

Crop protection and pesticides data report 2022

This report includes full data on crop protection and pesticides for the past five 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 2022 87 different products were tested, with 363 samples in total. The table below is ordered by the most frequently tested products in 2022.

| Products | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|
| Table Grapes | 27 | 21 | 15 | 18 | 17 |
| Apples | 24 | 16 | 14 | 16 | 15 |
| Beans with pod | 17 | 16 | 9 | 13 | 14 |
| Tomatoes | 8 | 13 | 10 | 12 | 13 |
| Broccoli | 12 | 13 | 8 | 10 | 12 |
| Blueberries | 19 | 14 | 10 | 9 | 11 |

| | | | | | |
|------------------|----|----|----|----|----|
| Potatoes | 11 | 11 | 8 | 9 | 11 |
| Carrots | 12 | 11 | 6 | 9 | 9 |
| Strawberries | 15 | 15 | 9 | 11 | 9 |
| Sweet Peppers | 6 | 6 | 7 | 7 | 9 |
| Bananas | 15 | 10 | 8 | 12 | 8 |
| Mandarins | 10 | 10 | 8 | 4 | 8 |
| Pears | 12 | 9 | 10 | 9 | 8 |
| Raspberries | 15 | 12 | 10 | 10 | 8 |
| Mangoes | 10 | 7 | 7 | 7 | 7 |
| Oranges | 8 | 8 | 6 | 6 | 7 |
| Plums | 8 | 10 | 7 | 6 | 7 |
| Spinach | | | | 9 | 7 |
| Blackberries | 17 | 10 | 9 | 2 | 6 |
| Lemons | 8 | 7 | 5 | 6 | 6 |
| Limes | 7 | 5 | 5 | 5 | 6 |
| Onions | 2 | 4 | 6 | 4 | 6 |
| Avocado | 1 | 4 | 9 | 4 | 5 |
| Bread | | | | 5 | 5 |
| Butternut squash | 2 | 5 | 6 | 4 | 5 |
| Cherries | 9 | 7 | 5 | 4 | 5 |
| Cabbage | 6 | 9 | 7 | 4 | 5 |
| Lettuce | 12 | 8 | 8 | 7 | 5 |
| Mushrooms | 8 | 6 | 4 | 5 | 5 |
| Peas with pod | 13 | 11 | 9 | 6 | 5 |
| Pasta | | | | | 5 |
| Apricots | 2 | 4 | 3 | 4 | 4 |
| Asparagus | | 3 | 6 | 5 | 4 |
| Ginger Root | 3 | 5 | 5 | 2 | 4 |
| Melons | 4 | 6 | 5 | 6 | 4 |
| Pineapples | 10 | 8 | 5 | 7 | 4 |
| Aubergines | 2 | 3 | 5 | 2 | 3 |
| Baby Leaves | 8 | 10 | 7 | 3 | 3 |
| Brussel sprouts | | 2 | 4 | 2 | 3 |
| Celery | | 2 | 3 | 2 | 3 |
| Coriander | 8 | 8 | 6 | 4 | 3 |
| Courgettes | 6 | 6 | 6 | 4 | 3 |
| Kiwi Fruit | 2 | 5 | 4 | 4 | 3 |
| Parsley | 4 | 8 | 6 | 5 | 3 |
| Peaches | 3 | 4 | 2 | 2 | 3 |
| Rocket | | 2 | 4 | 4 | 3 |
| Swedes | | 2 | 2 | 3 | 3 |
| Sweetcorn | 1 | 3 | 3 | 3 | 3 |
| Baby corn | 1 | 2 | 2 | 2 | 2 |
| Cauliflower | 1 | 3 | 4 | 3 | 2 |
| Cucumber | 2 | 3 | 4 | 3 | 2 |
| Fennel | 1 | 2 | 2 | 2 | 2 |
| Flour | | | | 2 | 2 |

| | | | | | |
|-------------------|----|----|---|---|---|
| Garlic | | 2 | 3 | 2 | 2 |
| Grapefruit | 7 | 7 | 6 | 2 | 2 |
| Leeks | | 3 | 3 | 2 | 2 |
| Nectarines | 10 | 5 | 4 | 3 | 2 |
| Parsnips | 6 | 8 | 4 | 5 | 2 |
| Radishes | 4 | 3 | 4 | 1 | 2 |
| Shallots | | 1 | 2 | 1 | 2 |
| Sultanas | | | | 1 | 2 |
| Clementines | | | | | 2 |
| Milk | | | | | 2 |
| Rice | | | | 2 | 2 |
| Tea | | | | 1 | 2 |
| Wine | | | | 2 | 2 |
| Basil | 6 | 5 | 6 | 3 | 1 |
| Kale | | 3 | 2 | 3 | 1 |
| Pak Choi | 6 | 4 | 4 | 2 | 1 |
| Peas without pod | 1 | 3 | 1 | 1 | 1 |
| Pumpkins | 1 | 1 | 1 | | 1 |
| Sweet Potatoes | 1 | 3 | 5 | 4 | 1 |
| Thyme | 2 | 4 | 3 | 3 | 1 |
| Watermelons | 5 | 6 | 5 | 3 | 1 |
| Mixed berries | | | | 7 | 1 |
| Apple juice | | | | 1 | 1 |
| Brazil nuts | | | | 1 | 1 |
| Chilli powder | | | | | 1 |
| Coconut oil | | | | 2 | 1 |
| Coffee | | | | 1 | 1 |
| Curry powder | | | | | 1 |
| Eggs | | | | | 1 |
| Granola | | | | | 1 |
| Honey | | | | | 1 |
| Nuts | | | | | 1 |
| Oats | | | | | 1 |
| Salmon | | | | 1 | 1 |
| Beans without pod | 1 | 2 | 1 | | |
| Cassava | 3 | 1 | | | |
| Chayotes | 2 | 1 | | | |
| Citrus | | | | | |
| Chilli Peppers | 9 | 10 | 7 | 2 | |
| Coconuts | | 2 | 1 | | |
| Cranberries | | 1 | 1 | | |
| Cress | | | 1 | | |
| Cumin | | | | 1 | |
| Dudhi | 1 | 2 | | | |
| Eddoes | 2 | 1 | | | |
| Figs | 3 | 1 | | | |
| Lemon Grass | 1 | 1 | | | |

| | | | | | |
|---------------|------------|------------|------------|------------|------------|
| Mint | 6 | 3 | 6 | 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 | | |
| Rosemary | 1 | 2 | 3 | 1 | |
| Spring Greens | | 1 | 3 | 1 | |
| Spring Onions | | 4 | 3 | 4 | |
| Turmeric | 1 | 1 | | 1 | |
| Watercress | 1 | 3 | 3 | 1 | |
| Beef | | | | 1 | |
| Butter | | | | 1 | |
| Mandarin | | | | 1 | |
| Sage | | | | 1 | |
| Tangerine | | | | 1 | |
| Walnuts | | | | 2 | |
| Total | 470 | 480 | 402 | 380 | 363 |

Detections by product

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

363 samples were tested for multiple-residues each, resulting in 203726 test results. A single sample could have multiple residues of different active substances detected. From 636 samples tested, 155 had no residues present and 208 had at least 1 residue detected. There was a total of 640 detections.

