



BANNED PESTICIDES

still in use in the EU



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The image shows a tractor with a large sprayer attachment moving across a field of crops, likely corn, during sunset. The sky is a mix of orange and yellow, and the sun is visible on the right side. The tractor is kicking up a mist of spray. The field is in the foreground, and the tractor is in the middle ground. The background shows rolling hills under the sunset sky.

Executive summary

Pesticide active substances are regularly banned at EU-level because it has been established that they do not meet the safety criteria regarding the protection of human or animal health, the environment, as well as ground water. The Europe regulatory framework allows Member States to grant 120-day derogations to their farmers for the use of pesticides that are not authorised at national level. While in many cases, derogations are used to accelerate the availability of biocontrol (pesticides authorised in organic farming) on the market, PAN Europe has been advocating since many years against the abuses of derogations given to bee-toxic neonicotinoids that were banned in 2018. In this research, PAN Europe has investigated to what extent derogations are provided to other EU-banned pesticides.

PAN Europe has analysed the European Commission database on the so-called 'emergency authorisations' for 24 normally non-approved active substances between 2019 and 2022. We found no less than 236 derogations given to 14 substances from that list. These substances are all highly hazardous to human health and/or to the environment. Neonicotinoid insecticides represent 47.5% of such derogations, while endocrine disrupter herbicide diquat is the 2nd most popular derogation and 1,3-dichloropropene, a highly toxic soil fumigant that was never approved in the EU, completes the podium.

A big discrepancy between Member States was observed. Austria (20), Finland (18) and Denmark (17) are the 3 countries giving the most important amount of derogations while Luxembourg, Malta and Bulgaria did not declare any such derogation.

PAN Europe further identified that the derogations provided are not in line with the EU legislation as they are not underpinned by a true emergency that justifies them. Furthermore, non-chemical or less toxic chemical alternatives exist in all cases, questioning again their legality.

While the European Commission decides to ban substances to protect health and the environment, Member States decide to keep exposing their citizens and biodiversity through this regulatory loophole. The European Commission is well aware of the situation but few reactions have been observed. PAN Europe asks that the EU puts an end to the derogations provided to non-approved pesticide substances. They have been banned to protect citizens' health and the environment, in line with EU law. Non-chemical and chemical alternatives exist. European Citizens regularly ask for a drastic reduction in pesticide use in the EU. This loophole must be urgently addressed.



Introduction

Over the last 10 years the European Commission and Member States have finally ended the authorisation of some pesticides that were proven to be extremely hazardous to human health and the environment. However, they are still used on a large scale and authorised in many EU countries. This is made possible by circumventing the bans by means of so-called 'emergency authorisations' which the EU pesticide regulation (EU) 1107/2009 provides for a period of 120 days, in case of emergency, and when no alternatives are available. This loophole is abused by EU Member States, who give hundreds of derogations to highly toxic pesticides every year, even though non-chemical or less-toxic chemical alternatives exist.

For instance, in 2018, three neonicotinoid substances were banned, following their important toxicity to bees. In the same way, children's brain-damaging chlorpyrifos and foetus-toxic mancozeb were respectively banned in 2019 and 2020. One could think that the environment has become cleaner and healthier but unfortunately, many Member States maintain the banned pesticides on the market, exposing citizens and the environment to these toxins.

PAN Europe has noticed that derogations were regularly granted to the pesticide industry itself. In a recent move, the European Commission and Member States tried to legitimise the fact that the pesticide industry can ask itself for derogations for their own products (see section Legal framework). PAN Europe decided to investigate to what extent industry is behind derogations.

In this report, we analysed the derogations provided by Member States to allow the use of 24 EU-banned pesticides, provided from 2019 to 2022. We identify a series of flaws in the system, including the major role played by agribusiness in the delivery of such derogations, as well as the failures of Member State competent authorities in assessing the rationale behind such requests in a professional way. We conclude that the derogation system constitutes a backdoor for agribusiness to maintain the use of these toxic products on the market, while Member States and the European Commission turn a blind eye to such practices that are not justified from an agronomic point of view.



Regulatory framework

Under article 53 from Pesticide Regulation (EU) 1107/2009, derogations for emergency situations may be granted for a maximum of 120 days, “for limited and controlled use, where such a measure appears necessary because of a danger which cannot be contained by any other reasonable means”. The wording of article 53 (“any other reasonable means”) is quite imprecise, as it does not provide specific criteria to evaluate if an alternative is reasonable or not. Nevertheless, it infers that in order to provide a derogation, Member States’ competent authorities must carry out an analysis on the alternatives to be able to assess if they are considered as reasonable or not. In past communications^{1,2,3,4} PAN Europe already identified that the lack of clear criteria allows for Member States to dramatically abuse the system by claiming that any small loss in terms of yields allows for the provision of derogations (for instance, read our Meet (chemical) agriculture report⁵).

Article 53 establishes that it is the responsibility of Member States to provide derogations. The article does not mention the role of stakeholder applicants in the derogation process. In particular for cases where derogations are asked for plant protection products that contain non-approved active substances, Member States are responsible for making sure that the request is duly justified and that no alternative is available.

To clarify article 53, the European Commission in 2013 produced a working document⁶ on the implementation of this article. The document indicated that “Derogations for emergency use are meant solely to be in the interest of agriculture, environment and governments. Applications solely based on industry interests should be refused”. PAN Europe complained several times to the European

¹ <https://www.pan-europe.info/press-releases/2022/09/eu-advocate-general-recommends-strongly-limit-use-pesticide-derogations>

² <https://www.pan-europe.info/press-releases/2021/11/pollinis-and-pan-europe-boycott-efsa-meeting-neonicotinoids-derogations>

³ <https://www.pan-europe.info/press-releases/2021/11/neonicotinoids-efsa-gives-blank-cheque-member-states-keep-abusing-toxic>

⁴ <https://www.pan-europe.info/blog/pan-europe-takes-issue-pesticide-derogations-court-justice-european-union>

⁵ <https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/reports/pan-europe-2012-meet-chemical-agriculture-the-120-day-derogation.pdf>

⁶ Working document SANCO/10087/2013



Commission that many derogations were asked for by the pesticide industry itself.

In 2021, the European Commission and the unanimity of Member States agreed on a new Guidance Document for the implementation of article 53 of regulation (EU) 1107/2009⁷. The EU Commission did not follow PAN Europe's complaint. Instead of clarifying that derogations should not be asked for by the agrochemical industry because of the evident and unacceptable conflict of interest they have, the European Commission gave the possibility for the pesticide industry to apply themselves, as any other stakeholder in this revised guidance document. No explanation is provided on how far the pesticide industry must demonstrate that it acts on behalf

of farmers nor on how to differentiate the interest of farmers and that of the industry. By developing a fuzzy guidance for the already unclear article 53, the European Commission gave a blank cheque for industry to apply for derogations to maintain normally-banned toxic pesticides on the market.

The Guidance document⁷ also mentions the need for applicants to provide: *“a robust justification for the authorisation [...], first by the applicant as part of the notification, and, subsequently, if an authorisation is granted, by the Member State authority issuing the authorisation.”*. The details of the argument that must be provided by applicants concerning the description of the danger and the lack of reasonable alternatives is further described in the guidance

'In the context of Article 53 of the Regulation, applicants are typically growers' associations, agricultural cooperatives or other representatives of growers or regional administrations. However, applications may also come from companies that are holders of authorisations for plant protection products who may act on behalf of growers in submitting an application. However, emergency authorisations should solely be in the interest of agriculture or protection of the environment (e.g. invasive species). Applications solely based on the interests of industry are not acceptable and must be refused. Applicants should provide as much information as possible to enable the Member State authorities to progress the evaluation efficiently and reach a decision as quickly as possible, without the need to request further information.'

(Guidance on emergency authorisations according to Article 53 of Regulation (EC) 1107/2009, SANCO/10087/2013 rev., 1 of 26 January 2021, Art. 3.1)

⁷ https://futureu.europa.eu/rails/active_storage/blobs/eyJfcmFpbHMiOnsibWVzc2FnZSI6IkJBaHBBcFdyliwiZXhwIjpudWxsLCJwdXliOiJi bG9iX2lkIn19--a45418e437059870ee63d47dcb4b8565a8ea35a9/Panel%203%20session%203%20Report_v2022.01.12_final.pdf

The guidance document indicates: *«applications may also come from companies that are holders of authorisations for plant protection products who may act on behalf of growers in submitting an application. However, emergency authorisations should solely be in the interest of agriculture or protection of the environment (e.g. invasive species). Applications solely based on the interests of industry are not acceptable and must be refused»*



document (pp.19-20). Motivating the absence of any other reasonable alternatives should include the description of the *“alternative control measures (chemical, non-chemical, including biological control and agricultural methods) that have been considered and indicate why they do not (by themselves or in combination) suffice or why non-control would cause unacceptable damage to plant production or ecosystems. Describe which, if any, alternative methods and/or authorisations of plant protection products for the pest to be controlled exist in the other Member States”*. Member States are then requested to evaluate the application and to carry out their own analysis on the validity of the arguments provided, including checking their completeness, in order to eventually provide a derogation that complies with article 53.

