European Commission

Health and Food Safety

2024 Annual Report
Alert & Cooperation Network

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FOREWORD – Director General Sandra Gallina

2024 was a year that saw Europe face numerous challenges, yet make significant strides in food safety. This annual report of the Alert and Cooperation Network (ACN) is an opportune moment to take stock of the evolving landscape in food and feed safety and to explore the complexity of emerging risks and the crucial role that vigilance and cooperation play in addressing them.

This year's report captures these developments, providing a comprehensive overview of the Member States' activities and outcomes. Without wanting to give too much away, it reveals a rise in the number of notifications across networks, particularly in the Rapid Alert System for Food and Feed (RASFF) notifications. This increase demonstrates the enduring vigilance and importance of EU control authorities on food and feed safety issues.

Responding to the growing need for enhanced communication between authorities in the agri-food sector, the ACN has continued to expand both in terms of reach and impact, with increased engagement from Member States. Recognising the need for greater collaboration, DG Health and Food Safety (DG SANTE) launched two new networks through the iRASFF: the Animal Welfare Network and the Pet Animals Network. The Animal Welfare Network focuses on the welfare of animals throughout their lifecycle, ensuring alignment with EU legislation. The Pet Animals Network facilitates swift information exchange among authorities to prevent fraudulent practices and to safeguard the safety of animals and their owners. These newly established networks facilitate rapid communication and information exchange between Member States, ultimately ensuring better implementation of EU legislation.

In 2024, innovation remained at the heart of our efforts. Building on the successful pilot project deploying artificial intelligence (AI), DG SANTE embarked on developing TraceMap – an advanced AI-driven tool, embedded within the Information Management System for Official Controls.

TraceMap will enhance the processing of large amounts of data, integrating over 10,000 ACN notifications and 4 million TRACES documents annually. It will automate the extraction of information from unstructured data, such as documents and images, and integrate this information with data from various databases. TraceMap will also facilitate identifying connections and links between alerts, operators, and patterns. These technological advancements will enable faster and more efficient tracing of food, feed, and live animals throughout the systems, abetting investigations into food safety incidents, while also helping in the fight against food fraud. This will build a safer, sustainable, and more responsive system – one that continues to protect the well-being of all EU citizens.

These initiatives align with the Commission's broader strategy for safeguarding public health and enhancing food safety. Our commitment to a more resilient and transparent agri-food system is unwavering. Our work in 2024, highlighted in this report, proves this. I take great pride in these accomplishments and look forward to the opportunities ahead.

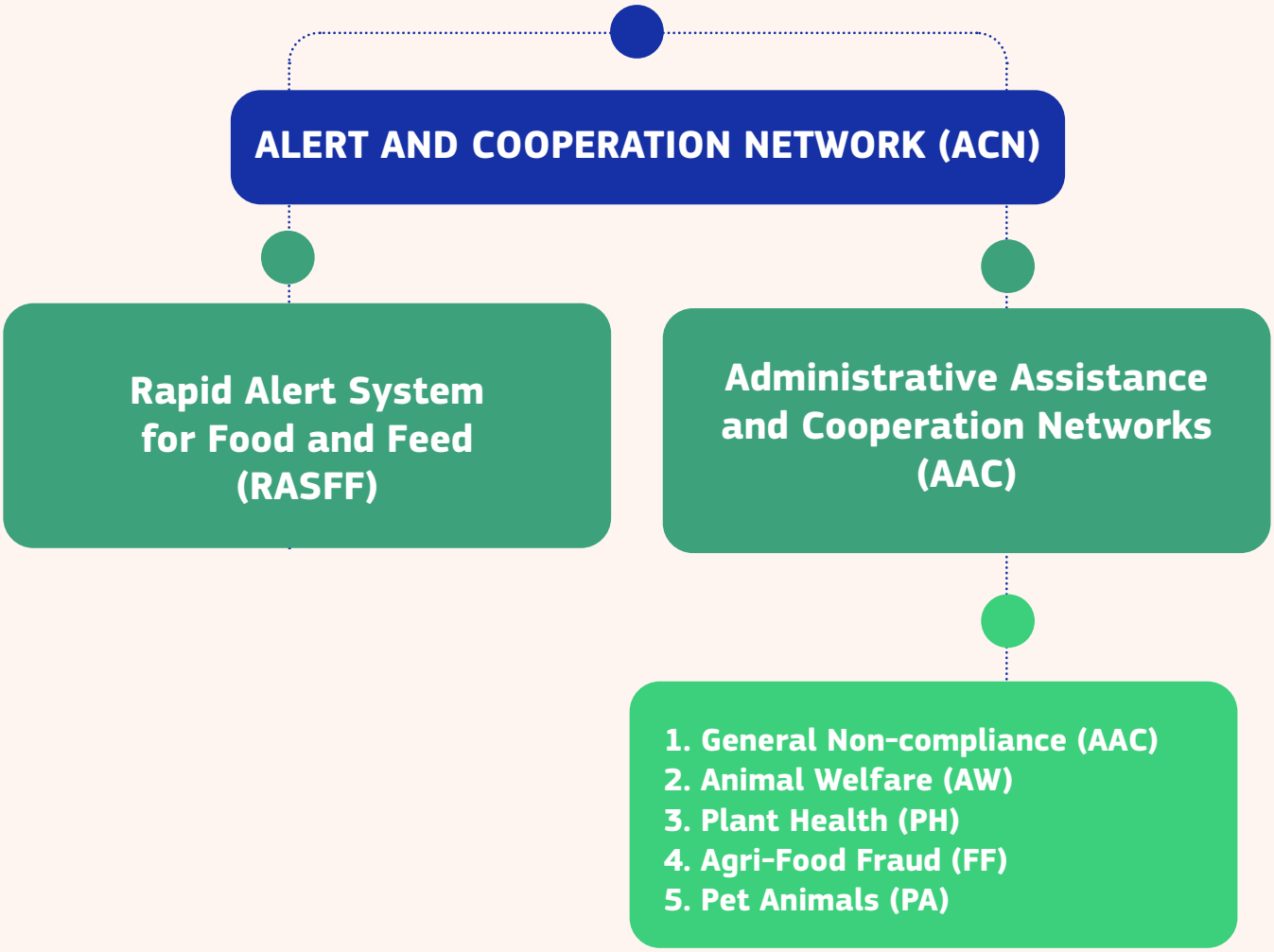
Thank you.

ALERT AND COOPERATION NETWORK

IN BRIEF

The 2024 Annual Report provides an overview and analysis of the information exchanged within the Alert and Cooperation Network (ACN) through the electronic system iRASFF. The ACN is a network composed of the RASFF [1] and the Administrative Assistance and Cooperation networks (AAC) [2].

This report showcases the continued growth in ACN usage by its members, as well as the increasing engagement of non-EU countries in collaboration and information exchange. 2024 marks the first year of operation for two new networks with detailed information provided in this report: the Pet Animals and the Animal Welfare networks.



Graph 1: Components of the Alert and Cooperation Network.

1 The Rapid Alert System for Food and Feed (RASFF) was established to ensure the exchange of information between Member States to support swift reaction by food safety authorities in case of risks to public health resulting from the food chain - Article 50 of Regulation (EC) N° 178/2002.

2 'AAC networks' refers to the networks composed of the Commission and the liaison bodies designated by the Member States in accordance with Article 103(1) of Regulation (EU) 2017/625 for the purpose of facilitating cooperation between competent authorities.

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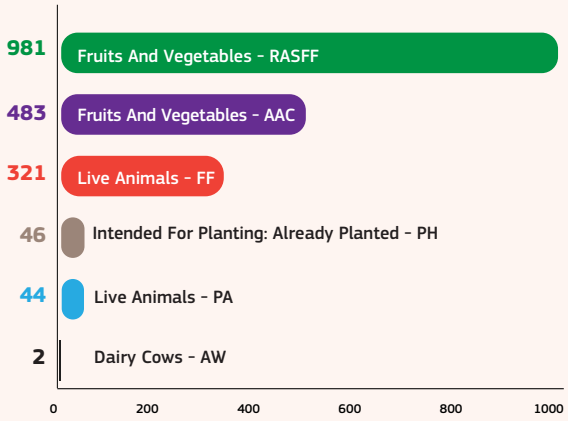
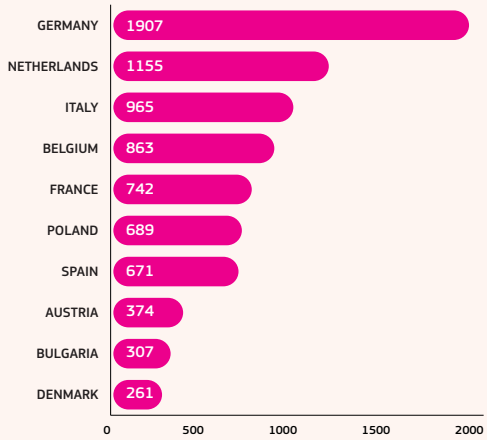
1. Main Activities of the Alert and Cooperation Network (ACN)

AGRI-FOOD FRAUD	ADMINISTRATIVE ASSISTANCE & COOPERATION GENERAL	RAPID ALERT SYSTEM FOR FOOD AND FEED	PLANT HEALTH	ANIMAL WELFARE	PET ANIMALS
546	3212	5250	397	3	52

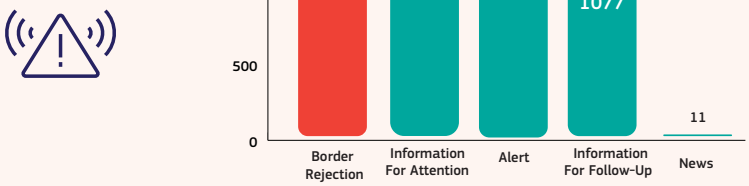
Top product categories notified by network