Sultanas had the highest average number of residues detected per sample (n=2, 17 per sample).

| 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 | 2 | 1 | 34 | | 1 | | 50 | 17.0 |
| Baby leaves | 3 | 3 | 25 | | 3 | | 100 | 8.3 |
| Kale | 1 | 1 | 7 | | 1 | | 100 | 7.0 |
| Rocket | 3 | 3 | 18 | | 2 | 1 | 100 | 6.0 |
| Basil | 1 | 1 | 6 | | 1 | | 100 | 6.0 |
| Parsley | 3 | 3 | 15 | | 3 | | 100 | 5.0 |
| Clementines | 2 | 2 | 9 | | 2 | | 100 | 4.5 |
| Strawberries | 9 | 9 | 38 | 2 | 7 | | 100 | 4.2 |
| Curry powder | 1 | 1 | 4 | | 1 | | 100 | 4.0 |
| Table grapes | 17 | 17 | 64 | 2 | 14 | 1 | 100 | 3.8 |
| Coriander | 3 | 3 | 11 | 1 | 2 | | 100 | 3.7 |
| Oranges | 2 | 2 | 7 | | 2 | | 100 | 3.5 |

| | | | | | | | | |
|------------------|----|----|----|---|---|---|-----|-----|
| Pears | 8 | 7 | 27 | 1 | 6 | | 88 | 3.4 |
| Mixed berries | 1 | 1 | 3 | | 1 | | 100 | 3.0 |
| Mandarins | 8 | 7 | 24 | | 6 | 1 | 88 | 3.0 |
| Oranges | 5 | 4 | 15 | | 4 | | 80 | 3.0 |
| Tea | 2 | 1 | 6 | | 1 | | 50 | 3.0 |
| Blackberries | 6 | 3 | 17 | | 3 | | 50 | 2.8 |
| Tomatoes | 13 | 9 | 35 | | 9 | | 69 | 2.7 |
| Peaches | 3 | 2 | 8 | | 2 | | 67 | 2.7 |
| Cherries | 5 | 4 | 13 | 2 | 1 | 2 | 80 | 2.6 |
| Fennel | 2 | 2 | 5 | | 2 | | 100 | 2.5 |
| Grapefruit | 2 | 2 | 5 | | 2 | | 100 | 2.5 |
| Spinach | 7 | 6 | 17 | 1 | 4 | 1 | 86 | 2.4 |
| Bananas | 8 | 6 | 19 | | 6 | | 75 | 2.4 |
| Apples | 15 | 11 | 34 | 3 | 8 | | 73 | 2.3 |
| Parsnips | 2 | 2 | 4 | 1 | 1 | | 100 | 2.0 |
| Raspberries | 8 | 6 | 16 | 2 | 4 | | 75 | 2.0 |
| Plums | 7 | 6 | 13 | 3 | 3 | | 86 | 1.9 |
| Lemons | 6 | 4 | 11 | 1 | 3 | | 67 | 1.8 |
| Apricots | 4 | 3 | 7 | | 3 | | 75 | 1.8 |
| Mangoes | 7 | 6 | 12 | 3 | 3 | | 86 | 1.7 |
| Brussel sprouts | 3 | 3 | 5 | 2 | 1 | | 100 | 1.7 |
| Blueberries | 11 | 7 | 15 | 3 | 4 | | 64 | 1.4 |
| Sweet peppers | 9 | 5 | 11 | 3 | 2 | | 56 | 1.2 |
| Peas with pod | 5 | 3 | 6 | 1 | 2 | | 60 | 1.2 |
| Beans with pod | 14 | 7 | 16 | 2 | 5 | | 50 | 1.1 |
| Flour | 2 | 2 | 2 | 2 | | | 100 | 1.0 |
| Apple juice | 1 | 1 | 1 | 1 | | | 100 | 1.0 |
| Pumpkin | 1 | 1 | 1 | 1 | | | 100 | 1.0 |
| Sweet potatoes | 1 | 1 | 1 | 1 | | | 100 | 1.0 |
| Watermelons | 1 | 1 | 1 | 1 | | | 100 | 1.0 |
| Limes | 6 | 5 | 6 | 4 | 1 | | 83 | 1.0 |
| Garlic | 2 | 1 | 2 | | 1 | | 50 | 1.0 |
| Carrots | 9 | 3 | 9 | 1 | 2 | | 33 | 1.0 |
| Kiwi fruit | 3 | 1 | 3 | | 1 | | 33 | 1.0 |
| Avocado | 5 | 3 | 4 | 2 | 1 | | 60 | 0.8 |
| Cabbage | 5 | 3 | 4 | 2 | 1 | | 60 | 0.8 |
| Pineapple | 4 | 3 | 3 | 3 | | | 75 | 0.8 |
| Mushrooms | 5 | 3 | 3 | 3 | | | 60 | 0.6 |
| Melons | 4 | 2 | 2 | 2 | | | 50 | 0.5 |
| Shallots | 2 | 1 | 1 | | | 1 | 50 | 0.5 |
| Nectarines | 2 | 1 | 1 | 1 | | | 50 | 0.5 |
| Radishes | 2 | 1 | 1 | 1 | | | 50 | 0.5 |
| Rice | 2 | 1 | 1 | 1 | | | 50 | 0.5 |
| Leeks | 2 | 0 | 1 | | | | 0 | 0.5 |
| Bread | 5 | 2 | 2 | 2 | | | 40 | 0.4 |
| Butternut squash | 5 | 2 | 2 | 2 | | | 40 | 0.4 |
| Lettuce | 5 | 2 | 2 | 2 | | | 40 | 0.4 |

| | | | | | | | | |
|--------------------|------------|------------|------------|-----------|------------|----------|----|-----|
| Aubergines | 3 | 1 | 1 | 1 | | | 33 | 0.3 |
| Courgettes | 3 | 1 | 1 | 1 | | | 33 | 0.3 |
| Potatoes | 11 | 2 | 2 | 2 | | | 18 | 0.2 |
| Onions | 6 | 1 | 1 | 1 | | | 17 | 0.2 |
| Grand Total | 305 | 208 | 640 | 70 | 132 | 6 | | |

Tests by product region and country of origin

| Region | Number of tests |
|---------------|-----------------|
| UK | 119 |
| EU | 91 |
| Rest of world | 90 |
| Unspecified | 63 |
| 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 | 2022 |
|--------------------|------|------|------|------|------|
| UK | 96 | 118 | 96 | 96 | 119 |
| Unspecified | 12 | 6 | 13 | 101 | 63 |
| Spain | 78 | 83 | 65 | 56 | 58 |
| South Africa | 25 | 27 | 18 | 9 | 16 |
| Morocco | 27 | 26 | 21 | 9 | 15 |
| Italy | 15 | 17 | 18 | 13 | 10 |
| Brazil | 12 | 13 | 12 | 7 | 9 |
| Peru | 9 | 11 | 13 | 10 | 8 |
| Kenya | 17 | 14 | 9 | 10 | 6 |
| Colombia | 10 | 14 | 6 | 6 | 6 |
| Netherlands | 7 | 12 | 15 | 5 | 8 |
| Chile | 14 | 14 | 12 | 7 | 5 |
| Egypt | 17 | 20 | 13 | 9 | 4 |
| Portugal | 6 | 4 | 10 | 5 | 4 |
| Dominican Republic | 9 | 5 | 2 | 4 | 4 |
| Guatemala | 17 | 10 | 9 | 5 | 3 |
| India | 6 | 10 | 4 | 4 | 3 |
| Costa Rica | 18 | 10 | 4 | 3 | 3 |
| Belgium | 5 | 3 | 3 | 3 | 5 |
| France | | 5 | 3 | 2 | 2 |
| Greece | 4 | 3 | 2 | | 2 |
| Cote d'Ivoire | 3 | 3 | 2 | | 2 |
| Germany | 3 | 4 | 2 | 1 | 1 |
| Israel | 7 | 3 | 5 | 1 | 1 |
| New Zealand | 2 | 3 | 4 | | 2 |
| Turkey | 2 | 3 | 1 | | 1 |