The Guidance document also specifies that derogations on banned substances should be “a last resort”. However, in the case of the derogations provided for these EU-banned substances, alternatives exist. The main benefactor of these derogations then being the pesticide company.

The regulatory framework thus clearly establishes that national competent authorities must play a key role in assessing the validity of derogation requests. A derogation can only be provided when an emergency arises, only when no alternative exists and this must be duly justified. The beneficiary of the derogation must be farmers and applications must evidently document this.





Methodology

We analysed the emergency authorisations for 24 pesticide active substances⁸ from 2019 to 2022. These pesticides have been either proven to be highly toxic for human health and the environment or to contribute to the rise of antibiotic-resistant pathogens and have consequently been banned in the EU. For one of them (1,3-Dichloropropene), applications for approval at EU-level have systematically been rejected, due to its extreme toxicity.

Our research was based on the European Commission's open database⁹, which gives access to the notifications that Member States send to the European Commission, providing information on emergency authorisations granted, the authorisation holder, the pesticide for which the derogation is given, target pests, etc. PAN Europe investigated whether and how often Member States granted emergency authorisations for the respective banned pesticides, and whether they sufficiently documented and justified the existence of an emergency and the lack of alternatives. The derogations granted were

further evaluated according to the identity of the so-called 'authorisation holders'. Those were divided into 5 categories: farmer organisations, national authorities, pesticide industry, sugar industry/industry-related sugar lobby groups and others. The latter corresponds to organisations that could not be included into one of the first four categories. Sugar industry and sugar lobby groups were included into a special category as they represent an important share of the derogation requests since a few years. Furthermore, some sugar industry companies provide neonicotinoid-treated seeds to the farmers they work with.

When several derogations were given for different products containing the same active ingredient for the same use, they were counted as a single derogation. Some Member States provided derogations for the treatment of seeds. These derogations are not included in our statistics, only derogations for the use of non-EU approved pesticides were counted.

⁸ 1,3-Dichloropropene; Acetochlor; Aldicarb; Asulam sodium; Atrazine; Carbendazim; Chlorothalonil; Chlorpropham; Chlorpyrifos; Chlorpyrifos-methyl; Clothianidin; Diquat; Endosulfan; Glufosinate; Imidacloprid; Iprodione; Linuron; Mancozeb; Maneb; Streptomycin; Thiocloprid; Thiamethoxam; Thiram; Tricyclazole.

⁹ <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/ppp/pppeas/index.html>

This database has either not been accessible or the PDF files for a series of derogations that we analysed are not downloadable at the moment of publication of this report.

Results



For the period from January 2019 to December 2022, our investigation has found derogations for 14 pesticide substances out of the 24 investigated substances¹⁰ of this research.

Active substance	Toxicity - reason for banning
1,3-Dichloropropene	Contamination of groundwater, non-target arthropods (including bees), birds and mammals, and soil organisms. Endocrine disruptor.
Asulam sodium	Risk for consumers, risk to birds and non-targeted terrestrial plants. Acute risk to wild mammals.
Chlorothalonil	Poses the high risk to amphibians and fish. Causes contamination of groundwater by its metabolites. Identified risk for bees. A genotoxicity risk for consumers.
Chlorpyrifos	Genotoxicity and developmental neurotoxicity. Potentially toxic for reproduction.
Chlorpyrifos-methyl	Development and adverse neurodevelopmental outcomes in children. Potentially toxic for reproduction.
Clothianidin	High acute risks for honeybees, solitary bees and bumblebees.
Diquat	Identified high risk to workers, bystanders and residents; high risk to birds.
Imidacloprid	High acute risks for bees.
Linuron	Toxic for reproduction, category 1B and carcinogen, category 2. Poses high risk for children if exposure occurs, and for workers operating handheld sprayers, even with the use of the protective equipment. A high risk to birds and wild mammals, non-target arthropods and non-target soil macro-organisms is identified.
Mancozeb	Toxic for reproduction, category 1B. Endocrine-disrupting properties for humans and non-target organisms.
Streptomycin	The approvals of antibiotics for non-medical purposes in agriculture exacerbate the problem of antibiotic resistance.
Thiacloprid	Toxic for reproduction, category 1B and carcinogen, category 2. Metabolites of thiacloprid hold carcinogenic properties and contaminate groundwater.
Thiamethoxam	High acute risks for honeybees, solitary bees and bumblebees.
Thiram	High acute risk to consumers and to workers. Water treatment processes of thiram-containing surface and groundwater result with toxic metabolites. High risk to birds and mammals. High risk to aquatic organisms from exposure to metabolites. Endocrine-disrupting properties.

Source: [EU pesticide database](#) - active substances

¹⁰ 1,3-Dichloropropene; Asulam sodium; Chlorothalonil; Chlorpyrifos; Chlorpyrifos-methyl; Clothianidin; Diquat; Imidacloprid; Linuron; Mancozeb; Streptomycin; Thiacloprid; Thiamethoxam; Thiram.

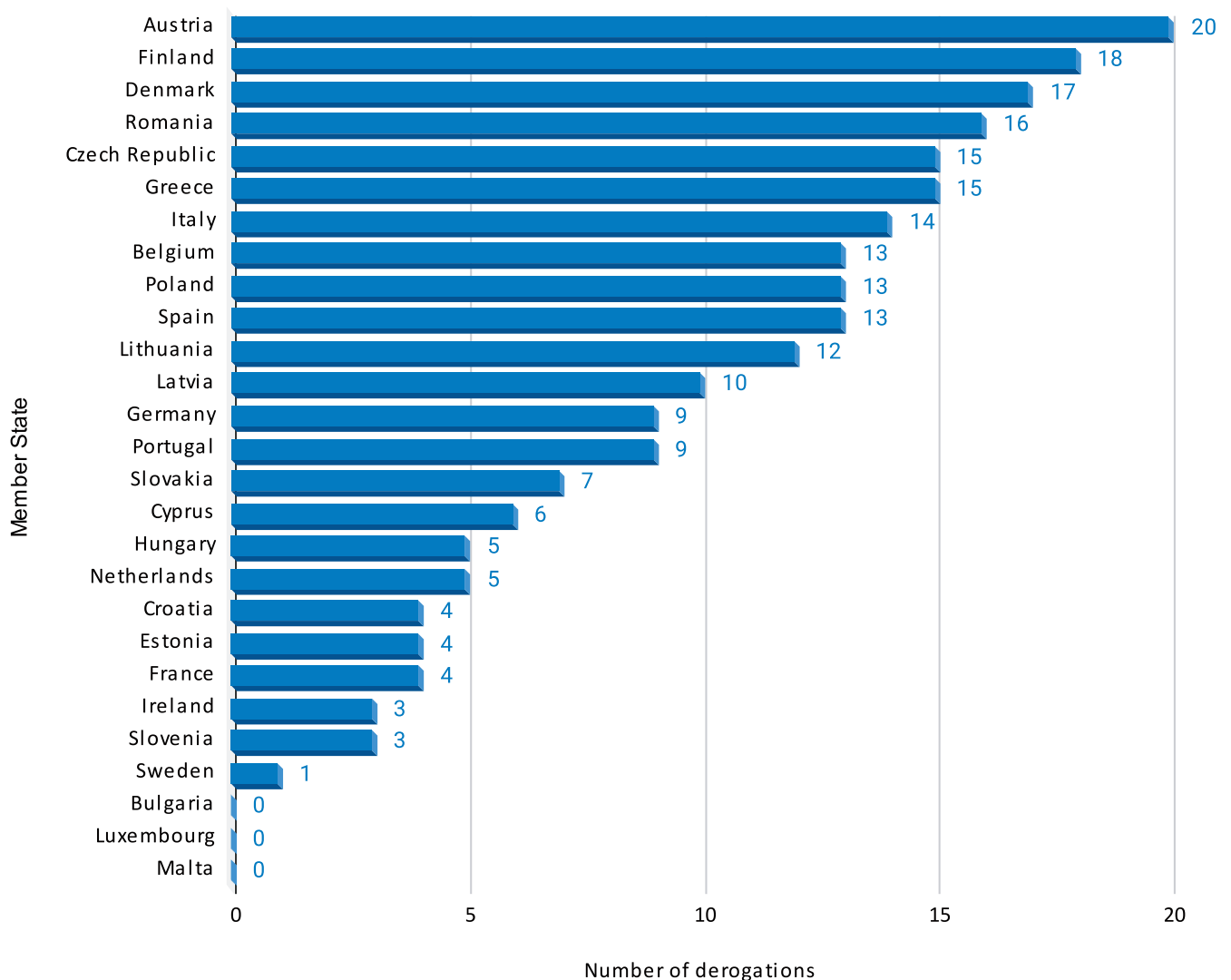


4.1. Derogations per country

Out of the 24 investigated banned pesticide substances, a total of 236 emergency authorisations were granted for 14 substances between 2019 and 2022. Austria is the 'champion' of derogations for pesticides that are normally banned, followed by

Finland and Denmark. The results show significant differences between Member States, with 3 Member States (Bulgaria, Malta and Luxembourg) having submitted no derogations for the studied substances until the end of 2022.

