Pesticide Action Network UK

Different regulatory positions on neonicotinoids across Europe

Bee Declines & Pesticides factsheet 4

Over recent years, several EU countries have taken regulatory actions to restrict the use of specific neonicotinoids in order to protect honey bees. This fact sheet describes the current status of these pesticides and contrasts these precautionary, although limited measures, with the lack of regulatory action in the UK. It discusses how different national positions reflect uncertainties in understanding field impacts, disagreements among stakeholders on harmful effects and the controversies when decision makers take a non-transparent approach to looking at all the evidence. Latest events demonstrate how this policy environment is constantly changing.

Credit: Graham White

Current state of play on restricted neonicotinoids in different EU countries

This section summarises specific restrictions imposed on neonicotinoid and other systemic insecticides (fipronil) in four EU countries, with brief information on how long these have been in place and any earlier restrictions now lifted. Note that many on-line sources on bee declines incorrectly describe these as national bans on neonicotinoids. This is misleading as they are generally quite narrow restrictions on the use as seed treatments of specific active ingredients on specific crops.

The same active ingredients may continue to be authorised for foliar application on a range of crops and for seed treatment on other crops, thereby exposing pollinators further.

Factsheet 5 describes and critiques the EU-wide risk mitigation measures added since 2010 on certain neonicotinoid uses as well as general guidance in Member States in label instructions for pesticides which pose a risk to bees.

FRANCE

current status: imidacloprid suspended for sunflower and maize seed treatments. All agricultural uses of the systemic insecticide **fipronil** banned

In 1999 the French Minister of Agriculture, decided to ban imidacloprid use (Gaucho products) in sunflower seed-dressing, after prolonged and controversial debates between different government agencies, arguments with pesticide manufacturers, and lawsuits[1]. This ban was renewed in 2001 for two years, again in 2004 for three years and at present it is still in force. Imidacloprid use on maize was not banned till 2004, along with fipronil (Regent product), following lengthy public debates and legal rulings.

GERMANY

current status: **clothianidin, thiamethoxam** and **imidacloprid** suspended as seed treatments for maize

Eight seed treatment products for oilseed rape and maize were temporarily suspended following mass bee death incidents in May 2008. The products were: imidacloprid (Antarc, Chinook, Faibel); thiamethoxam (Cruiser); clothianidin (Elado, Poncho); methiocarb (not a neonicotinoid) (Mesurol). It was a problem in the seed treatment process for

clothianidin on maize seed which caused the mass bee kills, releasing the pesticide into the air during late sowing when nearby oilseed rape was already in bloom, compounded by strong dry winds carrying it onto neighbouring fields where bees were foraging[2].

However, in June 2008 Germany lifted its temporary suspension of seed treatments for oilseed rape and in 2009 ended the suspension of Mesurol on maize. Today 74 products containing neonicotinoids are sold on the German market for uses other than in maize. PAN Germany (Susan Haffmans, personal communication) has criticised the government's lack of precaution, highlighting that nine neonicotinoid products have been granted special permission under "emergency situations" for 120 days including Santana (a clothianidin product) on maize. The neonicotinoid approvals issue remains highly controversial, with the German Professional Beekeepers' Association, PAN Germany and three other environmental NGOs pulling out of collaboration with the government's National Pesticide

Credit: Graham White

Action Plan in 2011, as there was no substantial movement towards a better protection of bees[3].

ITALY

current status: **imidacloprid, thiamethoxam, clothianidin** and non-neonicotinoid **fipronil** suspended for maize seed treatment

These seed treatment uses were suspended temporarily in 2008 under the precautionary principle, but foliar uses are allowed. This action was taken based on preliminary monitoring studies in northern and southern regions of Italy showing that bee losses were correlated with spring sowing of maize seeds treated with these active ingredients. Italy also based its decision on the known acute toxicity of these compounds to pollinators and serious winter hive losses reported. These suspensions are for an annual basis each time and have already been renewed 5 times now.

