mexico	Methamidophos	0.02	0.01
08/11/2021	Garlic	Spain	Prochloraz	0.18	0.03
11/11/2021	Blackberries	UK	Cyantranilprole	0.02	0.01

Blue highlight indicates actives that are on the PAN HHP list.

2020 exceedances details

Date sampled	Crop or Crop Group	Country	Pesticide	Level Found (mg/kg)	MRL (mg/kg)	Comments
03-Mar-20	Lettuce		Chlorates	0.024	0.01	Chlorates MRL 0.7 from 28/06/2020
03-Mar-20	Lettuce		Chlorates	0.197	0.01	Chlorates MRL 0.7 from 28/06/2020
31-Mar-20	Baby Leaf Spinach	Italy	Chlorates	0.015	0.01	Chlorates MRL 0.7 from 28/06/2020
31-Mar-20	Butternut squashes	Brazil	Imazalil	0.08	0.05	
31-Mar-20	Blackberries	Mexico	Iprodione	0.05	0.01	
31-Mar-20	Cauliflower	UK	Chlorates	0.088	0.01	Chlorates MRL 0.06 from 28/06/2020
31-Mar-20	Rocket	Italy	Chlorates	0.244	0.01	Chlorates MRL 0.7 from 28/06/2020
06-Aug-20	Parsley	UK	Dithiocarbamates	6.2	5	
07-Sep-20	Cherries	UK	Fosetyl-aluminium	9.2	2	Environmental contaminant
02-Oct-20	Avocados	Dominican Republic	Chlorothalonil	0.06	0.01	
02-Oct-20	Pea with pod	Kenya	Famoxadone	0.02	0.01	
29-Oct-20	Ginger Root	Brazil	Clothianidin	0.07	0.01	
23-Dec-20	Blackberries	Mexico	Dithiocarbamates	0.06	0.05	

2019 exceedances details

Date sampled	Crop or Crop Group	Country	Pesticide	Level Found (mg/kg)	MRL (mg/kg)	Comments
29-Jan-19	Basil	Kenya	Dithiocarbamates	10	5	
28-Feb-19	Raspberries	Zimbabwe	Nicotine	0.03	0.01	Environmental contaminant
28-Feb-19	Blueberries	Morocco	Fosetyl-aluminium	28.3	2	
28-Feb-19	Pea with pod	Guatemala	Omethoate	0.02	0.01	
29-Mar-19	Basil	Jordan	Lufenuron	0.21	0.02	
29-Mar-19	Basil	Jordan	Tolfenpyrad	0.03	0.02	
28-May-19	Butternut squashes	South Africa	Fludioxonil	0.34	0.3	
01-Aug-19	Passion Fruit	Colombia	Difenoconazole	0.11	0.1	
30-Aug-19	Plums	UK	Fosetyl-aluminium	7.11	2	Environmental contaminant
30-Aug-19	Pea with pod	Peru	Dithiocarbamates	1.5	1	
02-Oct-19	Passion Fruit	Colombia	Fosetyl-aluminium	2.2	2	Environmental contaminant
04-Dec-19	Mandarins	Turkey	Buprofezin	0.05	0.01	

2018 exceedances details

Date sampled	Crop or Crop Group	Country	Pesticide	Level Found	MRL	Comments
26-Feb-18	Mint	Kenya	Spiromesifen	0.18	0.02	
28-Mar-18	Blackberries	Mexico	Acephate	0.22	0.01	
28-Mar-18	Bean with pod	Kenya	Acephate	0.06	0.01	
28-Mar-18	Bean with pod	Kenya	Methamidophos	0.03	0.01	
28-Mar-18	Basil	Kenya	Spiromesifen	0.06	0.02	
28-Aug-18	Mint	Kenya	Dithiocarbamates	14	5	
25-Oct-18	Blackberries	Guatemala	Famoxadone	0.02	0.01	
25-Oct-18	Figs	Israel	Cyromazine	0.09	0.05	
27-Nov-18	Head Cabbage	UK	Prothioconazole	0.16	0.09	
27-Nov-18	Pomegranates	Turkey	Acetamiprid	0.04	0.01	

Further data

Further data can be found on our [crop protection page](#).