Number of derogations granted per Member States (2019 - 2022)



This survey concerns: 1,3-Dichloropropene, Asulam sodium, Chlorothalonil, Chlorpyrifos, Chlorpyrifos-methyl, Clothianidin, Diquat, Imidacloprid, Linuron, Mancozeb, Streptomycin, Thiacloprid, Thiametoxam, Thiram

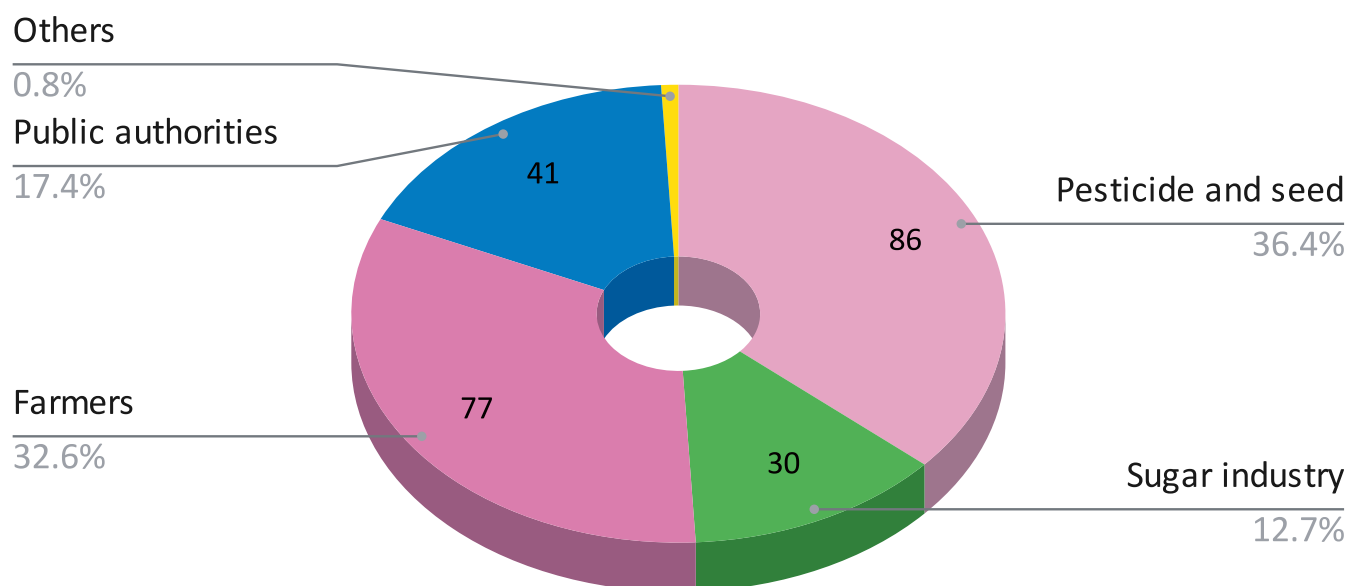


4.2. Derogations per applicant

Our investigation further studied the share of the different categories of authorisation holders. It appears that farmers account for less than a third (32,6%) of the applications, while the pesticide and seed industry account for 36,4% of the derogations.

Public authorities represent 17,4% of the derogations, while the sugar industry accounts for 12,7% of the derogation requests, all of them being for neonicotinoid insecticides to be used mostly on sugar beet.

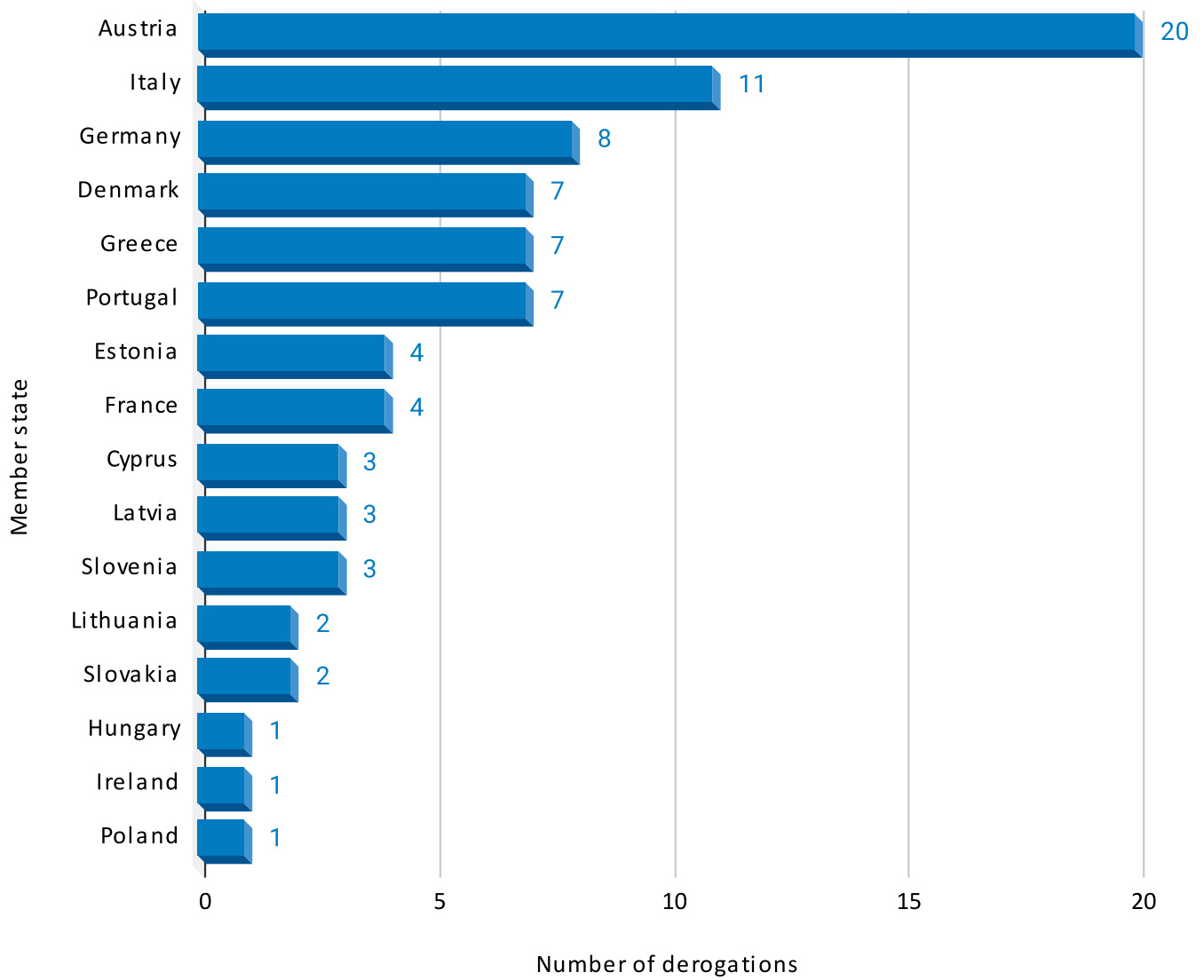
Number of derogations granted by Member States, per holder category (2019 - 2022)



This survey concerns: 1,3-Dichloropropene, Asulam sodium, Chlorothalonil, Chlorpyrifos, Chlorpyrifos-methyl, Clothianidin, Diquat, Imidacloprid, Linuron, Mancozeb, Streptomycin, Thiacloprid, Thiametoxam, Thiram



Number of derogations given by Member States to pesticide and seed industry (2019 - 2022)



This survey concerns: 1,3-Dichloropropene, Asulam sodium, Chlorothalonil, Chlorpyrifos, Chlorpyrifos-methyl, Clothianidin, Diquat, Imidacloprid, Linuron, Mancozeb, Streptomycin, Thiacloprid, Thiamethoxam, Thiram