After the initial 2008 suspension, the pesticide industry issued a lawsuit against the Italian state. The Italian Federation of Beekeeper Associations (UNAAPI) took part in the trial alongside the Italian State and together they won, maintaining the maize seed suspension of neonicotinoid products Cruiser, Poncho, Gaucho and fipronil product Regent. Italian authorities are unhappy with this situation of annual decisions and would prefer the European Commission to make a decision EU-wide as announcing a definitive ban in Italy could risk further legal action from the pesticide industry (Francesco Panella, UNAAPI President, personal communication).

SLOVENIA

current status: Neonicotinoid seed treatments for maize and oil seed rape suspended.

The original suspension in 2008 was based on poor seed treatment methods, similar to those in Germany, resulting in release of contaminated dust during the seed sowing process. In August 2008, the suspension for oil seed rape seed treatments was lifted due to improved seed treatment methods and seed sowing equipment. Another temporary ban on maize seed treatment containing thiamethoxam and clothianidin started in April 2011, following beekeepers in the Pomurge region reporting massive bee deaths - clothianidin was blamed in several of the cases. Their suspension on maize continues in 2012.

Neonicotinoids remain unrestricted in UK

Under the earlier Labour and current Coalition governments, the position of the UK regulators Chemicals Regulation Directorate (CRD, formerly the Pesticides Safety Directorate, which now comes under the Health & Safety Executive) and the Department for Environment, Food & Rural Affairs (DEFRA) has shown little change. They have declined to review, let alone adjust, neonicotinoid approvals, despite calls for action from several stakeholders. The CRD position on honeybees and seed treatments[4] is that

the treated seed dust poisoning incidents seen elsewhere in Europe are unlikely in the British context due to differences in dose rate and other factors. CRD stated that they are not aware of any problem in the UK related to any seed treatments and bees and that there have been no incidents reported to the Wildlife Incident Investigation Scheme (WIIS) to date which could be connected to the use of seed treatments.

In early 2011, MP Martin Caton tabled an Early Day Motion to the UK Parliament calling for the government to act urgently to suspend all existing approvals for products containing neonicotinoids and fipronil pending more exhaustive tests and improved methodologies for assessing the long-term effects on invertebrate populations[5]. This motion was supported by 77 MPs from all major parties yet no regulatory changes were proposed by the Ministers responsible for pesticide issues or CRD and DEFRA.

Responding to the latest field study evidence for harm from low dose exposure via oral intake, published in March 2012[6,7], a DEFRA spokesperson said these did not change the government's position. "*The UK has a robust system for assessing risks from pesticides and all the evidence shows neonicotinoids do not pose an unacceptable risk to honeybees when products are used correctly. However, we will not hesitate to act if presented with any new evidence*"[8]. Nevertheless, a few days later Sir Bob Watson, DEFRA Chief Scientific Advisor, explained that the government would now begin a comprehensive re-evaluation of its position, after analysing closely the most recent studies.

"We must look at this in real detail to see whether or not the current British position is correct or is incorrect"

Sir Bob Watson, quoted in The Independent, 2012[9]

In April 2012, a coalition of 14 British NGOs, including PAN UK, renewed calls to the DEFRA Minister for a suspension of neonicotinoids[10]. In May 2012, a policy review report on England's declining bees by Reading University for Friends of the Earth described a general upward trend in pesticide application in the UK since 2005, stressing how higher reliance on pesticides in oilseed and fruit crops in particular increases bee exposure risk[11]. Official data reveal a considerable decline in imidacloprid in UK since 2008 as signs of pest resistance emerged, but increased use of clothianidin and thiamethoxam[12]. Related demands for UK policy review and recommendations from PAN UK and others are discussed in Factsheet 8.

Inadequate and non-transparent decision making in contested and uncertain environmental issues

The variety of national approaches on neonicotinoid approvals reflect differences in their regulators' interpretation of the science and the uncertainty about the extent to which widespread but low dose exposure may be harming bee health. Different regulatory authorities do not necessarily even agree on which pesticides are harmful to bees (contrast, for example, the two lists from the UK and US regulatory agencies, listed in PAN UK's List of Lists[13]) although neonicotinoids feature strongly.