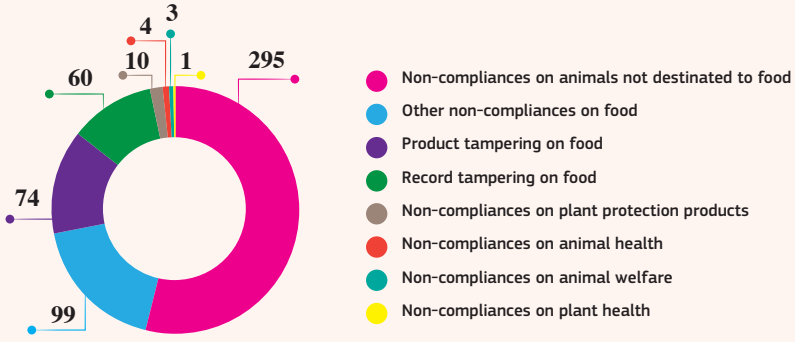
Top 10 ACN notifying countries



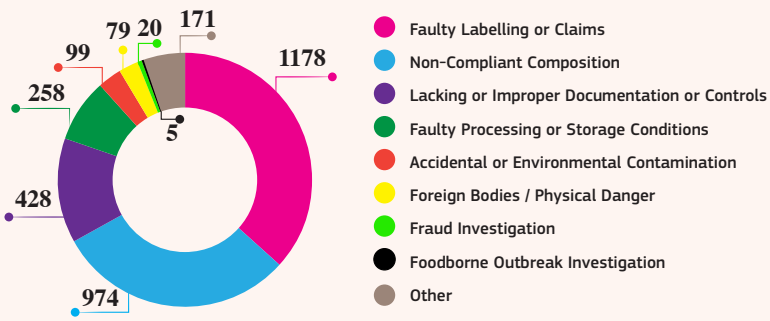
RASFF notifications by classification



Agri-Food Fraud notifications



Non-Compliance notifications



Graph 2: ACN Overview 2024

The overall number of ACN notifications (9460) continues to increase in 2024 (8% increase compared to the year 2023), with RASFF rising by 12% (5250 notifications). AAC notifications remained stable, FF notifications declined by one-third and PH notifications almost tripled in number. As in previous years, around one-third of RASFF notifications concerned border rejections, involving mainly pesticide residues in fruit and vegetable consignments.

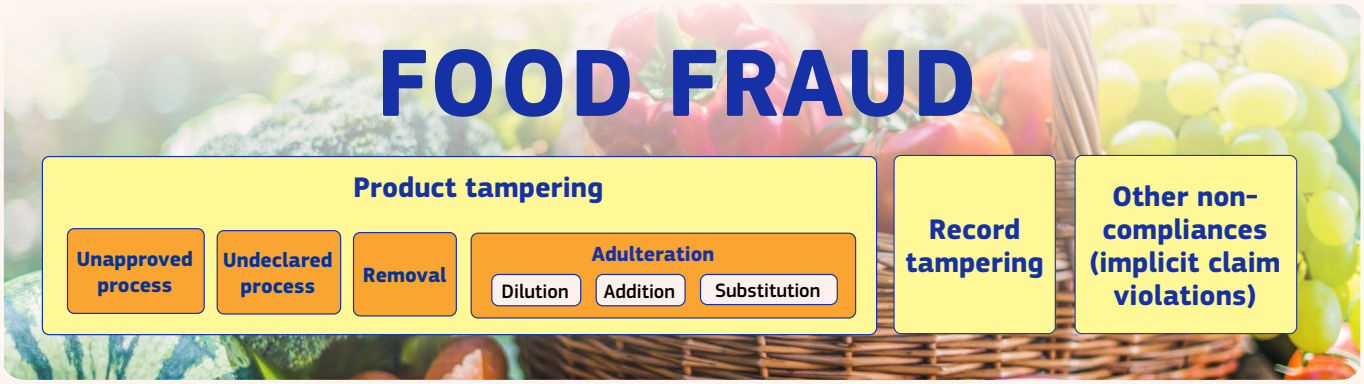
In the iRASFF system, in addition to original notifications, national authorities and the European Commission can provide further details (such as investigation outcomes, measures taken, distribution information, and relevant documents) through follow-ups and the conversation module. This facilitates direct and effective communication to clarify and enrich notifications.

The top notifying countries within the ACN are Germany, the Netherlands, and Italy.

1.1 Fraud Suspicions in the ACN

The Commission reviews all notifications generated in the ACN on a daily basis. This screening not only confirms the classification or categorization of non-compliance, but more importantly, allows the Commission to thoroughly assess possible connections, trends, and recurrences among these notifications.

In instances where coordination and further follow-up is deemed necessary, these cases are brought to the attention of the competent authorities for eventually conducting further investigations. In 2024, 1335 AAC and 1959 RASFF notifications have been identified as possibly resulting from an intentional behaviour. Compared to 2023, this represents an increase of 24% for AAC and 21% for RASFF.

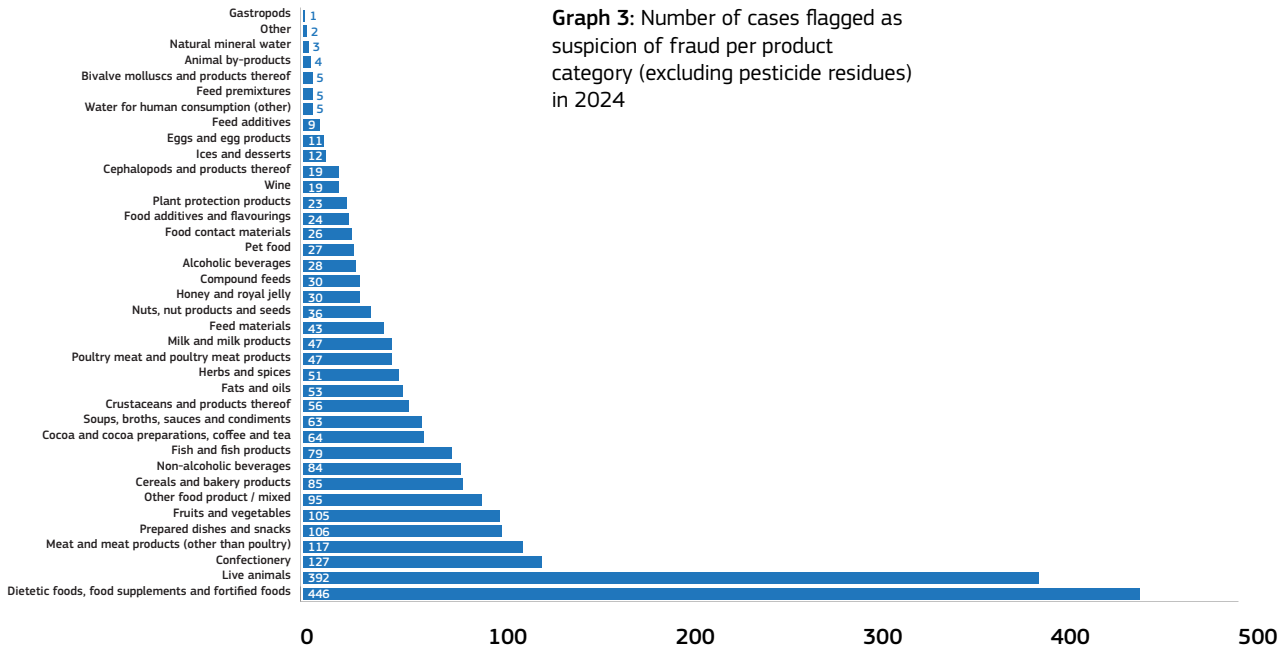


Since 2024, a new terminology and categorization of agri-food fraud suspicions have been implemented at EU level. These are based on the European Committee of Normalisation (CEN)[3] and the Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS)[4]. Suspicions of agri-food fraud are categorized into three main types: product tampering, record tampering, and other non-compliances, which are further detailed in subcategories.

The Commission publishes monthly reports on suspected agri-food fraud. These reports highlight cross-border non-compliance cases identified and shared in the ACN as potential fraud. They cover the entire food chain, including food, feed, food contact materials, farmed animal welfare, plant protection products, veterinary medicines, and other inputs that may leave residues or contaminants in food and feed. By publishing these reports, the Commission supports Member States in conducting risk-based controls and helps food businesses assess their vulnerabilities to fraudulent and deceptive practices.

3 Document EN 17972:2004 titled "Food authenticity - Food authenticity and fraud - Concepts, terms, and definitions" and the Codex Committee on Food Import and Export Inspection.

4 Draft guidelines on the prevention and control of food fraud.



Graph 3: Number of cases flagged as suspicion of fraud per product category (excluding pesticide residues) in 2024

Relating to EU border controls, 147 coordinated performances by competent authorities of intensified official controls on products of animal origin, germinal products, animal by-products, and composite products [5] were active at border control posts in 2024, 40 of which were for non-compliances that would be qualified as fraud (e.g., antimicrobial agents not authorised for use in food and in food-producing animals, particularly in fishery products and shrimps). The most frequently reported countries in 2024 are Türkiye, China, and India.

2. The Alert and Cooperation Network (ACN) in figures

This section provides an analysis of the most frequently reported issues in the ACN for the year 2024. The percentages are calculated in relation to the total number of notifications concerning food, feed, and food contact materials (FCM).