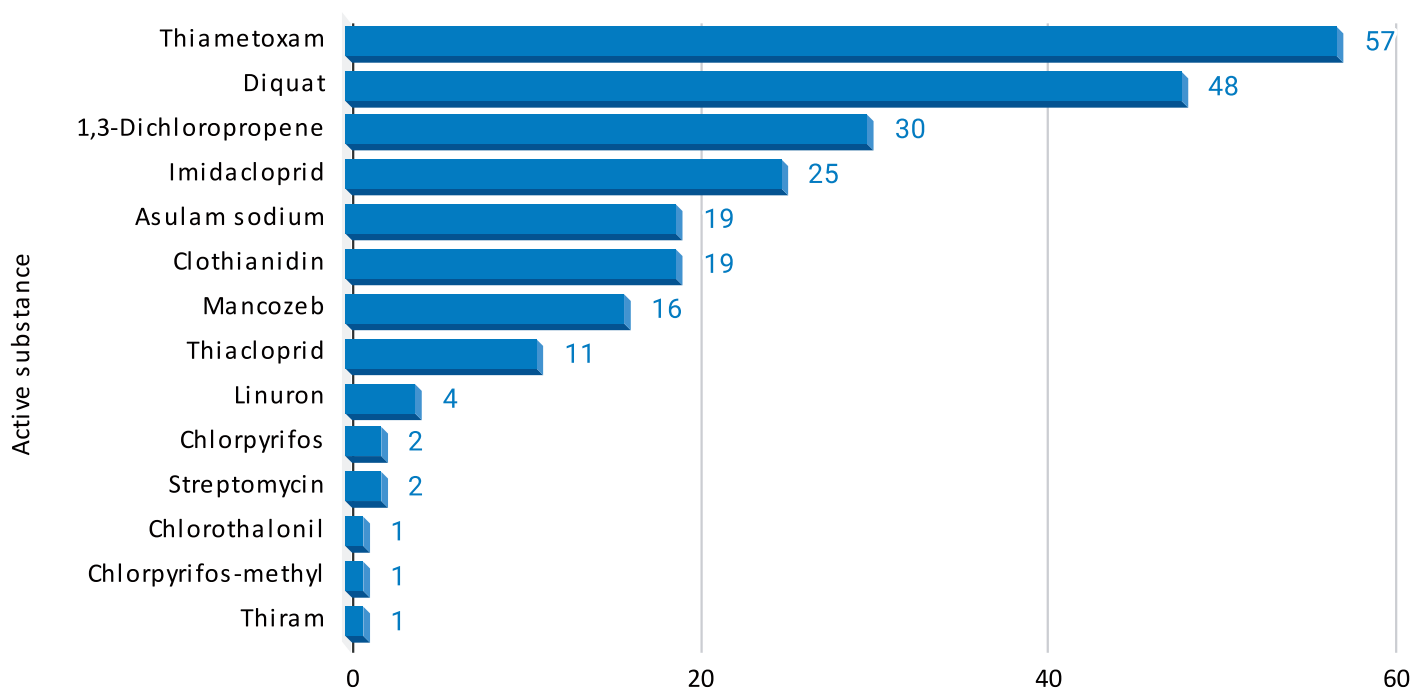




4.3. Derogations per substance

The derogations granted concerned 14 substances listed in the graph below, out of the 24 that we examined:

Number of derogations per active substance (2019 - 2022)



Neonicotinoid insecticides (thiamethoxam, imidacloprid and clothianidin) represent the most frequent derogations since 2019, for sugar beet growing. For the 2022 growing season, producers of sugar beet have given such derogations: France, Austria, Denmark, Belgium, Cyprus, Greece, Hungary and Finland.

Diquat herbicide was the second most important source of derogations, mostly in Denmark.

The third most popular derogation is **1,3-Dichloropropene**, a soil fumigant that was never approved in the EU, for its very important toxicity.



Discussion

1. A lack of transparency on the identity of the applicant

Our research has been facing a lack of consistency on the way Member States report on the identity of the entity applying for the derogations. Indeed, the Guidance Document¹¹ refers to the 'Applicant' as the entity behind the request, while the 'Authorisation holder' is the name of the company allowed to sell its normally banned products.

The European Commission database on emergency authorisation¹² provides only the name of the holder of the derogation, not the applicants. Nevertheless, in the vast majority of the cases, Member States have disclosed the names of the applicants, in the 'authorisation holder' section.

In its Guidance Document, the European Commission allows the pesticide industry to submit

applications for derogations for their own products, acting on behalf of growers. This conflict of interest is highly questionable and the lack of transparency on who is behind the application did not allow PAN Europe to establish the identity of the applicants in cases where the authorisation holder is a pesticide company.

The extremely low quality of the derogation notifications plays in favour of the interests of the pesticide industry. Therefore, if an application is submitted by the pesticide industry, Member States have no means to establish that they were truly submitted in the interest of farmers. Therefore, PAN Europe considers that these practices should be banned and that only farmers organisations should be allowed to submit requests for derogations.



¹¹ https://food.ec.europa.eu/system/files/2021-03/pesticides_aas_guidance_wd_emergency_authorisations_article53_post-210301.pdf

¹² <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/ppp/screen/home>

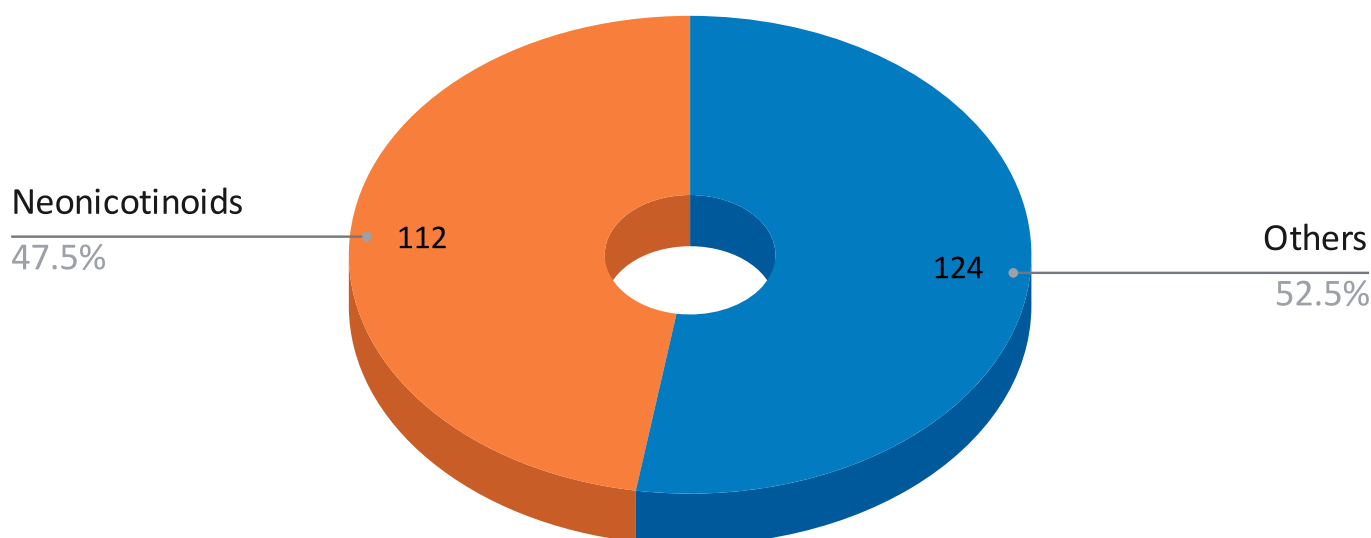


2. Neonicotinoids, the “winners” of a flawed derogation system

Thiamethoxam is by far the substance that received the most derogations. This neonicotinoid insecticide has been banned in the EU since 2018 as it was proven to be highly hazardous for bees

and other pollinators. Imidacloprid and clothianidin neonicotinoids are in 4th and 5th position. Most of the emergency authorisations for these substances concern sugar beet crops.