Regulatory differences also reflect the strength of stakeholder views, public

opinion and concerns of beekeepers in each country and varying agricultural contexts and farming practices. In France, the neonicotinoid issue has been highly controversial and high profile for well over a decade, with different government agencies taking different views and several legal cases ensued over regulatory decisions on both sides of the debate[14]. In Italy, the suspension of maize seed treatment approvals also provoked strong reactions. Italian public scientists working on bee issues have criticised the media for reporting unsupported data and have drawn attention to the influence of the pesticide industry on research teams[15]. Environmental risk decision making is undoubtedly difficult in the context of scientific uncertainty, disputed values, high socioeconomic stakes and political pressure, as is the case for bees and neonicotinoids (Box 1). Analysing the French policy debates reveals that value judgements and interests added to these difficulties and also influenced the outcomes. Consulted experts did not all possess the appropriate knowledge of beekeeping and some made biologically incorrect assumptions or became trapped in defending political arguments[16].

These controversies could be reduced if the arguments of different experts are well presented in a structured and transparent framework, using established and agreed criteria for assessing causal factors and the validity of individual studies. Experts consulted should involve not just those recognised institutionally but also knowledgeable 'lay' individuals, such as beekeepers[18]. The paper by these authors give a useful insight into the clash of opinions in France when beekeepers and public scientists argued that imidacloprid-treated sunflower and maize was the major contributor to the mass bee poisonings witnessed, based on observations and field studies after 1997. The pesticide companies and the French Food Safety Agency AFSSA put the blame on other factors when their

Box 1.
Concerns raised on how imidacloprid was approved at EU level

When PAN Europe and other NGOs challenged the EC's imidacloprid approval in 2009, they raised serious concerns about the way that Germany, who was responsible for compiling the imidacloprid Draft Assessment Report (DAR) on behalf of the Member States, judged the value of different scientific studies. For example, there were very wide discrepancies between the results of different tests on imidacloprid toxicity to bees. The German DAR conclusions on what is an acceptable risk for bees did not take into account these widely varying results. PAN Europe argued such wide variation should trigger a larger safety margin to cover the scientific uncertainty in estimating impact on bees and hive health. They criticised the way the assessment of the peer-reviewed literature was conducted as unclear and biased. By considering certain tests or studies to be valid and others invalid, but without having defined the criteria they use to judge validity, the German risk assessors' actions were neither transparent nor scientifically consistent.

Source: PAN Europe et al., 2009[17]

research results did not reproduce the signs observed by beekeepers. Making clear the socioeconomic stakes of the different actors involved would result in a better-informed and more balanced decision-making process. Experts involved in risk assessment consultation should all be required to declare their conflicts of interest and this information made public.

"The intense controversy which can be observed in confused, passionate and politically oriented public discourses… is much less intense when the arguments of different experts are structured and made transparent, factor by factor, sign by sign and using well established criteria for assessing causality"

Laura Maxim and Jeroen van der Sluijs, 2010

Latest events reflect a constantly changing policy environment

In April 2012 the European Ombudsman opened an investigation into whether the European Commission has taken appropriate measures to combat increased bee mortality in Europe. This follows a complaint from the Austrian Ombudsman Board that the EC failed to take into account new scientific evidence in favour of restricting the use of neonicotinoids. The EU Ombudsman investigation will also make recommendations, such as calling for a review of neonicotinoid approvals[19]. Increased bee mortality has been the subject of a number of European Parliament questions to the EC. In 2011, the EC stated that it was aware of the toxicity of neonicotinoids. It argued, however, that their use should be possible if exposure is limited to non-harmful levels.

In response to the important French field study results on impacts on bee homing behaviour[20] released in March 2012, the French Ministry of Agriculture and the national food safety evaluation agency ANSES have revisited the current approval for thiamethoxam products -the neonicotinoid used in that study[21]. Latest news is that France intends to suspend thiamethoxam products for treating oilseed rape seed[22]. The French government has asked the EC to update the risk assessment for thiamethoxam and complete the broader evaluation of bee-toxic pesticides (France Nature Environnement, personal communication). This NGO has criticised France's successive annual approvals of thiamethoxam and for very poorly conducted field monitoring of bee mortality.