2.1 FOOD PRODUCTS

2.1.1 FRUITS AND VEGETABLES

In 2024, fruits and vegetables represent 16% of the notifications (1479) in the ACN [6], making them the highest reported category of all products. Most of the cases (around 66%) involve possible health risks, including hazards such as pesticide residues, mycotoxins, pathogenic microorganisms, metals, environmental pollutants and contaminants.

Table (1) and Graph (4) reflect the main products affected and their most reported issues.

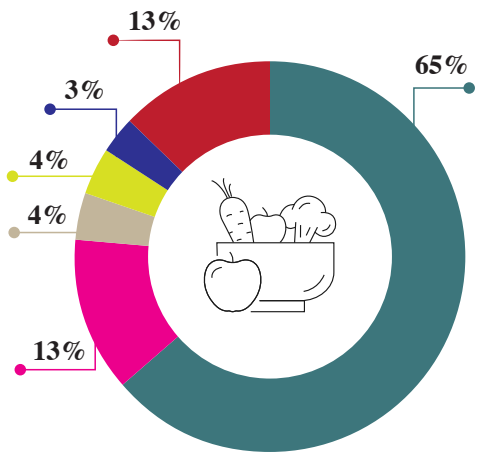
PRODUCTS	APPROXIMATE SHARE
Citrus fruits	**30%**
Dried fruits	**25%**
Peppers and chillies	**20%**
Others (e.g., beans, drumsticks)	**25%**

Table 1: fruit and vegetables reported in the ACN.

5 Commission Implementing Regulation (EU) 2019/1873 of 7 November 2019 on the procedures at border control posts for a coordinated performance by competent authorities of intensified official controls on products of animal origin, germinal products, animal by-products and composite products.

6 Percentages of notifications within the total of Food/feed/FCM in the ACN.

Pesticide residues, as in past years, are the most reported issue, with oranges, vine leaves, mangoes, and peppers appearing consistently in multiple notifications. Chlorpyrifos, acetamiprid, and dimethoate emerge as the most prevalent pesticide residues, affecting a variety of fresh produce. Vine leaves cases are notified frequently with more than 10 residues of different pesticides (32 notifications). Notifications on mycotoxins follow, with aflatoxins in figs and ochratoxin A in raisins being the most reported.



Graph 4: Most common issues reported for fruit and vegetables products in the ACN in 2024.

- **Pesticide residues** (chlorpyrifos, acetamiprid)
- **Mycotoxins** (aflatoxins, ochratoxin A)
- **Labelling issues**
- **Pathogenic micro-organisms** (Norovirus, *Salmonella*)
- **Metals** (cadmium, lead)
- **Others** (environmental pollutants, process contaminants, etc)

Products originating from non-EU countries account for 84% of the notifications concerning fruits and vegetables. As in previous years, Türkiye was the most frequently reported origin of these products, especially in cases involving figs, citrus fruits, and peppers. Egypt is another common origin, particularly in notifications regarding oranges and other citrus fruits. India and China were also represented, though with lower frequencies.

Aside from pesticide residues exceeding EU maximum residue limits, which questions the correctness of the use of plant protection products, numerous cases of product tampering with unauthorised food improvement agents (e.g., Allura Red AC, amaranth, tartrazine, brilliant blue, ponceau 4R) and excessive use of preservatives (e.g., benzoic acid, sulfur dioxide, nitrates) are notified. Additionally, there are instances of record tampering and other implicit claims violations (e.g., falsified origins, skipped border controls, incomplete traceability).

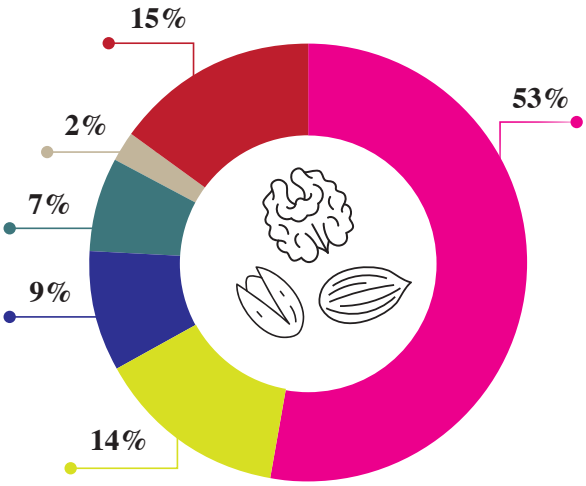
2.1.2. NUTS AND NUT PRODUCTS

In 2024, the ACN shows around 7% of notifications (657) on nuts and nut products, making them the second most reported category. Of all notifications reported, 91% involve possible health risks.

Table (2) and Graph (5) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Groundnuts	**35%**
Pistachios	**30%**
Sesame seeds	**20%**
Almonds	**10%**
Others (e.g., walnuts, hazelnuts)	**5%**

Table 2: nuts and nut products reported in the ACN.



Graph 5: most common issues reported for nuts and nut products in the ACN in 2024.

- **Mycotoxins** (aflatoxins, ochratoxin A)
- **Pathogenic micro-organisms** (*Salmonella, Listeria*)
- **Absence of health certificate(s)**
- **Pesticide residues** (chlorpyrifos, chlorate)
- **Natural toxins** (pyrrolizine alkaloids, opium alkaloids)
- **Others** (allergens, novel foods, biological contaminants)

Groundnuts are most frequently reported largely due to contamination with aflatoxins. Pistachios followed closely, primarily linked to mycotoxins and, to a lesser extent, pesticide residues. Sesame seeds account for approximately 20% of notifications, with issues related to both pathogenic microorganisms (e.g.; *Salmonella*) and absence of health certificate(s).

Pesticide residues cases are lower but still present, with substances like chlorpyrifos and chlorate being repeatedly reported. There are also some cases related to absence or improper health certificates to export to the EU, followed by other issues such as undeclared use of nuts in some products and unauthorised novel foods (e.g.; fenugreek (*Trigonella foenum-grecum*) leaves in roasted peanuts from India, tepary beans and areca nuts).

The countries of origin of the reported products are predominantly non-EU countries. Türkiye, Egypt, and the United States are the most frequently implicated origins, particularly for pistachios, groundnuts, and almonds. Türkiye is the leading source of pistachio contamination with aflatoxins, while Egypt is heavily linked to mycotoxins in groundnuts.

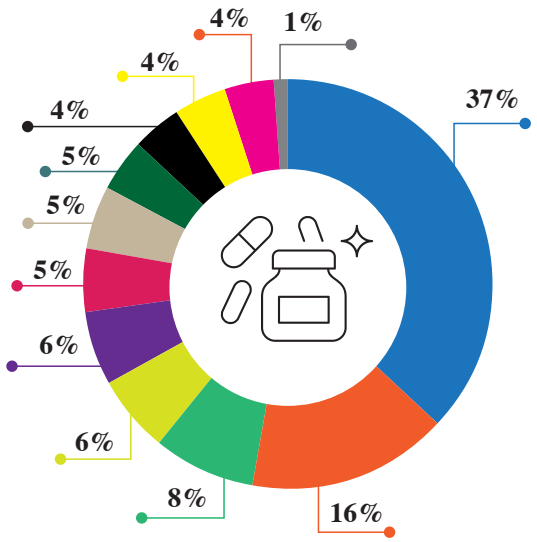
2.1.3. DIETETIC FOODS, FOOD SUPPLEMENTS AND FORTIFIED FOOD

In 2024, notifications related to dietetic foods, food supplements, and fortified foods accounts for 7% of notifications (642) in the ACN, with 60% of them covering potential health risks. Notably, nearly 70% of reported cases are flagged as potential fraud. These cases are largely associated with online sales, emphasizing the challenges of controlling e-commerce platforms' offers.

Table (3) and Graph (6) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Food supplements	75%
CBD products	10%
Protein powders	5%
Energy drinks	4%
Others (e.g., infant formulas)	6%

Table 3: dietetic foods, food supplements and fortified foods products reported in the ACN.



Graph 6: most common issues and substances/ingredients reported for dietetic products, food supplements and fortified foods in the ACN in 2024.

- **Unauthorised health claims**
- **Cannabidiol** (CBD)
- **Sildenafil**
- **Absence of marketing authorisation**
- **Yohimbine**
- **Titanium dioxide** (E 171)
- **Tongkat ali** (Eurycoma longifolia)
- **5-hydroxytryptophan** (5-HTP)
- **Tadalafil**
- **Serratiopeptidase**
- **Alpha glycerylphosphorylcholine** (GPC)
- **Nicotinamide Mononucleotide** (NMN)

Altogether, the most frequently reported issues in this category include implicit claim violations with declared or undeclared unauthorised ingredients or unauthorised substances such as sildenafil, yohimbine and tongkat ali (*Eurycoma longifolia*), commonly found in supplements marketed for weight loss or sexual enhancement. Another recurring issue is the detection of titanium dioxide (E171) used to increase the perceived quality of the product, an additive banned in the EU since August 2022 due to safety concerns related to genotoxicity.

Record tampering with misleading claims remains a major issue, with unsubstantiated statements such as 'contributes to mental balance,' 'increases vitality,' or 'supports a healthy metabolism,' and even cure-related statements such as 'prevents the formation of tumour cells' or 'beneficial against depression'. Consumers may rely on these unsubstantiated claims and use products that are ineffective or harmful.

Microbial contamination cases mainly involve pathogenic microorganisms such as *Cronobacter sakazakii* and *Salmonella*. Additionally, high mould counts are detected in products like aloe juice and spirulina, raising concerns about hygiene standards during manufacturing. Some reports also note excessively high vitamin contents (e.g., vitamin B6 and vitamin D), posing potential overdose risks.