| | | | | | |
|--------------|------------|------------|------------|------------|------------|
| Namibia | 1 | 1 | 2 | | 1 |
| Puerto Rico | 2 | 1 | 1 | | 1 |
| Norway | | | | | 1 |
| Mexico | 5 | 6 | 8 | 4 | |
| China | 5 | 4 | 3 | 2 | |
| Senegal | 1 | 1 | 3 | 2 | |
| Sri Lanka | | | | 2 | |
| USA | 2 | 3 | 3 | 1 | |
| Ghana | 2 | 2 | 3 | 1 | |
| Honduras | | 2 | 1 | 1 | |
| Indonesia | | | | 1 | |
| Jordan | 4 | 5 | 3 | | |
| Zimbabwe | 6 | 1 | 4 | | |
| Argentina | 5 | 2 | 1 | | |
| Poland | 6 | 1 | 1 | | |
| Viet Nam | 3 | 2 | 1 | | |
| Thailand | 2 | 2 | 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 | 363 |

2022 Country summary statistics

| Country | No. samples | No. detections | No. exceedances | No. samples with detection | Percentage of samples with a detection | Average detections per sample |
|--------------|-------------|----------------|-----------------|----------------------------|--|-------------------------------|
| UK | 119 | 230 | 3 | 68 | 57 | 1.9 |
| Spain | 58 | 94 | 1 | 35 | 60 | 1.6 |
| Unspecified | 63 | 53 | 2 | 26 | 41 | 0.8 |
| South Africa | 16 | 34 | 0 | 12 | 75 | 2.1 |
| Turkey | 1 | 34 | 0 | 1 | 100 | 34.0 |
| Morocco | 15 | 33 | 0 | 11 | 73 | 2.2 |
| Colombia | 6 | 18 | 0 | 6 | 100 | 3.0 |
| Chile | 5 | 16 | 0 | 4 | 80 | 3.2 |
| Italy | 10 | 16 | 0 | 4 | 40 | 1.6 |

| | | | | | | |
|--------------------|------------|------------|----------|------------|-----|-----|
| Brazil | 9 | 15 | 0 | 7 | 78 | 1.7 |
| Portugal | 4 | 11 | 0 | 3 | 75 | 2.8 |
| Guatemala | 3 | 10 | 0 | 3 | 100 | 3.3 |
| Peru | 8 | 9 | 0 | 4 | 50 | 1.1 |
| Egypt | 4 | 6 | 0 | 2 | 50 | 1.5 |
| India | 3 | 5 | 0 | 1 | 33 | 1.7 |
| Namibia | 1 | 5 | 1 | 1 | 100 | 5.0 |
| Belgium | 5 | 17 | 0 | 5 | 100 | 3.4 |
| France | 2 | 4 | 0 | 2 | 100 | 2.0 |
| Kenya | 6 | 4 | 0 | 1 | 17 | 0.7 |
| Netherlands | 8 | 13 | 0 | 4 | 50 | 1.6 |
| Cote d'Ivoire | 2 | 3 | 0 | 2 | 100 | 1.5 |
| Puerto Rico | 1 | 3 | 0 | 1 | 100 | 3.0 |
| Costa Rica | 3 | 2 | 0 | 2 | 67 | 0.7 |
| Greece | 2 | 2 | 0 | 1 | 50 | 1.0 |
| Israel | 1 | 2 | 0 | 1 | 100 | 2.0 |
| Dominican Republic | 4 | 0 | 0 | 0 | 0 | 0.0 |
| Germany | 1 | 0 | 0 | 0 | 0 | 0.0 |
| New Zealand | 2 | 1 | 0 | 1 | 50 | 0.5 |
| Norway | 1 | 0 | 0 | 0 | 0 | 0.0 |
| Totals | 363 | 640 | 7 | 208 | | |

Same table as above but sorted by average detections per sample.

| Country | No. samples | No. detections | No. exceedances | No. samples with detection | Percentage of samples with a detection | Average detections per sample |
|--------------|-------------|----------------|-----------------|----------------------------|--|-------------------------------|
| Turkey | 1 | 34 | 0 | 1 | 100 | 34.0 |
| Namibia | 1 | 5 | 1 | 1 | 100 | 5.0 |
| Belgium | 5 | 17 | 0 | 5 | 100 | 3.4 |
| Guatemala | 3 | 10 | 0 | 3 | 100 | 3.3 |
| Chile | 5 | 16 | 0 | 4 | 80 | 3.2 |
| Colombia | 6 | 18 | 0 | 6 | 100 | 3.0 |
| Puerto Rico | 1 | 3 | 0 | 1 | 100 | 3.0 |
| Portugal | 4 | 11 | 0 | 3 | 75 | 2.8 |
| Morocco | 15 | 33 | 0 | 11 | 73 | 2.2 |
| South Africa | 16 | 34 | 0 | 12 | 75 | 2.1 |
| France | 2 | 4 | 0 | 2 | 100 | 2.0 |
| Israel | 1 | 2 | 0 | 1 | 100 | 2.0 |
| UK | 119 | 230 | 3 | 68 | 57 | 1.9 |
| Brazil | 9 | 15 | 0 | 7 | 78 | 1.7 |
| India | 3 | 5 | 0 | 1 | 33 | 1.7 |
| Netherlands | 8 | 13 | 0 | 4 | 50 | 1.6 |
| Spain | 58 | 94 | 1 | 35 | 60 | 1.6 |
| Italy | 10 | 16 | 0 | 4 | 40 | 1.6 |
| Egypt | 4 | 6 | 0 | 2 | 50 | 1.5 |

| | | | | | | |
|--------------------|------------|------------|----------|------------|-----|-----|
| Cote d'Ivoire | 2 | 3 | 0 | 2 | 100 | 1.5 |
| Peru | 8 | 9 | 0 | 4 | 50 | 1.1 |
| Greece | 2 | 2 | 0 | 1 | 50 | 1.0 |
| Unspecified | 63 | 53 | 2 | 26 | 41 | 0.8 |
| Kenya | 6 | 4 | 0 | 1 | 17 | 0.7 |
| Costa Rica | 3 | 2 | 0 | 2 | 67 | 0.7 |
| New Zealand | 2 | 1 | 0 | 1 | 50 | 0.5 |
| Dominican Republic | 4 | 0 | 0 | 0 | 0 | 0.0 |
| Germany | 1 | 0 | 0 | 0 | 0 | 0.0 |
| Norway | 1 | 0 | 0 | 0 | 0 | 0.0 |
| Totals | 363 | 640 | 7 | 208 | | |