Share of neonicotinoids in all derogations granted by Member states (2019 - 2022)



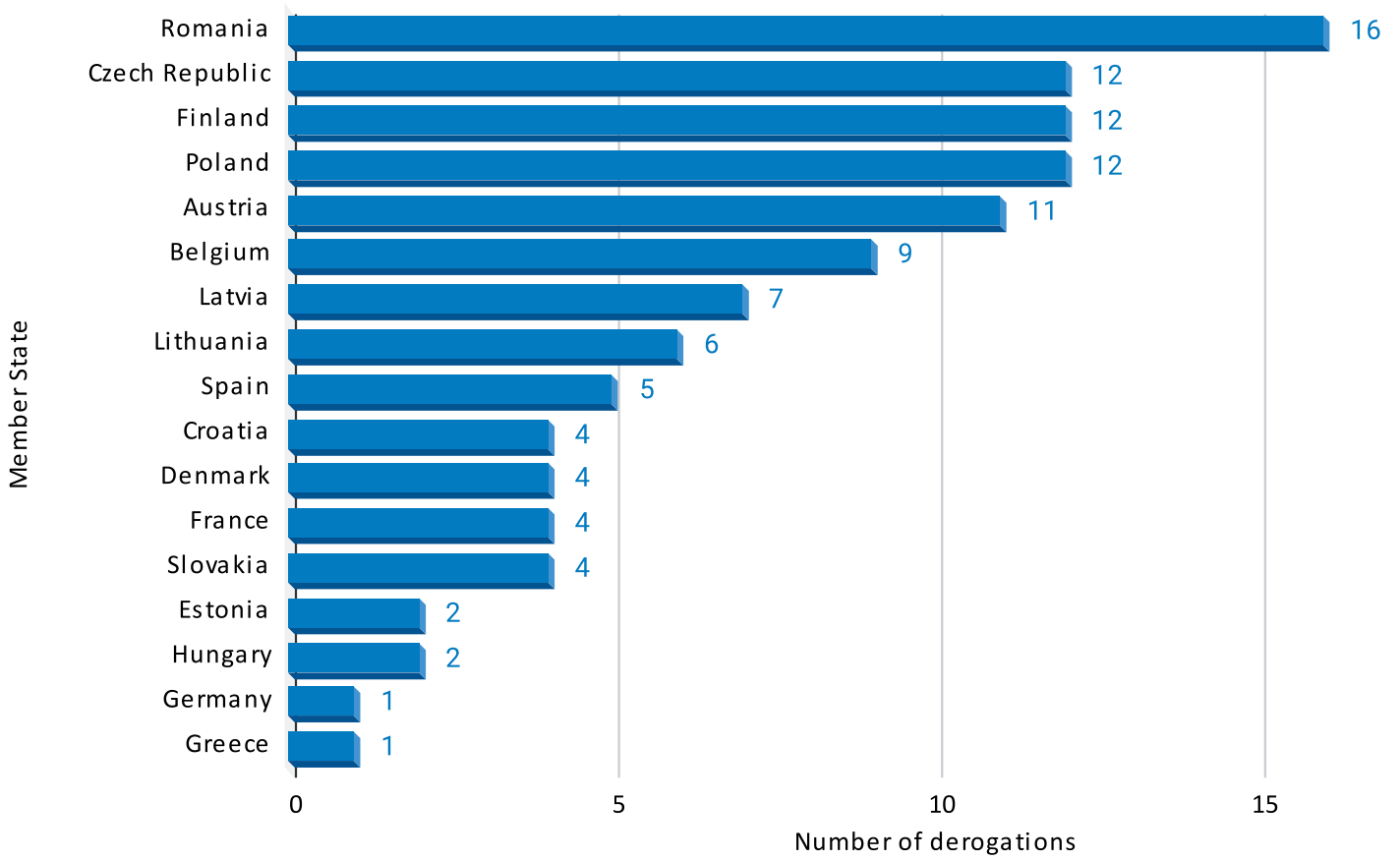
Neonicotinoids represent almost half (47,5%) of the derogations granted by Member States in this time period. The Member States that provide most such derogations are **Romania** (16 derogations), followed by the **Czech Republic, Finland** and **Poland** (12 derogations each).



Sugar beet crop in the Netherlands (Unsplash)



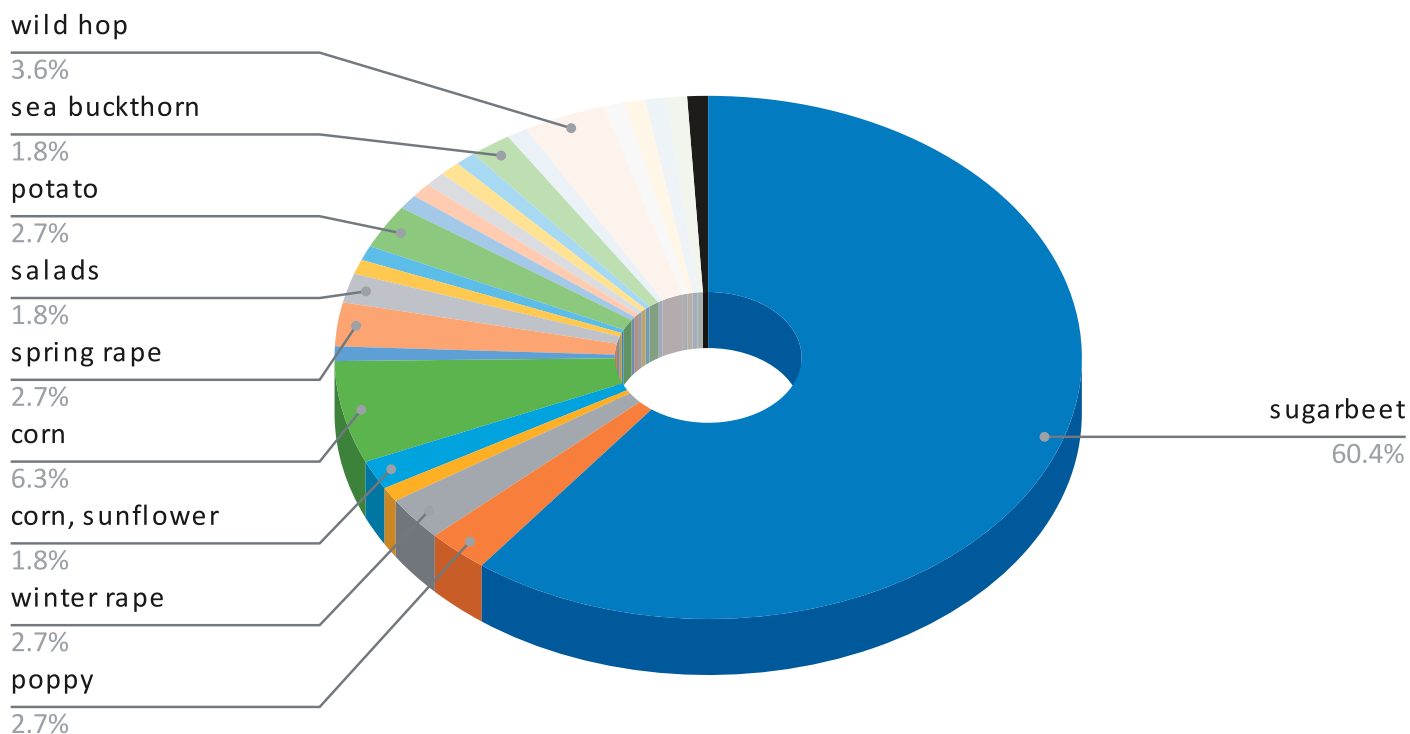
Number of derogations for neonicotinoids per Member State (2019 - 2022)



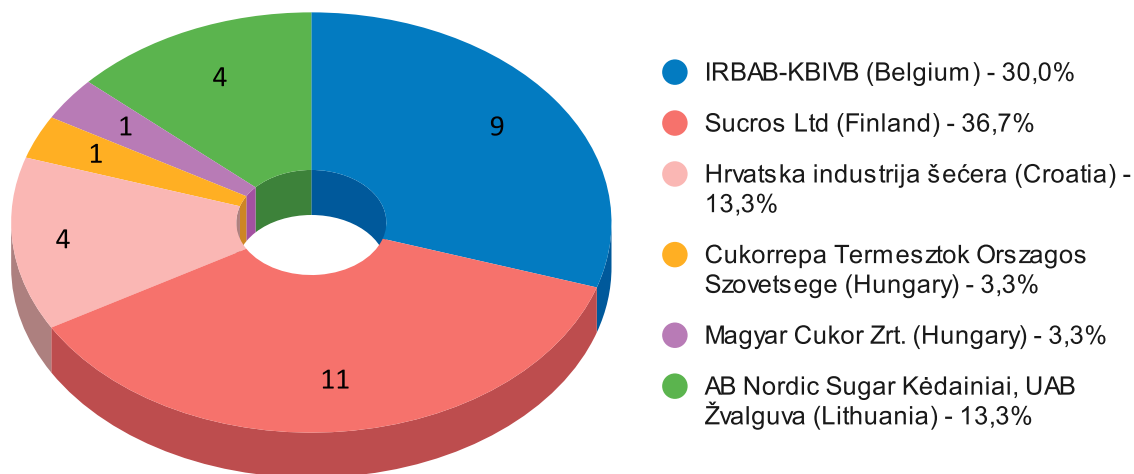
Methyl iodide applied to a farm field (UC ANR)



