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Debate Pack

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By
Alexander Bellis,
Agnieszka Suchenia
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Government approval for the use of neonicotinoids and the impact on bees

Summary

A debate has been scheduled in Westminster Hall on Wednesday 2 February at 9.30am on Government approval for the use of neonicotinoids and the impact on bees. The debate is sponsored by Luke Pollard MP.

Neonicotinoid insecticides are used in some pesticides to kill crop-harming insects. The use of most neonicotinoids was severely restricted in 2013 in the EU and UK due to their potential negative impact on bees and other pollinators. By 2020, all but one neonicotinoid was no longer approved for use. However, emergency authorisations are allowed, and in January 2022, the Government authorised an emergency application in England of the use of the Cruiser SB pesticide, which contains thiamethoxam, a neonicotinoid.

The Government stated that this was necessary to tackle the threat to sugar beet crops from the Yellows Virus, carried by aphids, and the lack of alternative insecticide options. The Government believes that the potential benefits of using the pesticide outweigh the risks to pollinators, particularly with the various limitations and controls attached to the authorisation. The Health and Safety Executive (HSE) disagreed.

Industry groups have supported the decision to protect a high value crop – the sector lost over £65 million after a Yellows Virus outbreak in 2020. Environmental and wildlife organisations have been highly critical of the move, citing growing evidence of the potential harm it could cause.

The Government stated that by 2023, it is hoped that the sugar beet industry will no longer rely on neonicotinoids through the development of pest-resistant varieties and greater use of Integrated Pest Management, a key focus for future UK pesticides policy.

1 Background

A debate has been scheduled in Westminster Hall on Wednesday 2 February at 9.30am on Government approval for the use of neonicotinoids and the impact on bees. The debate is sponsored by Luke Pollard MP.

1.1 What are neonicotinoids and what is their impact on bees?

As the European Commission explains, neonicotinoid insecticides (sometimes shortened to 'neonics' or NNIs) are the active substances used in some pesticides (plant protection products or PPP). They are systemic pesticides, meaning that unlike other pesticides that rest on the surface of plants, NNIs are taken up by plants and transported throughout their structures, into roots and stems for instance. They work by affecting the nervous system of some insects, leading to paralysis and death. They are much less harmful to mammals and birds.

NNIs are the most commonly used pesticide in the world. However, some varieties have been shown to have a harmful effect on pollinators, such as bees. Bees and other pollinators, such as moths and butterflies, play an important role in natural habitats and food supply by pollinating crops and wild plants.

The use of NNIs has been controversial for many years. The Library has previously written on Bees and neonicotinoids in 2017. This paper provides a useful background to neonicotinoids and outlines various stakeholder opinions. Since then, more studies have been published that appear to confirm that NNIs can be damaging to pollinators. The impact may not necessarily result in death, but the impact on nervous systems and brains can make it difficult for such insects to function.[1]

In 2019, the Food and Agriculture Organization of the United Nations summarised concerns that NNIs appear to be persistent in soil and water, are causing large scale adverse effects on bees and other pollinators and a 'consensus' is emerging over the need to restrict their use.[2]

1 See How Neonicotinoids Can Kill Bees by the Xerxes Society (2016) for more details.

2 FAO and WHO, Detoxifying agriculture and health from highly hazardous pesticides: A call for action, 2019, p9.

A 2021 article in The Conversation, a source of academic and research news, highlighted that "Research into the effects of these pesticides on pollinators is still ongoing, but new harmful effects are discovered all the time."[3]

1.2 What are the rules on using neonicotinoids?

EU regulations

Until the UK left the EU, pesticides policy was decided at an EU level. The legislation governing the placement of pesticides on the market is Regulation (EC) No 1107/2009.