The products originate from a diverse range of countries, with China being the most frequently implicated particularly as a supplier of raw materials for food supplements, while the United States accounts for manufactured products often introducing new ingredients and formulations lacking proper authorisation in the EU. As in 2023, the Netherlands and Poland were frequently linked to food products incorporating cannabidiol (CBD), a novel food under EU legislation (EU 2015/2283) that should yet be authorized before it can be marketed in the EU.

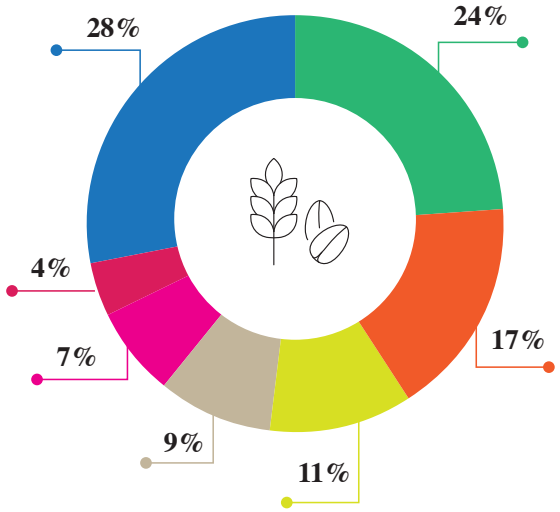
2.1.4. CEREALS AND BAKERY PRODUCTS

The product category cereals and bakery products represents around 6% of all notifications (562) in the ACN. Of these notifications, 70% cover potential health risks.

Table (4) and Graph (7) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Rice	**45%**
Flour (e.g. wheat, maize, buckwheat)	**15%**
Biscuits	**10%**
Others (e.g. pasta, bread, noodles)	**30%**

Table 4: cereals and bakery products products reported in the ACN.



Graph 7: most common issues reported for cereals and bakery products in the ACN in 2024

- **Pesticide residues** (chlorpyrifos, acetamiprid, thiamethoxam)
- **Labelling issues** (best before date, incorrect language)
- **Mycotoxins** (aflatoxins and ochratoxin A)
- **Allergens**
- **Foreign bodies**
- **Food additives and flavourings** (titanium dioxide (E171))
- **Others** (natural toxins, unapproved substances, process contaminants)

Pesticide residues above EU maximum residue limits represent the largest issue reported, particularly in basmati rice. This is followed by mislabelling issues and mycotoxins, often reported in rice and maize-based products.

Natural toxins (e.g., ergot and tropane alkaloids), unauthorised substances (e.g., E 110 (Sunset Yellow FCF) and E 928 (benzoyl peroxide)) in snacks, noodles, and other processed cereals, and process-related contaminants (e.g., acrylamide and glycidyl esters) in biscuits and flatbreads are often presented.

Cereal products implicated in these notifications predominantly originate from non-EU regions, with Pakistan and India being particularly notable sources of rice. However, several cases also involve products from within the EU, including products from Italy, Germany, and the Netherlands (e.g., organic corn flour, wheat flakes, quinoa).

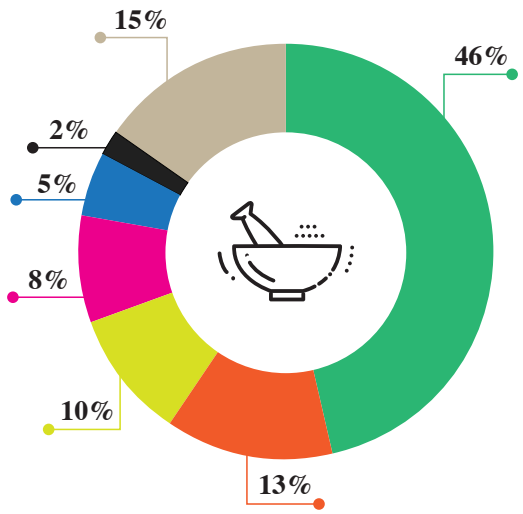
2.1.5. HERBS AND SPICES

In 2024, approximately 4% of the notifications (392) in the ACN concern herbs and spices. Of these, 81% were related to potential health risks.

Table (5) and Graph (8) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Oregano	**30%**
Cumin	**20%**
Nutmeg	**10%**
Black pepper	**25%**
Others (e.g. parsley, fennel)	**15%**

Table 5: herbs and spices reported in the ACN.



Graph 8: most common issues reported in the ACN for herbs and spices products in 2024

- **Pesticide residues** (chlorpyrifos, acetamiprid, carbendazim)
- **Natural toxins** (pyrrolizidine alkaloids)
- **Pathogenic micro-organisms** (*Salmonella, Bacillus cereus*)
- **Mycotoxins** (aflatoxins, ochratoxin A)
- **Labelling issues**
- **Environmental pollutants** (polycyclic aromatic hydrocarbons)
- **Others** (foreign bodies, novel foods, allergens)

Oregano and cumin are frequently implicated, in many cases due to high levels of pyrrolizidine alkaloids, while nutmeg and pepper are often associated with mycotoxins and pesticide residues. Cumin (powder and seeds) is particularly present (41 notifications) for the presence of multiple pesticide residues, with many instances exceeding 10 different pesticides residues in the sample and one case reaching 18. Notably, 80% of these cases originated from India. The remaining notifications pertain to various issues, including cases of non-compliant products due to accidental or environmental contamination and foreign bodies.

As exemplified in the Coordinated Control Plan of 2021, fraud suspicions continue to be detected in herbs and spices with unauthorised and undeclared colorants (e.g., Sudan dyes, Orange II, Rhodamine B) and heavy metals (e.g. lead), undeclared ingredients or additives like silicon dioxide (anti-caking agent) or sulfur dioxide (preservative). In addition, unapproved plant materials (e.g., *Angelica dahurica*, butterfly pea) and unreported irradiation is reported in some cases along with traceability and labelling irregularities.

Concerning the origins of the products and following the same trend as in fruits and vegetables, the EU imports a large variety of herbs and spices from non-member countries. Products originating from these countries constitute a significant 76% of the notifications related to herbs and spices. While RASFF notifications repeatedly cite Türkiye, Indonesia, India, and Egypt, cases involving non-compliances and suspicions of fraud show that Israel tops the list, followed by Germany, China, Spain, and India.

2.1.6. FATS AND OILS

The fats and oils category accounts for around 3% (265) of all notifications recorded in the ACN. These notifications address a few potential health risks (17%) related to process contaminants (e.g., glycidyl esters and 3-monochloropropane-1,2-diol (3-MCPD) in sunflower oil, palm oil, and vegetable ghee) or environmental pollutants (e.g., Mineral Oil Saturated Hydrocarbons (MOSH) and Mineral Oil Aromatic Hydrocarbons (MOAH) in olive, palm, and coconut oils). A few cases of pesticide residues above EU maximum limits are also reported (e.g., chlorpyrifos in olive and sunflower oils).

Table (6) reflects the main products affected.

PRODUCT	APPROXIMATE SHARE
Sunflower oil	30%
Olive oil	28%
Palm oil	15%
Vegetable ghee	10%
Coconut oil	7%
Hemp seed oil	3%
Others (oil blends, specialty oils)	7%

Table 6: fats and oils products reported in the ACN.

Non-conformities with declared quality and labelling, as well as fraud suspicions, are commonly notified within this category (83%). The main issues reported involve misbranding, mislabeling, and documentation discrepancies (e.g., product's origin, composition, or intended use).

In 2024, this is particularly problematic for sunflower and soybean oils, where technical-grade oils are suspected of being repurposed for food use.

OLIVE OIL

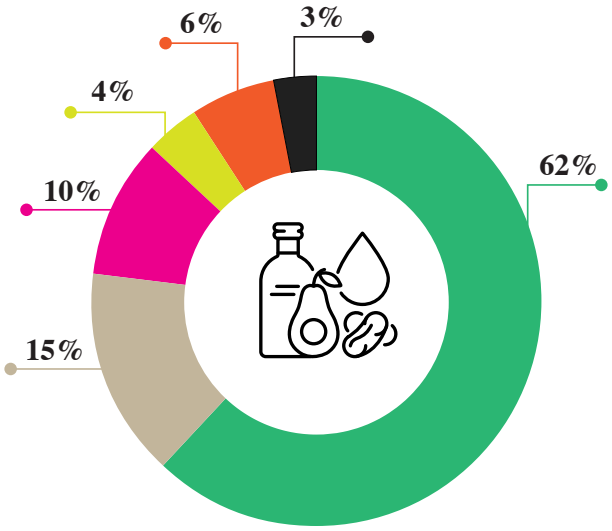
Olive oil is reputed as one of the foods most vulnerable to fraud in Europe with highly lucrative criminal activities regularly reported. Olive oil, and in particular extra virgin olive oil, is highly valued for its health benefits and culinary uses, making it an interesting target for fraudsters. Olives harvests and oil production remain labor-intensive and costly while yield productions are subject to critical condition due to extreme weather conditions, pests, and diseases (e.g., *Xylella fastidiosa*). All these factors can become an incentive to circumvent legislation and cut costs, mixing genuine oil with cheaper oils, or using lower-quality olive oil. Olive oil misclassification, misrepresentation and adulteration is always a source of consumer deception but differentiating frauds (intentional and economically motivated) from non-intentional non-compliances is sometimes hazardous unless when based on clear and undisputable evidence (e.g., confirmation of substitution with cheaper oils, addition of colorings and additives, forensic analysis). Olive oil is a natural product that degrades over time explaining why even under optimal storage conditions, it has a limited shelf life. Its oxidation leads to the formation of peroxides and other compounds that result in rancid flavors and odors. This natural phenomenon is exacerbated by light and heat exposures.