Crops on which neonicotinoids are used (2019 - 2022)



Sugar companies/lobby groups having received a neonicotinoid derogation (2019 - 2022)



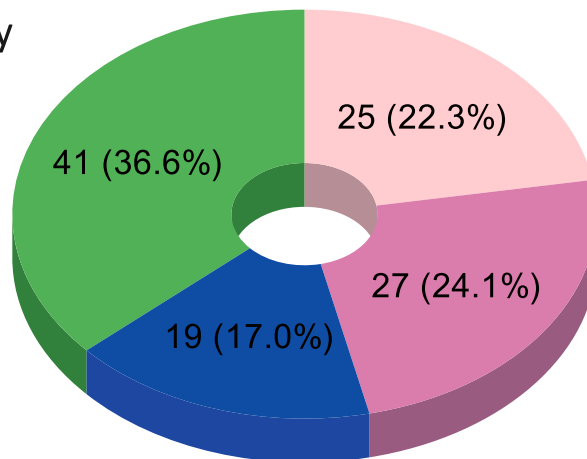


Due to an inconsistent reporting, it is not possible to identify if the 22.3% of the derogations granted to the pesticide industry have been requested by them or not. On the other hand, in 24.1% of the cases, it is clearly the sugar industry and related bodies that have applied for the derogations. This situation is not acceptable. Indeed, the sugar industry and sugar-related lobby groups have been intensely lobbying against a ban on neonicotinoids. In some cases, the sugar industry used to sell neonicotinoid-

treated seeds directly to the farmers they work with. Furthermore, the use of neonicotinoids in sugar beet growing allowed for a more intensive crop production, in line with the interests of the sugar industry. After the ban on neonicotinoids from 2018, the sugar industry directly applied for derogations. In these cases, it is very clear that the benefactor of the derogations is the sugar industry, not farmers. Many Member States have nevertheless given derogations year after year for neonicotinoids use on sugar beets.

Share of stakeholders granted a neonicotinoid derogation (2019-2022)

- Pesticide and seed industry
- Sugar industry
- Public authorities
- Farmers



Out of the 112 derogations for neonicotinoids, almost half (46,4%) was attributed to the pesticide and sugar industries. One third (36,6%) of the authorisations were granted to farmers' associations.





3. A systematic abuse of the derogation system to keep banned pesticides on the market

Of particular concern is the fact that in most notifications of emergency authorisations granted by Member States, the reasoning provided shows a clear lack of scientific and technical argumentation on the (alleged or actual) emergency as well as on the (alleged or actual) lack of alternatives. Both are necessary preconditions for the granting of an emergency authorisation.

Austria's derogation for the use of the neonicotinoid Thiamethoxam on sugar beet¹³ does not provide the needed justification for such a derogation: in the box 'Absence of other reasonable means', the Austrian authority only claims that thiamethoxam is more effective and more practical than other means. This is evidently not a scientific demonstration that alternatives are inefficient in protecting crops. The 'Rationale' box remains empty, while the 'Research activities' box refers to research carried out by Syngenta, the owner of Thiamethoxam, who obviously has a direct interest in maintaining Thiamethoxam on the market.

Other member states may argue somewhat more eloquently the derogations but in substance, agronomic justification are systematically missing, in particular with solid scientific evidence (field efficacy trials, etc.). But these statements are not in line with agronomic evidence. In the case of

neonicotinoids used on sugar beets, organic sugar production is developing in many EU countries and organic farmers claim that the challenge with growing organic sugar beet is the management of weeds, not insects¹⁴. Secondly, some Member States like Belgium have granted, for similar crop/pest derogations, a derogation for two other pesticides, namely sulfoxaflor and spirotetramate, that are much less toxic to bees, compared to Thiamethoxam. This is a clear example of a poor and misleading argumentation that is then validated by the national competent authority, without any proper analysis of the situation. Such requests for derogation should either be rejected by the Member State authorities, or the analysis of available alternatives should be completed by national experts. Existing non-chemical alternatives to banned neonicotinoids such as Thiamethoxam include crop rotation, stalled beds, as well as the use of flowering/uncultivated strips to host beneficial insects to keep pests under control.

Regrettably, the granting of annually recurring emergency authorisations for banned pesticides is not an Austrian peculiarity, but is routinely practiced by numerous member states, ignoring the fact that an ordinary danger that occurs regularly does not represent an emergency and therefore does not meet the requirements for granting an emergency authorisation.

¹³ Notification AT-4337-0, period 01/02/2022 - 01/06/2022. The notification can be consulted [here](#).

¹⁴ <https://www.low-impact-farming.info/growing-sugar-beets-without-neonicotinoids>
PAN Europe has collected the testimony of an Austrian farmer who has been growing sugar beets without neonicotinoids for years, with an incentive from the Austrian sugar industry that is gradually converting part of its production to organic.



Diquat, a Highly Hazardous Pesticide abusively used as crop desiccant

Diquat has been banned in 2018 because of its high toxicity to human health. It was established that no safe use existed. Nevertheless, numerous Member States provide derogations for the use of diquat as a desiccant. The pesticide regulation (EU) 1107/2009 defines a plant protection product (pesticide) as a substance aiming at «protecting plants or plant products against all harmful organisms» (article 2). Desiccating crops is not linked to any kind of pest. Second, article 53 is very clear: emergency authorisations can only be granted for dangers that cannot be contained by another reasonable means. Desiccation is a cultural practice taking place every year, no danger justifies the need for desiccation.

“Type of danger to plant production or ecosystem” according to Austria’s notifications of derogations for Neonicotinoids in sugar beets between 2019 and 2022

Instead of scientifically establishing a real emergency, Austria gave, year after year, a copy-pasted forecast for a normal pest pressure on sugar beets, without any scientific evidence of an emergency and a real threat to the harvest.

«As in the year 2018, due to weather conditions, a high level of pest pressure is to be expected for the year of production 2019, which has caused a massive loss of area in the cultivated sugar beet by animal pests. The professional need to use the PPP applied for control of pests in the culture sugar beet is thus given.»

2019, Emergency Authorisations for Clothianidin, Thiamethoxam, and Imidacloprid

«As in the year 2019, due to weather conditions, a high level of pest pressure is to be expected for the year of production 2020, which has caused a massive loss of area in the cultivated sugar beet by animal pests. The professional need to use the PPP applied for control of pests in the culture sugar beet is thus given.»

2020, Emergency Authorisation for Clothianidin

«As in previous years a high level of pest pressure is to be expected for the year of production 2021, which can cause a massive loss of area in the cultivated sugar beet by animal pests. The professional need to use the PPP applied for control of pests in the culture sugar beet is thus given.»

2021, Emergency Authorisation for Clothianidin

«As in previous years, a high pest pressure is to be expected for the cultivation year 2022, which will cause a massive loss of area in the sugar beet cultivation due to animal pests. It is of utmost importance to provide effective seed care solution to the sugar beet growers to ensure the future of sugar production in Austria.»

2022, Emergency Authorisation for Thiamethoxam



A recent opinion of the Spanish Ombudsman¹⁵, responding to a **complaint by Ecologistas en Acción**, PAN Europe's Spanish member, shed light on the lack of proper justification for derogations, regarding the emergency authorisations given by Spain's Ministry of Agriculture in 2020. These derogations concerned 5 banned substances¹⁶, among which the bee-toxic neonicotinoid Clothianidin. In this case, the Spanish Ombudsman's opinion concluded that the emergency authorisations analysed were contrary to both Spanish and EU law, highlighting a lack of motivation to act on the existing danger and the fact that alternatives were not considered, while economic reasons were taken into account rather

than the protection of the environment and human health. This opinion is particularly remarkable as **the Ombudsman asked the Spanish Ministry of Agriculture to cancel the derogation granted for clothianidin in 2021**, on the same grounds as the opinion states for the derogation granted in 2020. As this case clearly points out the flaws of the current system, the Spanish Ombudsman recommends the introduction of a procedure including technical reasoning on possible alternatives, strengthened monitoring, control and inspection mechanisms, information to the public, and involvement of environmental and consumer organisations in the derogation system procedure.



¹⁵ A translation of the Ombudsman opinion can be consulted [here](#). Please note this is not an official translation.

¹⁶ The other substances are : Dichlorvos, Camellia extract, Propanil, Thidiazuron. They fall outside of the scope of substances analyzed in this report.