Products tested by country

| Region | Country of origin | Apple juice | Apples | Apricots | Asparagus | Aubergines | Avocado | Baby corn | Baby leaves | Bananas | Basil | Beans with pod | Blackberries | Blueberries | Brazil nuts | Bread | Broccoli | Brussel sprouts | Butternut squash | Cabbage | Carrots | Cauliflower | Celery | Cherries | Chilli powder | Clementines | Coconut oil | Coffee | Coriander | Courgettes | Cucumber | Curry powder | Eggs | Fennel | Flour | Garlic | Ginger | Granola | Grapefruit | Honey | Kale | Kiwi fruit | Leeks | | | | | | | |
|---------------|--------------------|-------------|--------|----------|-----------|------------|---------|-----------|-------------|---------|-------|----------------|--------------|-------------|-------------|-------|----------|-----------------|------------------|---------|---------|-------------|--------|----------|---------------|-------------|-------------|--------|-----------|------------|----------|--------------|------|--------|-------|--------|--------|---------|------------|-------|------|------------|-------|---|---|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UK | UK | 1 | 25 | | | | | 25 | | 6 | 3 | 11 | 1 | | 1 | 0 | 2 | | 2 | 9 | 0 | 0 | 7 | | | | | 1 | 0 | | | 0 | | 2 | 2 | | | | | 7 | | | 1 | | | | | | | |
| EU | Belgium | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | France | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Germany | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Greece | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | | | |
| | Italy | | 0 | | | | | | | | | | | | | | 0 | | | 0 | 0 | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | |
| | Netherlands | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Norway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Portugal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Spain | | | 5 | | | | | | | | | | 0 | | 0 | | 1 | 2 | | 0 | 1 | 4 | | | | 10 | 1 | 0 | | | | | | 0 | | | | | | | | | | | | | | | |
| Rest of world | Brazil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Chile | | 3 | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| | Colombia | | | | | | 1 | | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Costa Rica | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cote d'Ivoire | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dominican Republic | | | | | 0 | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Egypt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Guatemala | | | | | | | | | | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | India | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Israel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Kenya | | | | | 0 | | | | | | 4 | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Morocco | | | | | | | | | | 4 | 8 | | | | | | | | | | | | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | |
| | Namibia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | New Zealand | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Peru | | | | 0 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Puerto Rico | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | South Africa | | 1 | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turkey | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Unspecified | | 2 | 0 | 1 | 1 | 0 | | | 5 | 0 | 1 | 0 | 1 | 0 | | 1 | | | 0 | 5 | 0 | | 0 | 0 | | | | 0 | 4 | | 2 | | | 0 | 0 | | | 0 | | | 0 | | | 0 | | | | | |
| | Grand Total | 1 | 34 | 7 | 0 | 1 | 4 | 0 | 25 | 19 | 6 | 16 | 17 | 15 | 0 | 2 | 0 | 5 | 2 | 4 | 9 | 0 | 0 | 13 | 0 | 9 | 0 | 0 | 11 | 1 | 0 | 4 | 0 | 5 | 2 | 2 | 0 | 0 | 5 | 0 | 7 | 3 | | | 1 | | | | | |

Table continued

| Region | Country of origin | Lemons | Lettuce | Limes | Mandarins | Mangoes | Melons | Milk | Mixed berries | Mushrooms | Nectarines | Nuts | Oats | Onions | Oranges | Oranges | Pak choi | Parsley | Parsnips | Pasta | Peaches | Pears | Peas | Peas with pod | Pineapple | Plums | Potatoes | Pumpkin | Radishes | Raspberries | Rice | Rocket | Salmon | Shallots | Spinach | Strawberries | Sultanas | Swede | Sweet peppers | Sweet potatoes | Sweetcorn | Table grapes | Tea | Thyme | Tomatoes | Watermelons | Wine | Grand Total | | | | | | | | | | |
|---------------|--------------------|--------|---------|-------|-----------|---------|--------|------|---------------|-----------|------------|------|------|--------|---------|---------|----------|---------|----------|-------|---------|-------|------|---------------|-----------|-------|----------|---------|----------|-------------|------|--------|--------|----------|---------|--------------|----------|-------|---------------|----------------|-----------|--------------|-----|-------|----------|-------------|------|-------------|----|----|---|----|----|----|---|---|---|----|
| | | UK | UK | 4 | 1 | 1 | 8 | | 0 | 3 | 3 | | | | 1 | 4 | | 0 | 12 | 4 | | | | 4 | 0 | 0 | 7 | 2 | 1 | 1 | 0 | 13 | 1 | 10 | 26 | 0 | 0 | 3 | 1 | 0 | 6 | | | 8 | | | 230 | | | | | | | | | | | |
| EU | Belgium | | | | | | | | | | | | | | | | | | | | | 14 | | | | | | | | | | | | | | | | | | | | | | | | | 17 | | | | | | | | | | | |
| | France | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | |
| | Germany | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | | 0 | | | | | | | | |
| | Greece | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| | Italy | | | | | | | | | | | | | | | | | | | 0 | 6 | | | | | | | | | | | | | | | | | | | | | 7 | | | | | | | 16 | | | | | | | | | |
| | Netherlands | | | | | | | | | | | | | | | | | | | | | | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 | | | | | | | | |
| | Norway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | 0 | | | | | | | |
| | Portugal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 11 | | | | | | | | | | | | | | | | | | | | | | 11 | | | | | | |
| | Spain | 3 | 1 | | 10 | | 0 | | | | 1 | | | | 3 | 11 | | 3 | | | 2 | | | | | 1 | | | | 5 | | | 4 | 4 | | 7 | | | | | | 7 | | | 7 | 1 | | | 94 | | | | | | | | | |
| Rest of world | Brazil | | | 3 | | 6 | 1 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 15 | | | | | | | | |
| | Chile | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 16 | | | | | | |
| | Colombia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | | | | | |
| | Costa Rica | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| | Cote d'Ivoire | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| | Dominican Republic | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | | | |
| | Egypt | | | | | | | | | | | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 6 | | | | | | |
| | Guatemala | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | | | | | | |
| | India | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | | | | | |
| | Israel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | |
| | Kenya | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | |
| | Morocco | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 | 33 | | | | |
| | Namibia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | | | | |
| | New Zealand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| | Peru | | | 1 | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 9 | | | | |
| | Puerto Rico | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | |
| | South Africa | 4 | | | 6 | | | | | | | | | | | 4 | | | | | | | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | 34 | | | | |
| Turkey | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 | 34 | | | | |
| | Unspecified | 0 | 1 | | 2 | 1 | 0 | | | | 0 | 0 | | | | | | | | 0 | | | | | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 | 6 | 0 | 3 | 0 | 53 |
| | Grand Total | 11 | 2 | 6 | 24 | 12 | 2 | 0 | 3 | 3 | 1 | 0 | 0 | 1 | 7 | 15 | 0 | 15 | 4 | 0 | 8 | 27 | 0 | 6 | 3 | 13 | 2 | 1 | 1 | 16 | 1 | 18 | 0 | 1 | 17 | 38 | 34 | 0 | 11 | 1 | 0 | 64 | 6 | 0 | 35 | 1 | 0 | | | | | | | | | | | |