Non-compliances with olive oil must always be put in relation to the number of checks undertaken in supply chain(s) in application of EU Regulation 1308/2013 [7] and of Commission Delegated Regulation (EU) 2022/2104 [8]. In 2023, 17% of labels checks (724 on 4357) and 34% of category checks (1030 on 3023) were found non-conformities. These figures remain stable in the period 2020-2023 [9]. A portion of those checks end up as notifications and requests for cross-border technical and administrative assistance in the ACN. In 2024, EU Member States issued 130 notifications on olive oil, 15% of them qualifying with certainty as frauds of cross-border nature.

7 Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007.

8 Commission Delegated Regulation (EU) 2022/2104 of 29 July 2022 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards marketing standards for olive oil, and repealing Commission Regulation (EEC) No 2568/91 and Commission Implementing Regulation (EU) No 29/2012.

9 Source DG AGRI: Factsheet: olive oil quality checks in the EU.



Graph 9: most common issues reported in the ACN for Olive oil in 2024

- **Misrepresentation** (lower-grade quality)
- **Mislabelling issues**
- **Dilution / substitution with cheaper oil(s)**
- **PDO / PGI infringements**
- **MOSH / MOAH**
- **Pesticides / other contaminants**

2.1.7. MEAT AND MEAT PRODUCTS

In 2024, the meat and meat products category accounts for 10% [10] of all notifications (932) recorded in the ACN.

Table (7) reflects the main products affected.

PRODUCT	APPROXIMATE SHARE
MEAT (OTHER THAN POULTRY)	
Beef	17 %
Pork	15 %
Game meat	6 %
Processed meat	5 %
POULTRY	
Chicken	38 %
Turkey	8 %
Duck	5 %
Goose	3 %
Others	3 %

Table 7: meat and meat products reported in the ACN.

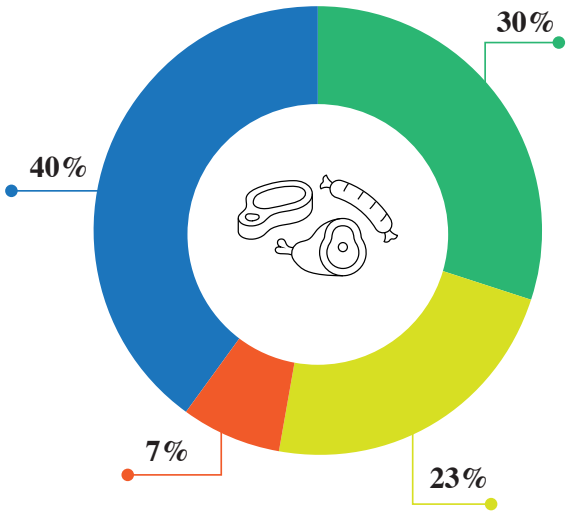
10 Percentages combine categories of "Meat and meat products" and "Poultry and poultry products" in the ACN.

Microbiological hazards account for almost half of notifications, with *Salmonella* appearing mainly in poultry, minced beef, pork sausages, and game meat, indicating hygiene issues during processing. STEC (Shiga toxin-producing *E. coli*) and *Listeria monocytogenes* are commonly reported in beef and pork products, while *Campylobacter* is mainly found in poultry.

With lower rates of reporting, some cases of chemical contaminants are notified (e.g., lead and cadmium in game meat), and residues of veterinary medicines above the EU maximum residues limits (e.g., antibiotics) in beef, pork and poultry, followed by the reporting of unauthorised or undeclared food additives. Physical hazards cases involve foreign bodies (e.g., metal fragments and plastic pieces from the manufacturing process or from packaging materials) in processed products. Cases of record and product tampering are reported, including misleading labelling (e.g., false claims of origin or quality), undeclared substitutions (e.g., beef and lamb substituted with chicken meat in processed and mixed meat products), and illegal imports. The most reported origins are Poland and Brazil, linked to *Salmonella* and hygiene issues.

HORSE MEAT

Between 2018 and 2024, several issues related to horse meat were reported in the ACN. Many incidents involve errors in documentation, such as cases where horses declared dead in one country were later slaughtered in another one or instances where the origin and destination of the animals are inaccurately reported. Poor record-keeping and misdeclarations made it difficult to track the origin and movements of these horses. This gap in traceability creates opportunities for fraudulent activities, including the illegal reintroduction of horses that had previously been excluded from the food chain. During this period, 60 cases of such illegal reintroduction were reported. Health-related concerns also emerged. Between 2018 and 2024, a total of 96 fraud suspicions and 74 non-compliance cases without any immediate health risks were noted, while 30 RASFF notifications pointed to potential health issues.



Graph 10: most common issues related to horse meat reported in the ACN in 2018-2024

In 2024 alone, the data reflects similar challenges with 15 fraud suspicions, 5 non-compliances, and one RASFF notification. The underlying issues remain consistent, driven by inadequate documentation, poor traceability, and the illegal diversion of horses not eligible for human consumption into the food chain. In one instance, a recall was initiated after a horse that had received disqualifying medicinal treatment was found to have been slaughtered and intended for human consumption.

2.1.8. MILK AND MILK PRODUCTS

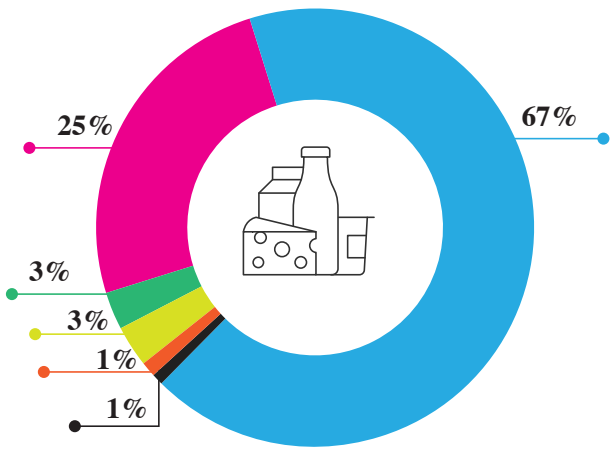
In 2024, notifications involving milk and milk products accounts for 3% (245) of the total of notifications in the ACN. Of these, 51% are related to potential health risks with cases of microbial contamination (e.g., *Listeria monocytogenes*, shiga toxin–producing *Escherichia coli* (STEC), and some cases of moulds and yeasts. Other hazards include foreign bodies (plastic, metal or wood fragments), as well as labelling, processing, and storage related non-compliances.

The most prominent example of pathogenic infection through raw milk productsfor 2024 is notification 2024.5201 is regarding *Yersinia enterocolitica* in raw milk goat's cheese from France. The notification, submitted by the Netherlands, was originally reporting *Yersinia* contamination in cheeses on a US cruise ship. Gradually, through more investigations from other member states, it was revealed that the product was distributed in 30 countries both within and outside the EU, with 181 reported cases connected to its consumption in France, Belgium, Norway, and Luxembourg.

Table (8) and Graph (11) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Cheeses and cheese products	60%
Raw milk products	27%
Others (yoghurts, powders, creams)	13%

Table 8: milk and milk products reported in the ACN.



Graph 11: most common microorganisms reported in the ACN for milk and milk products in 2024.

- *Listeria monocytogenes*
- *Escherichia coli*
- *Salmonella*
- *Yersinia enterocolitica*
- *Staphylococcus aureus*
- *Bacillus cereus*

Notifications concerning other non-compliances and fraud suspicions frequently highlight issues related to traceability, improper documentation, misrepresentation of product origin, misuse of protected designations of origin (PDO) and protected geographical indications (PGI), and product tampering, such as the use of undeclared additives (e.g., ascorbic acid in cheese) or substitution (milk species).

Products from France, Italy, and the Netherlands are most frequently implicated in 2024, with France being linked to the highest number of cases.

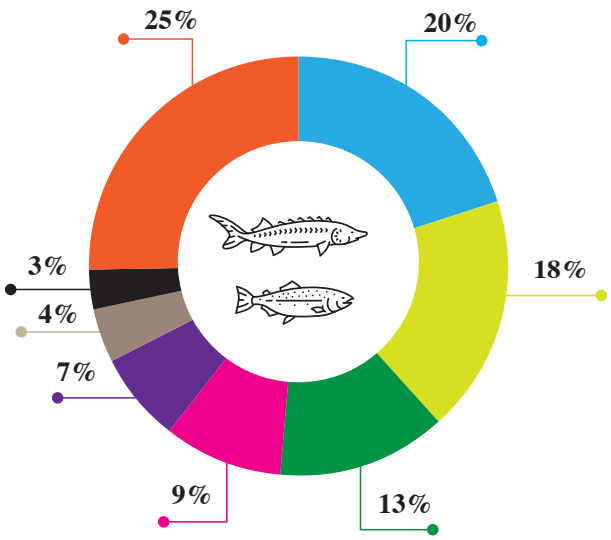
2.1.9. FISHERY PRODUCTS

In 2024, notifications involving fish and fish products represents 4% of the total of notifications (388) in the ACN. Most of the cases (64%) involve possible health risks.

Table (9) and Graph (12) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Tuna and tuna products	**40%**
Salmon and salmon products	**25%**
Swordfish	**15%**
Others (hake, mackerel, catfish)	**20%**

Table 9: fishery products reported in the ACN.



Graph 12: most common issues reported for fishery products in the ACN in 2024.