4. 1,3-Dichloropropene, a never EU-approved highly hazardous soil fumigant, keeps receiving derogations in the South of Europe

Fourth on the list of substances granted emergency authorisations comes 1,3-Dichloropropene, with 30 derogations between 2019 and 2022. This pesticide was never approved in the EU and is particularly used in monocultures to sterilise soils through the technique of soil fumigation. It is injected as a liquid that then evaporates into a gas. This gas is extremely dangerous for workers and bystanders, which is the reason it was never approved.

With this technique, farmers can “reset” their soils, annihilating not only pests but all forms of life in the top layer of the soil, hence exterminating beneficial organisms that are necessary to maintain a healthy soil and healthy crops. Soil fumigation of 1,3-Dichloropropene is in that sense perfectly representative of the industrial, intensive, monocultural, unsustainable system of agriculture that tries to destroy life instead of working with nature, with disastrous consequences for biodiversity and health.

1,3-Dichloropropene has been proven to be extremely toxic and mutagenic. It can cause chromosome aberrations, DNA fragmentation and several tumors (liver, urinary bladder and lung). The European Food Safety Authority (EFSA) concluded in 2006 that 1,3-Dichloropropene is a genotoxic

substance¹⁷. In its 2018 updated assessment¹⁸, the EFSA also concluded that it presented an unacceptable risk to non-target arthropods and to groundwater. On this basis, the European Commission and Member States rejected¹⁹ in 2022 another request for EU-approval. Alternatives for 1,3-Dichloropropene are well-known and easily available, based on Integrated Pest Management (IPM) principles: crop rotation system, use of nematode-resistant crop varieties, and putting in place practices favouring living and healthy soils (moderate dunging, conservation tillage, cover crops).

In fact, the only true obstacle to definitely stop using this dangerous substance is the economic interests linked to big monocultures. The derogations that we analysed show that this soil fumigant is especially used in the South of Europe: indeed, only 4 Southern Member States account for all the 1,3-Dichloropropene emergency authorisations: Italy (11 derogations), Portugal (8 derogations), Spain (7 derogations) and Greece (4). The emergency authorisations were in majority granted to pesticide companies (56,7%), such as German Bayer and BASF, but also by US Dow and Japanese Kanesho Soil Treatment and Certis, showing the variety of international interests in maintaining the use of this soil fumigant.

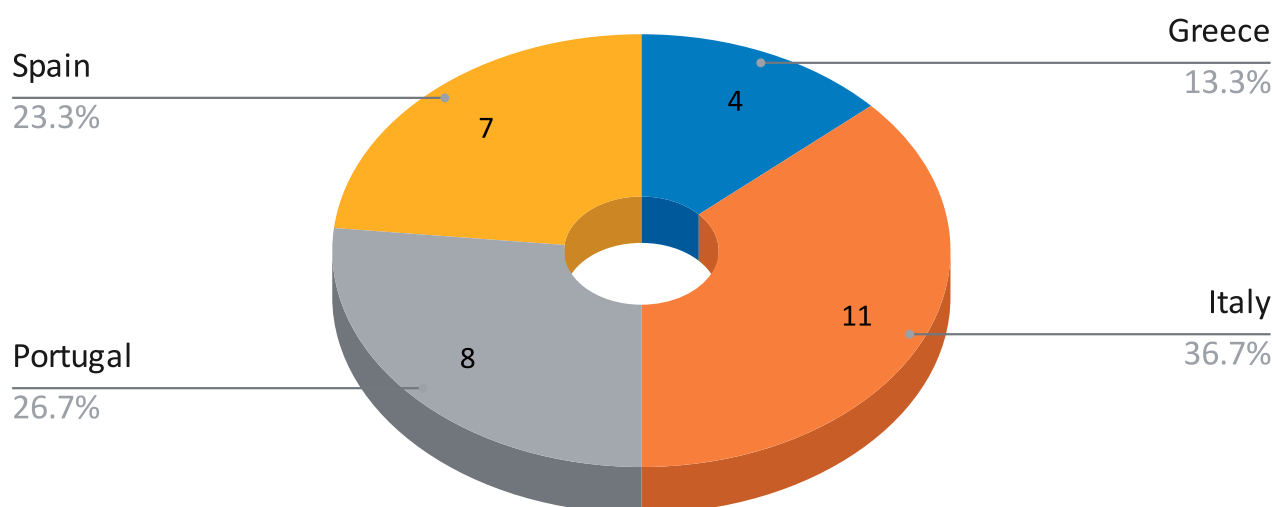
¹⁷ <https://www.efsa.europa.eu/en/efsajournal/pub/rn-72>

¹⁸ <https://www.efsa.europa.eu/en/efsajournal/pub/5464>

¹⁹ https://food.ec.europa.eu/system/files/2022-08/sc_phyto_20220330_ppl_sum.pdf



Derogations for 1,3-Dichlorpropene granted by Member States (2019 - 2022)



The derogations all concern a very wide variety of fruits and vegetables (cucumber, tomatoes, melon, lettuces, strawberries, paprika, zucchini, etc.), typically cultivated in large exploitations and usually aimed for exportation. Only 4 derogations for this substance were granted to a producers organisation, 3 in Greece and 1 in Portugal, representing only 13,3% of the notifications.

As for the justification provided by the national authorities to use such a dangerous substance, a lack of arguments is regularly observed in the notifications we reviewed. For example, a derogation granted to the pesticide company Dow AgroSciences for 1,3-Dichlorpropene in Italy²⁰ did not provide any form of technical argumentation. All sections on the notifications were simply filled with the sentence “as per stakeholders supporting letter”, suggesting that their justification is not available publicly. This demonstrates the lack of transparency

of this procedure, while competent authorities are supposed to ensure that proper justifications are provided. All the notifications granted to Dow AgroSciences in Italy for this substance were similar. Another example is the notification for this same active substance granted to BASF in Greece²¹. When required to describe the absence of alternatives, the competent authority simply states that: “no reliable alternative non-chemical measures exist”, without any further information on the efficiency of the existing non-chemical measures. According to the Guidance document, the applicant should, at least, indicate which alternative measures have been considered and why they would not suffice or cause “unacceptable damage to plant production or ecosystems”. Furthermore, as public authorities are supposed to carry out their own assessment of the possible alternatives to avoiding such a derogation, these additional examples show how much the law is not respected.

²⁰ Notification IT-IT-17520, period 01/03/2020 - 01/07/2020. The notification can be consulted [here](#).

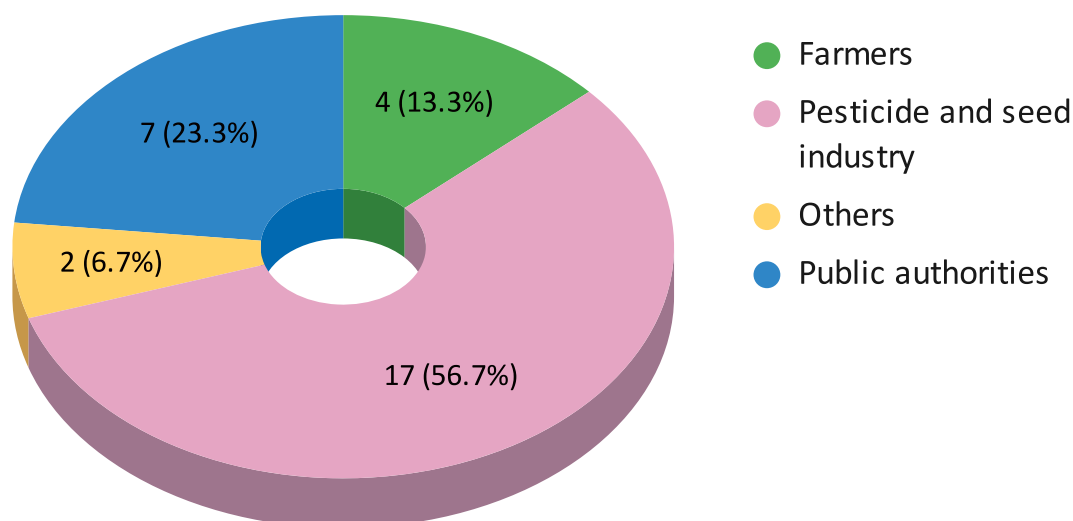
²¹ Notification GR-3032, period 21/06/2019 - 19/10/2019. The notification can be consulted [here](#).