Residue statistics

| All countries | 2018 | 2018 (%) | 2019 | 2019 (%) | 2020 | 2020 (%) | 2021 | 2021 (%) | 2022 | 2022 (%) | Notes |
|--|------|----------|------|----------|------|----------|------|----------|------|----------|--|
| Number of samples | 470 | | 480 | | 402 | | 380 | | 363 | | |
| Samples with zero residues | 133 | 28.3 | 168 | 35.0 | 126 | 31.3 | 160 | 42.1 | 155 | 42.7 | |
| Samples with 1 residue below MRL | 110 | 23.4 | 110 | 22.9 | 82 | 20.4 | 71 | 18.7 | 70 | 19.3 | |
| Samples with multiple residues all below MRL | 218 | 46.4 | 191 | 39.8 | 181 | 45.0 | 139 | 36.6 | 132 | 36.4 | |
| Samples with at least 1 MRL exceedence | 9 | 1.9 | 11 | 2.3 | 13 | 3.2 | 10 | 2.6 | 6 | 1.7 | There were 7 exceedances but one sample had two actives. |
| Number of detections | 949 | | 842 | | 748 | | 668 | | 640 | | |
| Average detections per sample | 2.02 | | 1.75 | | 1.86 | | 1.76 | | 1.8 | | |
| UK (including Jersey) | 2018 | 2018 (%) | 2019 | 2019 (%) | 2020 | 2020 (%) | 2021 | 2021 (%) | | | Notes |
| Number of samples | 96 | 20.4 | 119 | 24.8 | 97 | 24.1 | 97 | | 119 | | Percentage is % of samples from this region |
| Samples with zero residues | 30 | 31.3 | 52 | 43.7 | 42 | 43.3 | 43 | 44.3 | 50 | 42.0 | |
| Samples with 1 residue below MRL | 29 | 30.2 | 34 | 28.6 | 22 | 22.7 | 19 | 19.6 | 27 | 22.7 | |
| Samples with multiple residues all below MRL | 36 | 37.5 | 32 | 26.9 | 30 | 30.9 | 32 | 33.0 | 39 | 32.8 | |
| Samples with at least 1 MRL exceedence | 1 | 1 | 1 | 0.8 | 3 | 3.1 | 3 | 3.1 | 3 | 2.5 | |
| Number of detections | 190 | | 166 | | 152 | | 168 | | 230 | | |
| Average detections per sample | 1.98 | | 1.39 | | 1.57 | | 1.73 | | 1.9 | | |
| EU | 2018 | 2018 (%) | 2019 | 2019 (%) | 2020 | 2020 (%) | 2021 | 2021 (%) | | | Notes |
| Number of samples | 126 | 26.8 | 133 | 27.7 | 120 | 29.9 | 84 | | 91 | | |
| Samples with zero residues | 37 | 29.4 | 43 | 32.3 | 37 | 30.8 | 26 | 31.0 | 38 | 41.8 | |
| Samples with 1 residue below MRL | 28 | 22.2 | 21 | 15.8 | 22 | 18.3 | 18 | 21.4 | 13 | 14.3 | |
| Samples with multiple residues all below MRL | 61 | 48.4 | 69 | 51.9 | 59 | 49.2 | 38 | 45.2 | 39 | 42.9 | |

| | | | | | | | | | | | |
|--|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-----|------|---|
| Samples with at least 1 MRL exceedence | 0 | 0 | 0 | 0 | 2 | 1.7 | 2 | 2.4 | 1 | 1.1 | |
| Number of detections | 241 | | 255 | | 223 | | 177 | | 157 | | |
| Average detections per sample | 1.91 | | 1.92 | | 1.86 | | 2.11 | | 1.7 | | |
| Rest of world | 2018 | 2018 (%) | 2019 | 2019 (%) | 2020 | 2020 (%) | 2021 | 2021 (%) | | | Notes |
| Number of samples | 236 | 50.2 | 222 | 46.3 | 172 | 42.8 | 98 | | 90 | | |
| Samples with zero residues | 62 | 26.3 | 70 | 31.5 | 41 | 23.8 | 29 | 29.6 | 30 | 33.3 | |
| Samples with 1 residue below MRL | 51 | 21.6 | 54 | 24.3 | 36 | 20.9 | 19 | 19.4 | 16 | 17.8 | |
| Samples with multiple residues all below MRL | 115 | 48.7 | 88 | 39.6 | 89 | 51.7 | 46 | 46.9 | 43 | 47.8 | |
| Samples with at least 1 MRL exceedence | 8 | 3.4 | 10 | 4.5 | 6 | 3.5 | 4 | 4.1 | 1 | 1.1 | |
| Number of detections | 491 | | 414 | | 352 | | 203 | | 200 | | |
| Average detections per sample | 2.08 | | 1.86 | | 2.05 | | 2.07 | | 2.2 | | |
| Unspecified | 2018 | 2018 (%) | 2019 | 2019 (%) | 2020 | 2020 (%) | 2021 | 2021 (%) | | | Notes |
| Number of samples | 12 | 2.6 | 6 | 1.3 | 13 | 3.2 | 101 | | 63 | | |
| Samples with zero residues | 4 | 33.3 | 3 | 50 | 6 | 46.2 | 62 | 61.4 | 37 | 58.7 | |
| Samples with 1 residue below MRL | 2 | 16.7 | 1 | 16.7 | 2 | 15.4 | 15 | 14.9 | 14 | 22.2 | |
| Samples with multiple residues all below MRL | 6 | 50 | 2 | 33.3 | 3 | 23.1 | 23 | 22.8 | 11 | 17.5 | |
| Samples with at least 1 MRL exceedence | 0 | 0 | 0 | 0 | 2 | 15.4 | 1 | 1.0 | 1 | 1.6 | This sample had 2 exceedances for different actives |
| Number of detections | 27 | | 7 | | 21 | | 120 | | 53 | | |
| Average detections per sample | 2.25 | | 1.17 | | 1.62 | | 1.19 | | 0.8 | | |

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).

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

| Active | 2018 | 2019 | 2020 | 2021 | 2022 | Total | WHO 1a, 1b | PAN HHP | Comments |
|-----------------------------------|------|------|------|------|------|-------|------------|---------|--------------------------------|
| Fludioxonil | 73 | 67 | 56 | 52 | 59 | 307 | No | No | |
| Boscalid | 68 | 55 | 51 | 39 | 43 | 256 | No | No | |
| Pyrimethanil | 33 | 46 | 32 | 25 | 34 | 170 | No | No | |
| Azoxystrobin | 48 | 42 | 41 | 30 | 32 | 193 | No | No | |
| Imazalil | 37 | 36 | 30 | 21 | 27 | 151 | No | Yes | |
| Fluopyram | 27 | 26 | 33 | 29 | 25 | 140 | No | No | |
| Cyprodinil | 32 | 29 | 27 | 18 | 24 | 130 | No | No | |
| Difenoconazole | 16 | 26 | 21 | 15 | 20 | 98 | No | No | |
| Acetamiprid | 20 | 20 | 24 | 22 | 18 | 104 | No | No | |
| Dithiocarbamates | 44 | 29 | 33 | 30 | 18 | 154 | No | No | |
| Thiabendazole | 21 | 20 | 21 | 19 | 18 | 99 | No | Yes | Added to PAN HHP list in 2021. |
| Fenhexamid | 23 | 20 | 11 | 15 | 15 | 84 | No | Yes | Added to PAN HHP list in 2021. |
| Propamocarb | 12 | 12 | 13 | 11 | 13 | 61 | No | No | |
| cis-1,2,3,6-Tetrahydrophthalimide | | | | 13 | 12 | 25 | No | No | |
| Pyraclostrobin | 28 | 26 | 27 | 13 | 12 | 106 | No | No | |
| Mandipropamid | 11 | 12 | 10 | 10 | 11 | 54 | No | No | |
| Chlorantraniliprole | 15 | 19 | 10 | 12 | 10 | 66 | No | Yes | |
| Deltamethrin | 9 | 11 | 8 | 13 | 9 | 50 | No | Yes | |
| Fluxapyroxad | 4 | 2 | 1 | 6 | 9 | 22 | No | No | |
| Fosetyl-Al | | 22 | 6 | 4 | 9 | 41 | No | No | |
| Trifloxystrobin | 9 | 14 | 9 | 9 | 9 | 50 | No | No | |
| Lambda-cyhalothrin | 19 | 20 | 9 | 4 | 8 | 60 | No | Yes | |
| Cyantraniliprole | | 3 | 6 | 5 | 7 | 21 | No | No | |
| Spinosad | 13 | 7 | 11 | 17 | 7 | 55 | No | Yes | Includes A and B forms |
| Chlormequat | | | | 1 | 6 | 7 | No | No | |
| Dimethomorph | 7 | 7 | 8 | 9 | 6 | 37 | No | No | Includes E and Z forms |
| Metrafenone | 4 | 9 | 5 | 7 | 6 | 31 | No | No | |
| Ethephon | 11 | 4 | 7 | 7 | 5 | 34 | No | No | |
| Fenpyroximate | 1 | 1 | | 6 | 5 | 13 | No | Yes | |
| Fluopicolide | 4 | 1 | 3 | 10 | 5 | 23 | No | No | |
| Metalaxyl | 9 | 4 | 4 | 9 | 5 | 31 | No | No | |
| Methoxyfenozide | 8 | 3 | 6 | 2 | 5 | 24 | No | No | |
| Phosphorous Acid | | | | | 5 | 5 | No | No | |
| Spirotetramat | 6 | 2 | 5 | 3 | 5 | 21 | No | No | |