- **Pathogenic micro-organisms** (*Listeria monocytogenes*)
- **Metals**
- **Labelling issues**
- **Temperature failures**
- **Biological contaminants** (histamine)
- **Parasitic infestation** (anisakis, Nematode larvae)
- **Residues of veterinary medicinal products** (leucomalachite green, ivermectin)
- **Others** (insufficient checks, foreign bodies)

The key issues reported revolve around microbiological contaminants, followed by metals and metalloids such as mercury, arsenic, and cadmium. Labelling problems, including mismatched identification marks and missing health certificates, also arise. Temperature control issues frequently occur, with many frozen products undergoing poor cold chain management, which not only compromises product quality but also increases the risk of microbiological contamination. Residues of veterinary medicinal products appear in catfish and pangasius, notably from Vietnam.

Tuna products are particularly affected by elevated histamine levels and temperature control issues, while salmon is predominantly associated with microbiological hazards (e.g., *Listeria monocytogenes*). Swordfish appears often in the context of metal contamination (e.g., mercury).

Ten cases involving unauthorised treatments or additives (e.g., carbon monoxide, or ascorbic acid above EU prescribed limits) and thirteen notifications regarding labeling were recorded on tuna.

The Netherlands, Poland, Spain, China and Vietnam appear among the top sources.

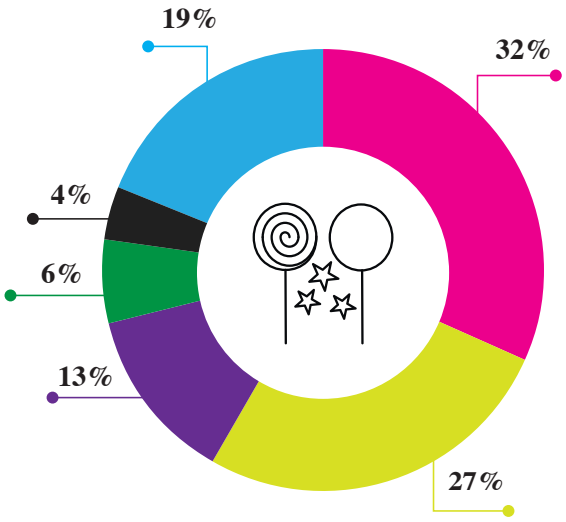
2.1.10. CONFECTIONERY PRODUCTS

In 2024, confectionery products account for 3% (225) of the ACN notifications with 51% of them involving possible health risks.

Table (10) and Graph (13) reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Gummies	30%
Candies	25%
Jelly products	20%
Lollipops	10%
Others	15%

Table 10: Confectionery products reported in the ACN.



Graph 13: most common issues reported for Confectionery products in the ACN in 2024.

- **Labelling issues**
- **Food additives and flavourings** (Sunset Yellow FCF, titanium dioxide)
- **Novel foods (CBD, THC)**
- **Foreign bodies** (glass, metal, plastic)
- **Allergens**
- **Others** (pathogenic microorganisms, skipped border controls, process contaminants)

Gummies are the most reported, with multiple cases documenting the presence of cannabinoids such as tetrahydrocannabinol (THC) and cannabidiol (CBD).

Other candies (e.g., hard candies, chocolates, caramels) are repeatedly flagged for unauthorised additives (e.g., titanium dioxide (E 171)) and excessive levels of colorants (e.g., Sunset Yellow FCF (E 110)). Carrageenan (E 407) or xanthan gum (E 415) additives, which increase the risk for suffocation if a sweet gets stuck in the respiratory tract, are commonly reported in jelly products.

Cases on labeling and trade quality are predominant in 2024, examples include insufficient allergen information, labelling of product claims (for instance, “gluten-free” or health claims), and failures in meeting legal requirements.

2.1.11. HONEY

The number of honey related notifications in the ACN remains noticeable (52) in a sector that remains highly scrutinised (4813 controls were undertaken in Member States in 2022 on 10392 EU operators). The issue of honey tampering by dilution with extraneous sugars remains the main reason for fraud-related notifications, as exemplified in the EU coordinated action conducted in 2021-2022. Other issues relate to falsified import documents, and misleading information about floral origins. Excessive hydroxymethylfurfural (HMF) contents, an indicator of honey quality (age, improper storage conditions or over-heating), are also a significant concern. There are few notifications of non-compliant labeling, particularly concerning the composition and health claims associated with Manuka honey. Cases of natural toxins like pyrrolizidine alkaloids and grayanotoxins, as well as the presence of medicinal substances (e.g., sildenafil and tadalafil) associated with a potential health risk are also reported.

2.2. FOOD CONTACT MATERIALS

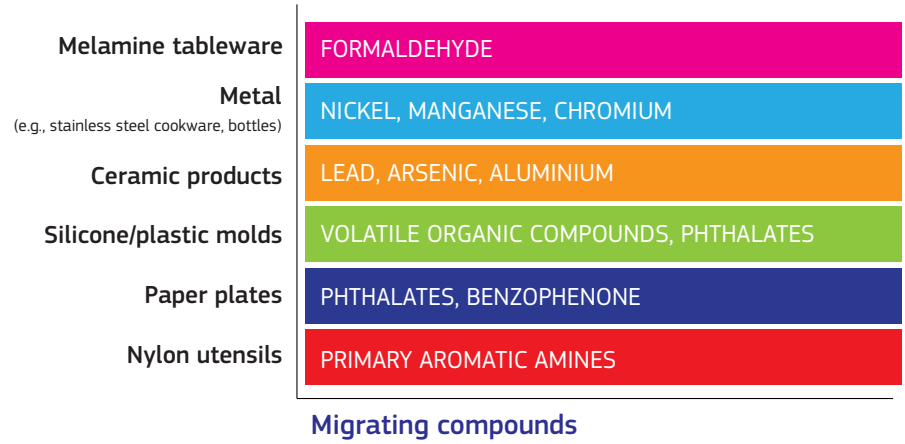
In 2024, notifications on food contact materials (FCM) represent 3% (257) of the ACN notifications, with 70% of them involving possible health risks. Table 11 and Graph 14 reflect the main products affected and their most reported issues, with half of them concerning migration hazards (e.g., primary aromatic amines, phthalates, and formaldehyde) and the others mainly concerning composition issues (e.g., bamboo fibres in melamine and plastic products marketed as eco-friendly alternatives but posing safety risks due to potential formaldehyde migration – see EU Coordinated Action 2021-2022, bisphenol A (BPA) in polycarbonate cooking molds and children's tableware, unauthorised use of wheat straws in plastic products). Other notable issues included corrosion and abrasion of materials and the detachment of coatings potentially leading to ingestion of particles.

PRODUCT	APPROXIMATE SHARE
Kitchenware and tableware	**34%**
One-use-only products	**22%**
Packaging materials	**18%**
Food processing equipment	**15%**
Others (baking trays, bottles)	**11%**

Table 11: FCM products reported in the ACN.

FOOD CONTACT MATERIALS & MIGRATING COMPOUNDS

Graph 14: most common compounds reported for migration from FMC in the ACN in 2024.



Non-compliances related to documentation and labelling account for a smaller but noteworthy share of notifications. These include missing declarations of compliance, incomplete labelling, and misleading product claims, particularly in plastic and silicone tableware and even evasion of border controls.

Most non-compliance originated from non-EU Countries, accounting for approximately 75% of the notifications. China was the most frequently implicated country, representing about 52% of all cases. Germany, Türkiye, Italy, and Spain also appeared as significant countries of origin, although at lower rates.

In early November 2024, a German operator discovered during the company's own inspections that small copper strands had contaminated one batch of packing buckets. These 10kg buckets contained six batches of mayonnaise, which the company immediately started to recall from the market. Despite this, the mayonnaise had already reached markets in six member countries.

In mid-November, a second notification from Germany highlighted buckets contaminated with copper strands, measuring 0.16 mm in diameter and ranging from 0.01 to 2 cm in length. Reports of copper strand presence from many manufacturers led to suspicions that the containers themselves caused the issue. Investigation revealed that an earth cable had become brittle due to constant movement and bending in the energy chain. The breaks in the sheathing allowed the strands to enter the buckets during the automatic stacking process, which was not capable of detecting such shortcomings. Unfortunately, metal detectors cannot pick up wire pieces with a diameter of 0.16 mm, as they only detect larger sizes.

These findings highlighted the problem with a second type of bucket. Food business operators commonly use two types of large buckets for packaging intermediate products such as cream cheese, mayonnaise, yogurt, or sour cream, which are then processed as ingredients for various cold salads, frozen dishes, pizzas, and other products. Companies recalled these final products from consumers and withdrew them from the markets in 16 member countries.

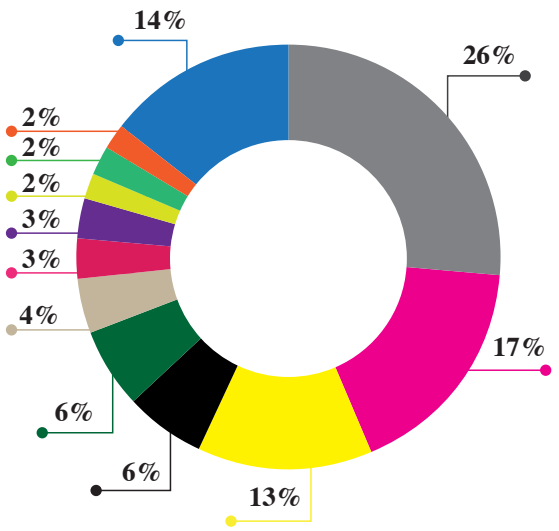
2.3. FEED

In 2024, notifications on feed products account for 5% (494) of the ACN notifications, with half of them involving possible feed safety risks.