Interestingly enough, in Spain, all the notifications for 1,3-Dichloropropene were granted to a regional public authority, the Directorate for Agriculture of the Murcia region, representing no less than 20% of all EU derogations for this substance. While this region is sometimes called the “vegetable garden of Europe”, and is the third Spanish region exporting the most vegetables and fruits (2.5 tons in 2019)²², it is very alarming to see that these products grow in soils treated with a highly hazardous pesticide, a soil fumigant that was never approved in the EU. When having a closer look at one of the notifications from the Spanish authority²³, we observe that the justification for using this harmful substance is, once more, very weak. Indeed, the argumentation recognises the use of 1,3-Dichloropropene is conditioned by the intensive growing conditions, as this excerpt shows: “intensive agricultural productions like some fruiting veggies and strawberry grown open

air or in glasshouses in South and Southeast of Spain are very susceptible to pathogen nematode and edaphic fungus diseases attacks (field or glasshouse). These pathogens are being favoured by actual growing systems. [...] Intensive crops (frequently long crop cycles) do not permit rotational practices most of the time. So that disinfection is necessary when these pathogens are presented in the soil”. In this case, the justification for the lack of alternative excludes from the start agronomical practices such as crop rotation, as they are incompatible with the intensive agricultural model. Such a statement by public authorities is acknowledging a complete lack of implementation of IPM, which is contrary to EU law (directive (EU) 128/2009). Spanish authorities thus provide a derogation to the region of Murcia for a non-approved substance that puts at risk its citizens and environment, to support an agricultural model that is opposed to EU-law.

Derogations for 1,3-Dichloropropene per applicant category (2019 - 2022)



²² <https://www.laopiniondemurcia.es/comunidad/2020/06/13/murcia-tercera-comunidad-exporta-frutas-34849453.html>

²³ Notification ES-ES-2021-4_, period 07/01/2021 - 30/03/2021. The notification can be consulted [here](#).

5.1. EU member states allow a permanent and illegal misuse of the derogations in the EU

Our findings show that a ban on a dangerous pesticide is not always a ban in the EU. Member States and agribusiness (the pesticide industry or sugar industry for instance) found an easy path to maintain these toxic substances on the market, even if they are not approved anymore in the EU. Some Member States did not provide any derogation for the 24 studied substances over the period of our investigation. Since the Commission database does not contain the rejected applications, it is not possible to identify if the industry has ever made an application in these countries. The fact that neighbouring countries with similar pedoclimatic conditions manage their agriculture without derogations questions the real necessity of these derogations.

Article 53 of the pesticide regulation (EU) 1107/2009 is very clear: it gives the possibility to Member States to grant a derogation for 120 days in case of exceptional circumstances in which a

danger exists that cannot be contained by any other reasonable means. Before giving any derogations, Member States must make sure they comply with the law.

When granting a derogation, Member States have the responsibility to determine the presence of an exceptional circumstance as well as the absence of alternatives, including non-chemical and chemical alternatives. While applicants are invited to submit a list of chemical and non-chemical alternatives, it is the responsibility of Member States to make sure they have verified the completeness and accuracy of the information provided by applicants. The files analysed by PAN Europe show that in most cases, Member States provide derogations without having carried out any analysis on the available non-chemical and chemical alternatives. These include chemical alternatives that present a better risk profile. In most cases, the files submitted by Member States seem to be simple copy-pastes of applications.



A recurrent disrespect of EU law by Member States

PAN Europe considers that article 53 is not respected in most derogations provided by Member States. PAN Europe has already highlighted this issue in several earlier reports^{24,25,26}. In particular, in all cases of derogations asked for by the pesticide, seed and sugar industry, none of them are asked for an exceptional circumstance (e.g. an exotic pest or an indigenous pest that occurs once every 10 years). Furthermore, non-chemical and chemical alternatives exist for all these derogations. Those are less harmful to the environment, and they are broadly used by farmers practicing Integrated Pest Management and by organic farmers.

As a reaction to the inaction of the European Commission to ensure a strict implementation of article 53, PAN Europe, together with its member organisation Nature et Progrès Belgique, as well as a Belgian beekeeper, has brought a case to the Court of Justice of the EU²⁷. Five prejudicial questions have been submitted to the Court, in order to better define the limits on the possibilities for Member States to use article 53. A ruling is expected in early 2023.

5.2. A lack of transparency on the role played by the pesticide industry in the process

In some countries, the holder of the derogation is the pesticide industry itself while in others, the holder of the derogation is the applicant (sugar lobby group, farmers union, etc.). In many cases,

there is a lack of transparency on who is behind the application. Our research indicates that there is a major lack of transparency on who is applying for the derogation.



²⁴ https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/reports/201702%20Bee%20emergency%20call%20%28neonics%20derogations%20report%29/bee_emergency_call_FINAL.pdf

²⁵ <https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/reports/pan-europe-2012-meet-chemical-agriculture-the-120-day-derogation.pdf>

²⁶ <https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/reports/pan-report-on-essential-use-of-metam.pdf>

²⁷ <https://www.pan-europe.info/blog/pan-europe-takes-issue-pesticide-derogations-court-justice-european-union>



5.3. EU Commission neglects its controlling role

The lack of a proper technical argumentation in most notifications reviewed is evident. Even more concerning is the fact that the European Commission does not play its role of controlling authorities by demanding more detailed justifications. Therefore, in many cases, emergency authorisations seem to have been delivered on the basis of flawed technical argumentation that does not consider all the chemical and non-chemical alternatives available. The European Commission is well aware of the flaws in the system, through the reports published by PAN Europe, as well as numerous letters sent by environmental and beekeeping organisations.

Already in a report published in 2012²⁸, PAN Europe found that the use of emergency authorisations was not at all an exceptional practice, and that it was rather widely used, even when safer alternatives are easily available. Overall, PAN Europe's analysis revealed an opaque process of notification and a lack of justification by Member States concerning the emergency situation for plant protection and the lack of other reasonable means. Since then, nothing has improved at EU- or national-level.

As a result, a system that is supposed to be used in "last resort" is actually frequently used by pesticide companies and other applicants, with no less than 236 derogations since 2019. In 2018, three neonicotinoids (Thiamethoxam, Imidacloprid, Clothianidin) were banned by the European Commission because of their toxicity for pollinators. While this decision was applauded, we can observe that these substances now constitute more than half of the emergency authorizations delivered since 2019. European citizens and the environment hence continue to be massively exposed to them.



5.4. Abuse of derogations leads to environmental and health damages

A flawed implementation of article 53 regarding highly toxic pesticides inevitably leads to environmental and health damages. The reduction in biodiversity and soil fertility will also lead to economic losses for farmers themselves in the long

run. The recurrent misimplementation of article 53 undermines the purpose of the whole derogation system for banned substances, which is supposed to be highly restrictive.

²⁸ <https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/reports/pan-europe-2012-meet-chemical-agriculture-the-120-day-derogation.pdf>



5.5. Abuse of derogations must end

In order for the ban on the most hazardous pesticides to be really effective, it is urgent and imperative to address the legal loopholes in the emergency authorisations system. A derogation can only be granted in exceptional and unforeseen circumstances. The current regulation is too vague and allows abuse of derogations as a loophole in the law. Clear criteria for the justification of the existing danger and possible alternatives must be defined to avoid abuse of the derogation system. Applications from the pesticide or sugar industry should be examined with particular scrutiny. The

interest of the farmers should be demonstrated with evidence. A comparative risk assessment including non-chemical alternatives should also be requested. The European Commission must also play its role of control in reviewing the justifications. In case of lack of evidence for the real necessity of a derogation, the European Commission should launch infringement procedures to overrule these recurrent abuses. Finally, reliable indicators on both sales and use need to be developed, in order to assess how broad the derogation system counters the beneficial impact of pesticide bans in the EU.

So far the European Commission has been failing to provide an indicator on pesticide use. This means there are no reliable data to calculate the actual amount of banned pesticides used thanks to the derogations, making it difficult to appreciate the effectiveness of a ban of an active substance. It is no surprise that the organisation representing the pesticide industry at the EU level, Crop Life Europe²⁹, is actually opposed to the Indicator proposed by the European Commission to measure pesticide risk linked to emergency authorisations³⁰ in the framework of the EU 50% pesticide reduction target for 2030. Crop Life Europe is also opposed to the development of an indicator on pesticide use³¹. Such reluctance from the pesticide industry to provide reliable data on both use and sales is a clear sign that some actors benefit significantly from this flawed system.

Contact: Natalija Svrtan, natalija@pan-europe.info, +32 2 318 62 55



The contents of this publication are the sole responsibility of PAN Europe and do not necessarily reflect the opinion of the European Union.

²⁹ Previously the European Crop Protection Association (ECPA).

³⁰ Harmonised risk indicator 2. More information can be found in the insert on p. 1.

³¹ More information can be found in [PAN Europe's factsheet](#).