| | | | | | | | | | |
|----------------------------------|----|----|----|----|---|----|----|-----|--------------------------------|
| Tebuconazole | 17 | 13 | 14 | 13 | 5 | 62 | No | Yes | |
| Benzalkonium chloride C16 | | | | | 4 | 4 | No | No | |
| Captan | 24 | 14 | 11 | 19 | 4 | 72 | No | Yes | Added to PAN HHP list in 2021. |
| Chloridazon | | | 1 | 5 | 4 | 10 | No | No | |
| Famoxadone | 2 | 2 | 1 | 1 | 4 | 10 | No | No | |
| Myclobutanil | 9 | 10 | 10 | 5 | 4 | 38 | No | No | |
| Pendimethalin | 9 | 3 | 6 | 6 | 4 | 28 | No | Yes | |
| Pyriproxyfen | 4 | 5 | 9 | 9 | 4 | 31 | No | No | |
| Spiromesifen | 3 | 1 | 2 | 2 | 4 | 12 | No | No | |
| Ametoctradin | | 1 | 2 | 3 | 3 | 9 | No | No | |
| Cyflufenamid | | | | | 3 | 3 | No | No | |
| Cypermethrin | 22 | 10 | 8 | 3 | 3 | 46 | No | Yes | |
| Didecyldimethylammonium chloride | | | | | 3 | 3 | No | No | |
| Fenpropimorph | 1 | 1 | 1 | 2 | 3 | 8 | No | No | |
| Flupyradifurone | | 1 | 5 | 4 | 3 | 13 | No | Yes | |
| Indoxacarb | 9 | 7 | 11 | 2 | 3 | 32 | No | Yes | |
| Penconazole | 4 | 3 | 1 | 2 | 3 | 13 | No | No | |
| Perchlorate | | | | 3 | 3 | 6 | No | No | |
| Propyzamide | | 1 | 1 | 1 | 3 | 6 | No | No | |
| Acionifen | | 4 | 3 | 6 | 2 | 15 | No | No | |
| Benzalkonium chloride C12 | | | | | 2 | 2 | No | No | |
| Bromuconazole | | | | | 2 | 2 | No | No | |
| Dodine | | | | 2 | 2 | 4 | No | Yes | |
| Fenpropidin | | | | 1 | 2 | 3 | No | No | |
| Flutriafol | 3 | 3 | 1 | 1 | 2 | 10 | No | No | |
| Hexythiazox | 1 | 3 | 1 | 3 | 2 | 10 | No | Yes | |
| Imidacloprid | 21 | 12 | 7 | 6 | 2 | 48 | No | Yes | |
| Isopyrazam | 2 | 1 | 4 | 2 | 2 | 11 | No | Yes | |
| Kresoxim-methyl | 1 | 1 | 1 | | 2 | 5 | No | Yes | |
| Mepiquat | | | | | 2 | 2 | No | No | |
| Penthiopyrad | | | 1 | | 2 | 3 | No | No | |
| Phthalimide | 4 | | | 2 | 2 | 8 | No | No | |
| Prochloraz | 6 | 4 | 2 | 1 | 2 | 15 | No | No | |
| Propiconazole | | 6 | 3 | 2 | 2 | 13 | No | Yes | |
| Proquinazid | | 1 | 1 | 2 | 2 | 6 | No | No | |
| Spiroxamine | 2 | | | | 2 | 4 | No | No | |
| Sulfoxaflor | | | | 1 | 2 | 3 | No | Yes | |
| Azadirachtin | | 1 | | | 1 | 2 | No | No | |
| Bifenazate | 5 | 3 | 2 | 4 | 1 | 15 | No | No | |
| Bifenthrin | 9 | 4 | 4 | 2 | 1 | 20 | No | Yes | |
| Biphenyl | | | | | 1 | 1 | No | Yes | |
| Bupirimate | 6 | 2 | | | 1 | 9 | No | No | |
| Chlorates | | | 13 | 5 | 1 | 19 | No | No | |