Table 12 and Graph 15 reflect the main products affected and their most reported issues.

PRODUCT	APPROXIMATE SHARE
Fish feed	**15%**
Soybean meal	**14%**
Sunflower cake	**11%**
Millet	**9%**
Rapeseed meal	**8%**
Compound feed for pets	**7%**
Others	**36%**

Table 12: feed products reported in iRASFF.



Graph 15: Most common issues reported for feed products in the ACN in 2024.

- **Pathogenic micro-organisms** (*Salmonella, Enterobacteriaceae*)
- **Pesticide residues** (chlorpyrifos)
- **Labelling issues**
- **Composition** (high content of ragweed (*Ambrosia spp.*)
- **Environmental pollutants** (dioxins)
- **Additives** (ie: lanthanum carbonate)
- **Ruminant DNA in fish feed**
- **Traceability deficiencies**
- **Foreign bodies**
- **Mycotoxins** (aflatoxins)
- **Metals** (cadmium, lead)
- **Others**

Microorganisms, particularly *Salmonella* are prevalent in soybean meal, sunflower cake, and fishmeal. Pesticide residues (notably chlorpyrifos) are frequently detected in products such as dried apple pulp, carob flour, and flax seeds, primarily originating from Ukraine. Some cases of metals and metalloids (e.g., cadmium) are found in compound feeds and fishmeal, with some cases involving imports from Peru and China. Additionally, environmental pollutants such as dioxins are detected in fish oil, copper feed additives, and palm fatty acids, highlighting contamination risks in raw materials sourced from Ireland, India, and Indonesia. Mycotoxins, such as deoxynivalenol (DON) and fumonisins, are commonly found in complementary feed for swine, while aflatoxins are reported in millet and groundnut kernels. Non-compliance issues are predominantly related to labelling issues, unauthorised claims, unauthorised feed additives or ingredients (e.g., lutein, zeaxanthin, and spirulina extracts in pet-food, CBD, unauthorised GMOs), composition irregularities and traceability defects.

At the end of August 2024, Finland reported a case related to dog chews imported from China suspected to be causing neurological symptoms in dogs, including sudden and extreme tension, panic attacks, howling, barking, restlessness, aggression, drooling, and spasms. In response, the Finnish company in question decided to stop collaboration with the Chinese manufacturer. As a precaution, they extended the recall to include all products imported from that operator. The notification was swiftly transmitted to Estonia due to further distribution. However, laboratory analyses revealed no abnormalities.

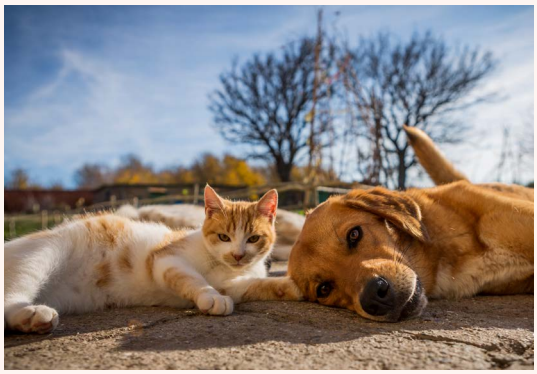
In December, Finland received several consumer complaints about similar neurological symptoms in dogs exposed to a different brand of dog chews produced at the same Chinese facility. Germany also reported additional suspected cases from pet owners and veterinarians. All affected animals had consumed bovine hide products. In response, German authorities formally requested the Chinese Competent Authorities to investigate the potential contamination.

In mid-December, Denmark issued a second notification regarding dog chews from China, initiating a recall following alarming reports from customers and veterinarians about behavioural changes in dogs that consumed the product. Danish authorities launched an in-depth investigation to identify the source of contamination and, as a precaution, recalled all suspected products. By the end of December, multiple European countries had received various products and brands from the Chinese manufacturer. The symptoms appeared isolated, suggesting that the contamination might be random rather than systematic.

On December 26, 2024, all involved countries received information from Chinese Competent Authority, detailing the measures and investigations underway in China. Investigations in Germany confirmed that the affected products were sold exclusively by an online retailer, with goods shipped from warehouses in Belgium, Poland, and the Czech Republic. To protect food safety and animal health in the EU, the Commission urged Chinese authorities to investigate in the company in China and to suspend the signature of export certificates to the Union. In addition, China was requested to conduct horizontal investigation to ensure that similar issues will not arise from products exported by other similar establishments. On January 22, 2025, Poland, collected samples from three different lots of dog chews for laboratory testing. The results indicated the presence of tannin compounds used in leather tanning. Given the inability to rule out the use of tannins in production, authorities imposed a ban on placing these dog chews on the market.

2.4. LIVE ANIMALS

2.4.1.PET ANIMALS



In 2024, a total of 483 notifications related to cats and dogs were submitted in the ACN. Of these, 336 involved suspected fraud.

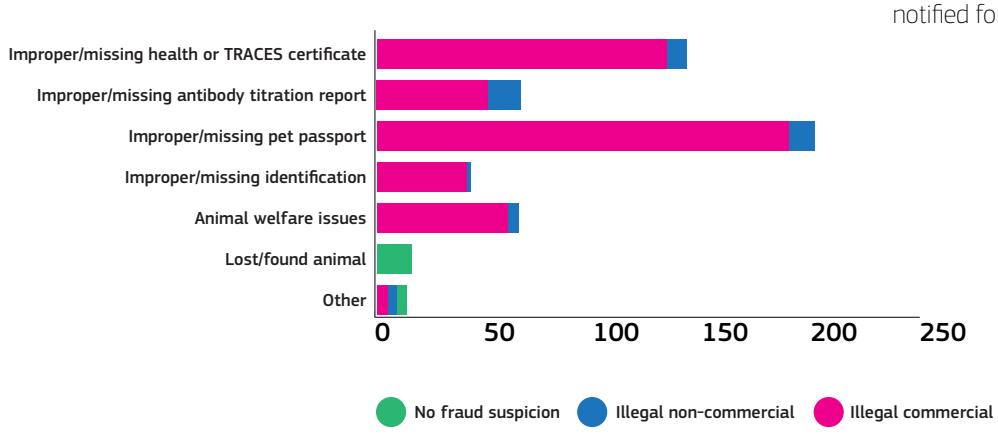
As demonstrated in the EU-coordinated action of 2022, most violations in this sector stem from missing documentation or forgery of documents such as health certificates, pet passports, and rabies titration test reports, including falsified veterinary stamps and signatures, altered animal origins or ages, and counterfeit rabies vaccination stickers. Notifications also highlighted animal welfare concerns, including mutilations (such as ear cropping and tail docking) and health-related issues.

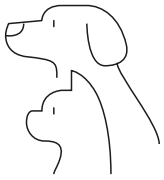
Among the reported cases, 78% were classified as illegal commercial activity, including instances where commercial trade was disguised as non-commercial movement.

Slovenia, Germany, Belgium, and the Netherlands recorded the highest number of notifications. Regarding the animals' origins, 46% came from EU countries – primarily Romania, Bulgaria, Croatia, and Poland – while 38% originated from non-EU countries, notably Serbia, Türkiye, Ukraine, Belarus, and Russia. The remaining 16% were of unknown origin.

In October 2024, the Commission launched the Pet Animals network (PAN), a dedicated Administrative Assistance and Cooperation network aimed at addressing non-compliance related to companion animals, including suspected fraud and illegal trade. PAN enhances collaboration, communication, and coordination among EU Member States' authorities, strengthening efforts to tackle these issues.

Graph 16: type of non-compliance notified for cats and dogs in 2024.





2.4.2.ANIMAL WELFARE

In October 2024, the European Commission launched a dedicated Administrative Assistance and Cooperation network, the Animal Welfare Network (AWN) to improve cooperation and information-sharing among Member States on animal welfare cases. The network focuses on ensuring humane treatment throughout the animal life cycle, from farming and transport to slaughter. It is designed with production animals in mind, hence why it was decided to keep welfare notifications involving cats and dogs in their own dedicated network. The AWN allows Member States to request support and exchange knowledge of best practices, aiming to align animal welfare standards across the EU. It operates under existing regulations covering animal protection during transport and slaughter, as well as directives setting minimum standards for farmed animals.

In its first months, the AWN had limited activity, as Member States were still in the process of assigning contact points and familiarising themselves with the system. Towards the end of the year, a training session was organized, and guidelines were distributed to facilitate engagement. With the foundation firmly established, the AWN is now poised to facilitate a significant increase in animal welfare notifications and collaborative efforts among Member States in 2025, building on the progress made in its inaugural year.

2.5. PLANT HEALTH

The Plant Health Network consists of the 27 Member States of the European Union and Switzerland. Its purpose is to facilitate the sharing of notifications regarding non-compliances with other Member States and Switzerland for consignments intercepted between Member States within the European Union. Additionally, goods originating from third countries may be imported into the EU, subsequently transported between Member States, and later found to be non-compliant. In such cases, the iRASFF system must be used. Moreover, the system can be used by Member States to share contingency plans for priority pests, suspicions of fraud or requests for assistance.