In Austria, beekeepers and NGOs have been demanding a ban on harmful insecticides for several years but until now the Ministry responsible for pesticide approvals has always argued that there was no clear evidence that neonicotinoids are the main reason for bee problems and was waiting for the results of a three year national bee health monitoring study. The results were published in April 2012 and show a link between neonicotinoid use and bee health. The Austrian parliament has begun to discuss the issue and most parties seem in favour of a ban (Umweltdachverband, Austria, personal communication).

In late May 2012, the European Food Safety Agency (EFSA), which coordinates

the EU-wide risk assessment for pesticides, published its latest scientific opinion on the adequacy of current risk assessment tests and decision-making for risks to bees and other pollinators. It calls for major revisions, even radical changes , to remedy the many serious problems in evaluating sub-lethal and chronic effects from contaminated food sources and other neglected exposure routes (see Factsheet 3). It is unclear how long it will take before an improved assessment framework is in place and if this will lead to changes in the approval status of neonicotinoids in the near future, either at EU or individual country levels (Noa Simon, personal communication).

Key points

- Four EU countries have imposed partial restrictions on certain systemic insecticides, mainly suspending use on seed treatments for maize, and sometimes for oilseed rape and sunflower.
- Despite calls from 77 British MPs, the UK regulators continue to state that neonicotinoids pose no unacceptable risks to bees if used properly
- Suspensions have been controversial, triggering legal cases for and against. Stakeholder economic interests and value judgements, as much as the scientific evidence, have influenced how decisions are made.
- The way Germany judged the value of different toxicity studies for the EU midacloprid risk assessment was inconsistent and non-transparent - one of the arguments raised in PAN Europe's request for a legal review of the approval decision.
- Policies are changing - Austria is now considering bans and the European Food Safety Authority wants major revisions of the EU risk assessment process for bees.

In this series

If you would like to find out more about the relationship between pesticides and pollinator declines, all of these leaflets and other info are available via PAN UK's bee webpages at: **http://bees.pan-uk.org**

Bee Declines and the Link with Pesticides. Summary leaflet.

Fact sheets:

1. Different routes of pesticide exposure
2. Sub-lethal and chronic effects of neonicotinoids on bees and other pollinators
3. Serious shortcomings in assessing risks to pollinators
4. **Different regulatory positions on neonicotinoids across Europe**
5. Can restrictions on systemic insecticides help restore bee health?
6. What could farmers do to rely less on neonicotinoids?
7. Opportunities for improving and expanding pollinator habitats
8. Action on neonicotinoid and other bee-toxic pesticides

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PAN UK's vital work in the UK and in developing countries

Pesticide Action Network UK is a registered charity dedicated to:-

- Eliminating the most hazardous pesticides,
- Reducing dependence on chemical pesticides,
- Promoting sustainable and equitable food systems and increasing the use of alternatives to chemical pest control in agriculture, urban areas, public health and homes and gardens

In the UK, we campaign for tighter regulatory controls on pesticides and encourage retailers to tackle pesticide problems in their supply chains. We provide advice on alternative ways to control pests and work with local communities to reduce public exposure to pesticides. In the developing world, we raise awareness about pesticide hazards and train farmers in organic and low input agricultural techniques to help them to make a decent living without putting their own health, their families or their environment at risk.

Populations of bees and other insect pollinators have fallen dramatically in recent years. The reasons for these declines are complex and wide ranging, but there is little doubt that pesticides are playing a key part. PAN UK has prepared these fact sheets to cut through the confusion and provide an up-to date and balanced explanation of the role of pesticides in pollinator declines. To find out more and what you can do, please visit http:\\bees.pan-uk.org

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PAN UK, Development House, 56-64 Leonard Street, London, EC2A 4LT

Tel: 44 (0)20 7065 0905, admin@pan-uk.org, www.pan-uk.org