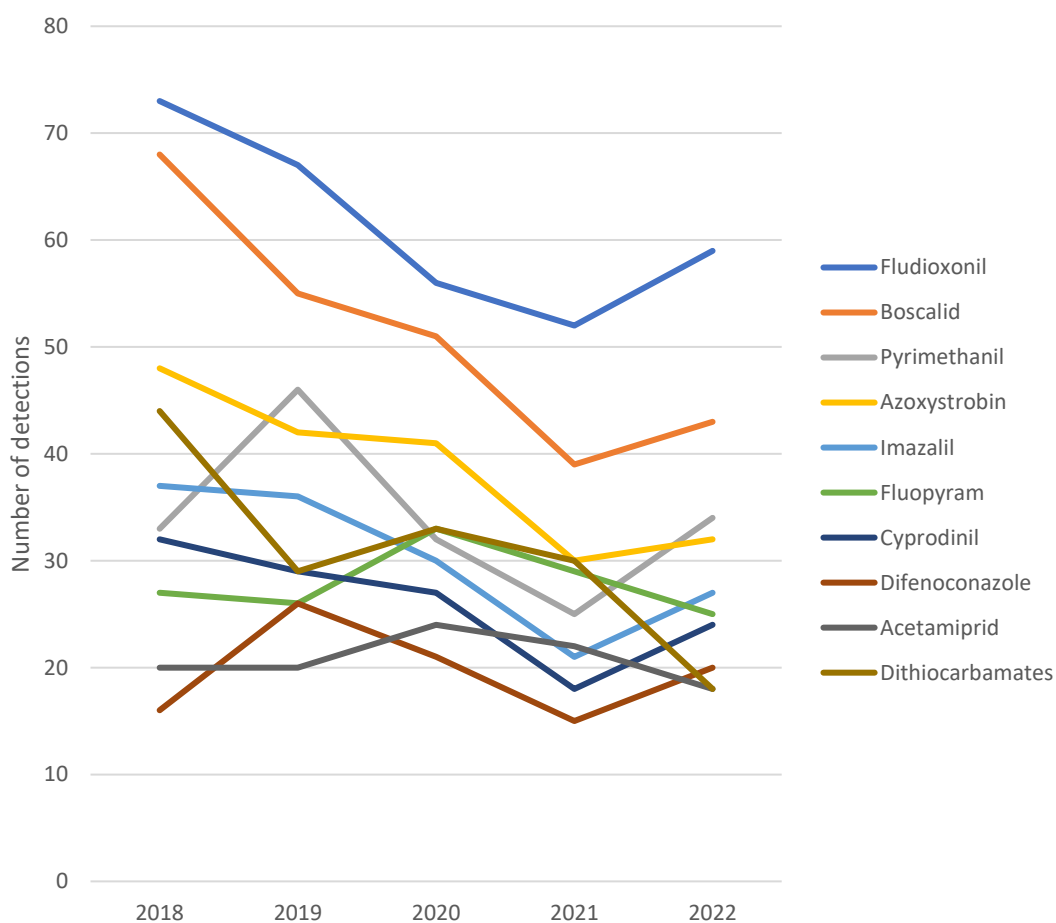
| | | | | | | | | | |
|-----------------------|----|----|----|---|---|----|--------|-----|--------------------------------|
| Chlorpropham | 7 | 4 | 1 | | 1 | 13 | No | Yes | Added to PAN HHP list in 2021. |
| Chlorpyrifos | 6 | 3 | 2 | | 1 | 12 | No | Yes | |
| Clofentezine | 1 | | | | 1 | 2 | No | No | |
| Clothianidin | | 1 | 2 | | 1 | 4 | No | Yes | |
| Copper | 17 | 9 | 13 | 2 | 1 | 42 | No | No | |
| Cyazofamid | | 2 | 2 | | 1 | 5 | No | No | |
| Cyflumetofen | | | | | 1 | 1 | No | No | |
| DDT | | | | | 1 | 1 | No | Yes | |
| Etofenprox | 6 | 2 | 1 | 2 | 1 | 12 | No | Yes | |
| Fenbuconazole | 2 | 3 | | | 1 | 6 | No | Yes | Added to PAN HHP list in 2021. |
| Fenpyrazamine | | | 1 | 2 | 1 | 4 | No | No | |
| Fenvalerate | | | | 1 | 1 | 2 | No | Yes | |
| Flonicamid | 1 | | 1 | 3 | 1 | 6 | No | No | |
| Flufenoxuron | | | | | 1 | 1 | No | Yes | |
| Furmecyclox | | | | | 1 | 1 | No | No | |
| Maleic hydrazide | 1 | | | 1 | 1 | 3 | No | No | |
| p,p'-DDE | | | | | 1 | 1 | No | No | |
| Phosmet | 4 | 1 | | 2 | 1 | 8 | No | Yes | |
| Piperonyl butoxide | 2 | 2 | 2 | 1 | 1 | 8 | No | No | |
| Profenofos | | | | | 1 | 1 | No | Yes | |
| Pyridalyl | | 1 | 1 | 1 | 1 | 4 | No | Yes | |
| Quizalofop | | | | | 1 | 1 | No | Yes | |
| Spirodiclofen | 4 | 3 | | 3 | 1 | 11 | No | Yes | |
| Tau-Fluvalinate | | | | | 1 | 1 | No | Yes | |
| Tebufenozide | 1 | | | 1 | 1 | 3 | No | No | |
| Tebufenpyrad | 1 | 1 | | | 1 | 3 | No | No | |
| Tetraconazole | 2 | | 1 | 1 | 1 | 5 | No | Yes | Added to PAN HHP list in 2021. |
| Thiamethoxam | 4 | 5 | 3 | | 1 | 13 | No | Yes | |
| Triallate | 3 | | 1 | 2 | 1 | 7 | No | Yes | |
| 2,4,6-Trichlorophenol | | | 1 | 1 | | 2 | No | No | |
| 2,4-D | | | 1 | | | 1 | No | Yes | Added to PAN HHP list in 2021. |
| 2-Phenylphenol | 5 | 10 | 7 | 4 | | 26 | No | No | |
| Abamectin | 2 | 1 | 1 | 1 | | 5 | WHO 1b | Yes | |
| Acephate | 2 | | 1 | | | 3 | No | Yes | |
| Benfluralin | 1 | | | | | 1 | No | No | |
| Buprofezin | 5 | 2 | | | | 7 | No | No | |
| Carbendazim | 7 | 6 | 5 | 1 | | 19 | No | Yes | |
| Chlorothalonil | 5 | 8 | 4 | 5 | | 22 | No | Yes | |
| Chlorpyrifos-methyl | 3 | 4 | | | | 7 | No | Yes | |
| Cyfluthrin | 2 | | 3 | | | 5 | WHO 1b | Yes | |
| Cymoxanil | | | | 1 | | 1 | No | No | |

| | | | | | | | | | |
|--------------------|----|----|----|---|--|----|--------|-----|--------------------------------|
| Cyromazine | 9 | 2 | 2 | | | 13 | No | No | |
| Diazinon | | | 2 | | | 2 | No | Yes | |
| Dieldrin | 1 | | 1 | | | 2 | No | No | |
| Dimethoate | | 1 | | 1 | | 2 | No | Yes | |
| Emamectin | | | | 1 | | 1 | No | Yes | |
| Emamectin benzoate | 3 | 1 | 1 | | | 5 | No | Yes | |
| Ethirimol | 3 | | | | | 3 | No | Yes | |
| Ethylene oxide | | | | 2 | | 2 | No | Yes | |
| Etoxazol | 1 | 3 | | | | 4 | No | No | |
| Fenamidone | 1 | | | | | 1 | No | No | |
| Fenazaquin | 2 | | | | | 2 | No | Yes | |
| Fenpropathrin | | | | 1 | | 1 | No | Yes | |
| Folpet | | 1 | | | | 1 | No | Yes | |
| Fosetyl | | | | 4 | | 4 | No | No | |
| Glyphosate | | | | 1 | | 1 | No | Yes | |
| Iprodione | 7 | 2 | 1 | | | 10 | No | Yes | |
| Iprovalicarb | | | 1 | | | 1 | No | Yes | |
| Linuron | 10 | 7 | | | | 17 | No | Yes | |
| Lufenuron | | 1 | | | | 1 | No | Yes | |
| Malathion | 1 | 1 | 1 | 1 | | 4 | No | Yes | |
| Mepanipyrim | | 2 | | 2 | | 4 | No | Yes | |
| Metaflumizone | | 1 | | 1 | | 2 | No | Yes | |
| Methamidophos | 2 | | | 1 | | 3 | WHO 1b | Yes | |
| Methiocarb | 1 | 1 | | | | 2 | WHO 1b | Yes | |
| Metribuzin | | | 1 | | | 1 | No | Yes | |
| Nicotine | | 1 | | | | 1 | WHO 1b | Yes | |
| Omethoate | | 1 | | | | 1 | WHO 1b | Yes | |
| Perchlorates | | | 6 | | | 6 | No | No | |
| Phenmedipham | | 1 | 1 | 3 | | 5 | No | No | |
| Pirimicarb | 6 | 4 | 1 | 1 | | 12 | No | Yes | |
| Prosulfocarb | 3 | 1 | 4 | 1 | | 9 | No | No | |
| Prothioconazole | 1 | 2 | 1 | | | 4 | No | No | |
| Pymetrozine | 4 | 5 | | | | 9 | No | Yes | |
| Pyrethrin I | 3 | | | 1 | | 4 | No | Yes | Added to PAN HHP list in 2021. |
| Pyridaben | 1 | | | 2 | | 3 | No | Yes | |
| Quinoxifen | 2 | 1 | 2 | | | 5 | No | Yes | |
| Spinetoram | 1 | 4 | 3 | 2 | | 10 | No | Yes | |
| Teflubenzuron | | 2 | 1 | | | 3 | No | No | |
| TFNA | | | | 1 | | 1 | No | No | |
| Thiacloprid | 16 | 14 | 10 | | | 40 | No | Yes | |
| Thiophanate-methyl | | 1 | | | | 1 | No | Yes | |
| Tolfenpyrad | | 1 | | | | 1 | No | Yes | |
| Triadimenol | 1 | 1 | 1 | | | 3 | No | Yes | |