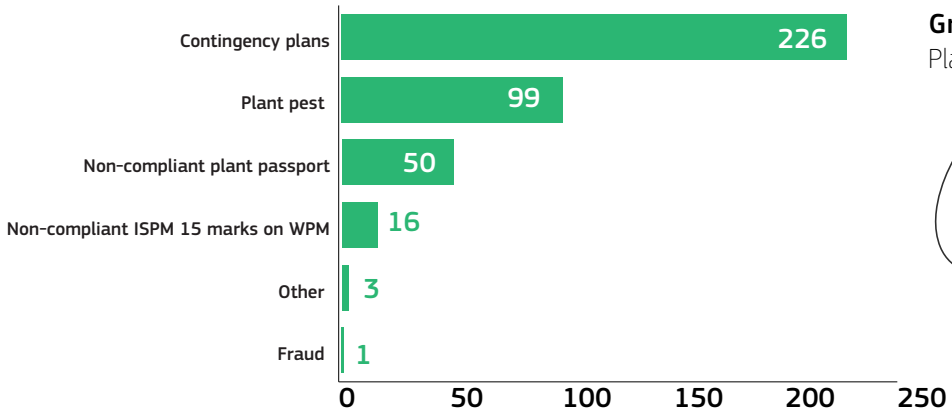
In 2024, a total of 397 Plant health notifications were exchanged. Among the 397 notifications, 171 were generated to report non-compliances, while 226 addressed issues regarding contingency plans.

Non-compliant notifications were issued by 21 Member States and Switzerland, with Belgium generating the highest number (34), followed by Poland and Estonia (16 each), Netherlands and Spain (13 each) and Sweden (12).

The most reported notification bases are official controls in operators' premises with 78 notifications, official controls on the market with 39 notifications, and followed by surveillance programs and monitoring samples with 19 notifications.

99 notifications involved the detection of regulated plant pests in consignments. Pests can include insects, viruses, nematodes, fungi and bacteria. They can cause significant plant damages, such as decreased crop yields, necrosis, rotting or death of plants.

Additionally, 50 notifications were issued due to non-compliant plant passports, which certify consignment contents and provide traceability details. 16 notifications reported missing or incorrect ISPM (International Standards for Phytosanitary Measures) marks on wood packaging materials, which is the wood that surrounds and secures certain products during transport. Such markings, indicating the dedicated symbol of "ISPM 15", the country code, the treatment provider code, and the treatment code applied, are required for non-EU and Portuguese wood packaging to comply with EU entry and circulation regulations. 5 notifications were created for the presence of leaves in consignments of citrus fruits, presence of bark on wood packaging material, or alerting on suspicion of the presence of pests. One notification was created to alert on a suspicion of fraud.



Graph 17: reported issues for Plant Health cases in 2024

Regarding the origin of the products, out of the 171 notifications, 152 concerned products originating from within the EU, with the Netherlands (45), Italy (23), and Spain (16) being the most frequently reported origins. An additional 22 notifications involved goods from outside the EU.

The most frequently reported products were **potatoes (*Solanum tuberosum*)** appearing in 25 notifications, **tomatoes (*Solanum lycopersicum*)** were cited in 23 notifications, **pine wood (*Pinus spp.*)** was mentioned in 18 notifications mostly for wood packaging missing ISPM 15 marks, and **citrus fruits (*Citrus spp.*)** were appearing in 8 notifications. Given the wide range of plant species, many commodities were only reported in one or two notifications over the year.

By category, the most reported product categories were:

- Plants for planting (106 notifications)
- Fruits and vegetables (32 notifications)
- Dunnage wood (11 notifications)

As shown in Figure 18, the top 5 plant pests were the following:

1. **Tomato brown rugose fruit virus** (23 notifications): Found in tomato seeds, plants, leaves, and fruits (*Solanum lycopersicum*), with one case in pepper seeds (*Capsicum annuum*).
2. **Globodera pallida** (9 notifications): Detected in tubers of potatoes (*Solanum tuberosum*).
3. **Bemisia tabaci** (6 notifications): Found in poinsettia plants (*Euphorbia pulcherrima*)
4. **Meloidogyne chitwoodi** (5 notifications): Reported in potatoes (*Solanum tuberosum*).
5. **Phytophthora Ramorum** (5 notifications): Found on Rhododendron plants (*Rhododendron spp.*).

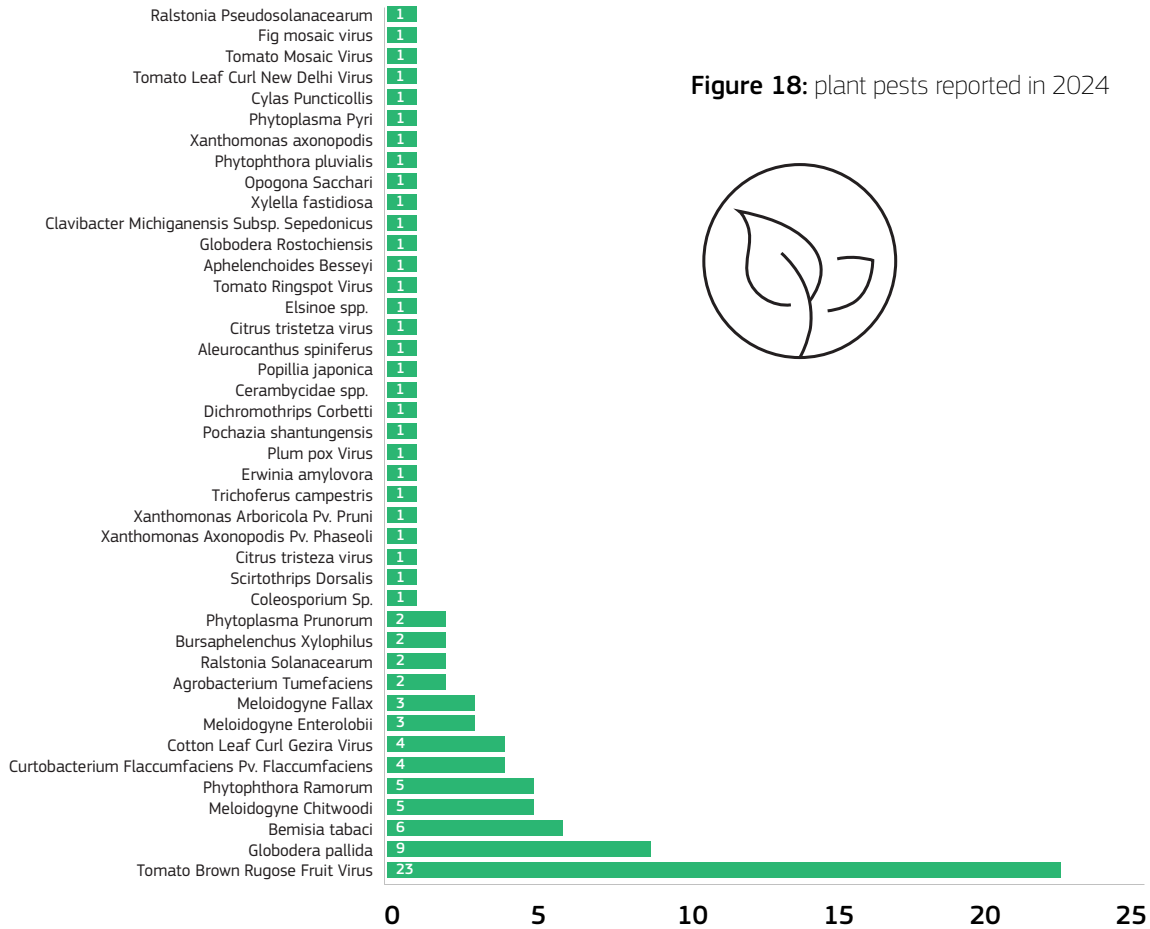


Figure 18: plant pests reported in 2024

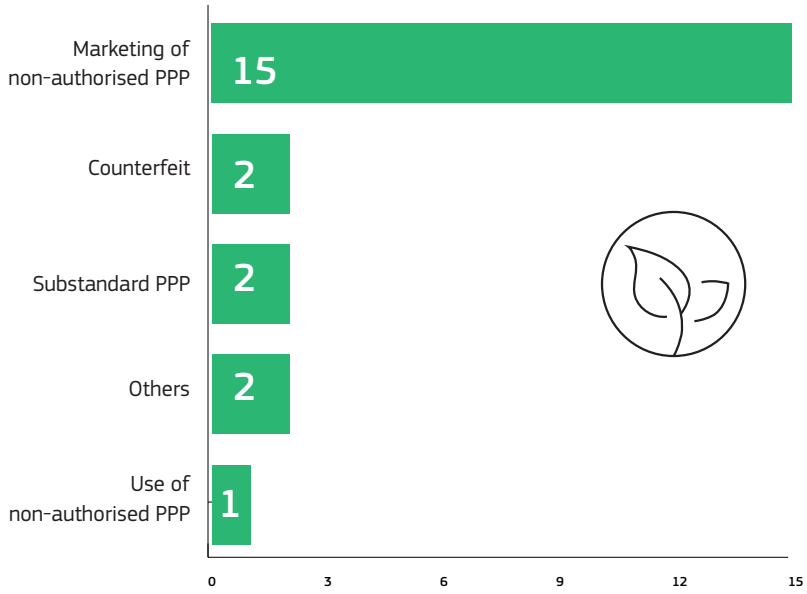
2.6. PLANT PROTECTION PRODUCTS

The European Commission's enforcement action on illegal plant protection products, which began in May 2023, continued throughout 2024 and is planned to extend into 2025. This initiative is implemented by the EU Food Fraud Network in close collaboration with Europol, under the framework of the EMPACT Envicrime sub-action on phytosanitary products, as well as within the context of IPR-related cases in Operation Silver Axe. The primary objective is to simultaneously target illegal pesticide trade from various perspectives of competent and law enforcement authorities.

Effective coordination among the involved actors and the secure dissemination of confidential information between authorities, despite occasional challenges, are crucial to the success of this action.

There were 22 notifications concerning illegal Plant Protection Products in 2024.

Graph 19: reported issues for PPP cases in 2024.



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