| | | | | | | | | | |
|-----------------|------------|------------|------------|------------|------------|-------------|----------|-----------|--|
| Zoxamide | | | | 1 | | 1 | No | No | |
| TOTAL | 949 | 842 | 748 | 668 | 640 | 3847 | 6 | 79 | |

| | | 2021 | 2022 |
|--------------------|----------------------|------|------|
| Actives substances | No. Actives detected | 101 | 109 |
| | WHO 1a 1b | 2 | 0 |
| | PAN HHP | 44 | 40 |
| Residue detections | Detections | 668 | 640 |
| | WHO 1a 1b | 2 | 0 |
| | PAN HHP | 208 | 154 |

Ten most detected active substances over time



Ten most detected active substances and the product detected in

| Active substance | Apples | Apricots | Avocado | Baby leaves | Bananas | Basil | Beans with pod | Blackberries | Blueberries | Brussel sprouts | Butternut squash | Cabbage | Carrots | Cherries | Clementines | Coriander | Curry powder | Fennel | Garlic | Grapefruit | Kale | Kiwi fruit | Lemons | Lettuce | Limes | Mandarins | Mangoes | Nectarines | Oranges | Oranges | Parsley | Parsnips | Peaches | Pears | Peas with pod | Pineapple | Plums | Potatoes | Radishes | Raspberries | Rocket | Spinach | Strawberries | Sultanas | Sweet peppers | Sweet potatoes | Table grapes | Tomatoes | Grand Total |
|--------------------|-----------|----------|----------|-------------|----------|----------|----------------|--------------|-------------|-----------------|------------------|----------|----------|----------|-------------|-----------|--------------|----------|----------|------------|----------|------------|----------|----------|----------|-----------|-----------|------------|----------|-----------|----------|----------|----------|-----------|---------------|-----------|----------|----------|----------|-------------|----------|----------|--------------|----------|---------------|----------------|--------------|-----------|-------------|
| Fludioxonil | 6 | | | 2 | | | | 2 | 2 | | 1 | | 2 | 1 | | 2 | | 1 | | | | 1 | | | | 2 | 6 | 1 | 1 | 1 | 2 | | 1 | 4 | | 3 | 3 | | 4 | 2 | | | 1 | 1 | 1 | 3 | 3 | 59 | |
| Boscalid | 3 | | | 1 | 2 | | 1 | 3 | 3 | 3 | | | 2 | 1 | | | | 1 | 1 | | | | | | | | | | | | 1 | 1 | 1 | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | 7 | 3 | 43 | | |
| Pyrimethanil | 5 | | | | | | | 1 | | | | | | | 2 | | | | | | | 2 | | | | 7 | | | 2 | 4 | | | | 1 | 1 | | 2 | 1 | | | 2 | 1 | | | 2 | 1 | 34 | | |
| Azoxystrobin | | | | 5 | 1 | 5 | 2 | | | | | | 1 | | | | | | | | | 1 | | 1 | | | 1 | 3 | | | 2 | | | | 2 | | | | | 1 | 2 | 1 | 1 | | 1 | 2 | 32 | | |
| Imazalil | | | | | | | | | | | | | | | 2 | | | | | | 2 | | 4 | | 5 | 7 | | | 2 | 4 | | | | | | | | | | | | | | | | 1 | 27 | | |
| Fluopyram | | 3 | | | | | 1 | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | | | | | 4 | 1 | 4 | | 6 | 2 | 25 | | | |
| Cyprodinil | | | | 1 | | | 1 | 2 | | | | | 2 | | | 1 | | 1 | | | | | | | | | | | 2 | | 1 | 3 | | | | | | 4 | | | 1 | | 3 | 2 | 24 | | | | |
| Difenoconazole | 1 | | | | | 1 | 1 | | | 1 | | | | | | | 1 | 2 | | | | 1 | | | | | | | | 1 | | | 2 | | | | | | | 1 | 2 | 1 | 1 | | 2 | 2 | 20 | | |
| Acetamiprid | 3 | 1 | | 2 | | 1 | 1 | 1 | | | | | | 1 | | | | | | | | | | | | | | | 1 | | | | | | 1 | | | | | | | | | 3 | | 18 | | | |
| Dithiocarbamates | 2 | | 1 | 2 | 1 | | 1 | | | | | 2 | | | | | | | | | | | 1 | | | | | 2 | | | | | | | | | | | | | 3 | | 1 | 1 | | 1 | 18 | | |
| Grand Total | 20 | 4 | 1 | 8 | 8 | 3 | 11 | 11 | 5 | 4 | 1 | 2 | 8 | 3 | 4 | 3 | 1 | 5 | 1 | 2 | 2 | 1 | 6 | 2 | 5 | 17 | 11 | 1 | 5 | 10 | 8 | 1 | 5 | 14 | 5 | 3 | 7 | 1 | 1 | 9 | 7 | 2 | 11 | 9 | 7 | 1 | 27 | 17 | |

Exceedances

2022 exceedances details

There were 7 exceedances in 2022. Three of these exceedances were active substances that are on the PAN HHP list: Chlorpropham, Deltamethrin, Chlorpyrifos.

| Date sampled | Crop or Crop Group | Country | Pesticide | Level Found (mg/kg) | UK MRL | EU MRL | Comments |
|--------------|--------------------|-------------|------------------|---------------------|--------|--------|--|
| 21-Dec-22 | Rocket | Spain | Acetamiprid | 3.33 | 3 | 3 | |
| 17-Mar-22 | Shallots | UK | Chlorpropham | 0.02 | 0.05 | 0.01 | Note divergence of UK and EU MRL. This was an EU exceedance. |
| 22-Jun-22 | Spinach | UK | Deltamethrin | 0.03 | 0.01 | 0.01 | |
| 24-Feb-22 | Cherries | Unspecified | Fosetyl-Al | 7.83 | 2 | 2 | The two exceedances in cherries were from the same sample. |
| 24-Feb-22 | Cherries | Unspecified | Phosphorous Acid | 5.8 | 2 | 2 | |

| | | | | | | | |
|-----------|--------------|---------|--------------|------|------|------|--|
| 22-Dec-22 | Table Grapes | Namibia | Ethephon | 1.72 | 1 | 1 | |
| 22-Jun-22 | Mandarins | UK | Chlorpyrifos | 0.01 | 0.01 | 0.01 | |

Blue shading indicates active that is on the PAN HHP list.

2021 exceedances details

| Date sampled | Crop or Crop Group | Country | Pesticide | Level Found (mg/kg) | UK MRL |
|--------------|--------------------|-------------|------------------|---------------------|--------|
| 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 | Cyantraniliprole | 0.02 | 0.01 |

Blue shading indicates active that is on the PAN HHP list.

2020 exceedances details

| Date sampled | Crop or Crop Group | Country | Pesticide | Level Found | MRL | 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 | MRL | 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](#).