Under this law, any active substances contained in a pesticide must be approved before the product can be used. The EU initially operates a hazard-based approach to regulating active substances and is regarded as one of the strictest regimes in the world.[4]

In 2012, the European Food Safety Authority (EFSA), which advises the EU Commission on pesticide approvals, was asked to conduct a risk assessment of clothianidin, imidacloprid and thiamethoxam, three of the most common NNIs used. In January 2013, it published its findings.[5] Some of the data had shortcomings, and EFSA made the case for a more detailed risk assessment to be taken. However, its interim findings were that they had "identified a number of risks posed to bees." On the basis of this advice, in 2013 the EU Commission severely restricted the use of pesticides containing clothianidin, imidacloprid and thiamethoxam.

EFSA conducted another review of the scientific evidence and published its finding in February 2018. Looking principally at honeybees and bumblebees, EFSA confirmed the risks that it had identified in 2013 for these three NNIs. More detail is set out in a Q&A on EFSA's conclusions.

The EU subsequently passed regulations to completely ban the use of clothianidin, imidacloprid and thiamethoxam in an outdoor environment, limiting them to use within greenhouses only.

Pesticide authorisations in the EU must be renewed after a maximum of 15 years. The approval for clothianidin, imidacloprid and thiamethoxam has not been renewed. Following another EFSA risk assessment in 2019, the approval

3 The Conversation, Pollinators: neonicotinoid pesticides stop bees and flies from getting a good night's sleep, 21 January 2021

4 Parliamentary Office of Science and Technology, Pesticides and health (POSTbrief 43), 21 September 2021, p.18

5 These are available via the EFSA press release, EFSA identifies risks to bees from neonicotinoids, 16 January 2013

for thiacloprid was also withdrawn on 3 February 2020. There remains only one NNI approved in the EU, acetamiprid.

For more information on how the EU has approached NNIs in recent years is set out on the EU Commission's website on Neonicotinoids.

UK law

Under the Northern Ireland Protocol, Northern Ireland is still subject to EU regulations, while Great Britain (England, Wales and Scotland) now operates a separate regime that began 1 January 2021.[6] Great Britain is therefore able to diverge from EU decisions when it comes to pesticide approval.

However, Regulation (EC) No 1107/2009 remains part of EU Retained Law and its provisions still apply. The Health and Safety Executive (HSE) is the regulator for pesticides for the whole UK, although in Great Britain, ministers provide final clearance for any pesticide approvals, based on an analysis by HSE. Great Britain has broadly continued the approach taken by the EU, including an initial 'hazard-based' approach. According to the HSE Pesticides Approvals Register, of the five NNIs that were previously approved, only acetamiprid now has approval in the UK.

1.3 Emergency authorisations

Despite a ban on most NNIs, both the EU and the UK (via EU Retained Law) allow emergency authorisations of neonicotinoids under Article 53 of Regulation (EC) No. 1107/2009. According to the Government, the Secretary of State can permit an emergency application if the following tests are met:

- there must be special circumstances which make it appropriate to derogate from the standard approach to authorisations
- there must be a danger
- the danger must not be capable of being contained by any other reasonable means
- an emergency authorisation must appear necessary because of that danger
- an emergency authorisation may allow only limited and controlled use of the plant protection product.[7]

6 Regulating pesticides in the UK after Brexit, HSE website {accessed 19 October 2021]

7 DEFRA, Statement of reasons for the decision on the application for emergency authorisation for the use of Cruiser SB on sugar beet crops in 2022, 14 January 2022

Applications are usually considered by the HSE and the UK Expert Committee on Pesticides (ECP). The Secretary of State usually considers their analysis before making a decision.

1.4 2022 emergency authorisation

On 14 January 2022, an emergency authorisation was given for the use of thiamethoxam to treat sugar beet seed in England, via the pesticide Cruiser SB, produced by Syngenta. The Government states that the authorisation is warranted to tackle the threat of Yellows Virus (YV), a disease carried by aphids.

More details on the decision can be found within the government decision, Guidance on the approach to handling applications for emergency authorisation of plant protection products. The Government argues that all five requirements have been met to grant this authorisation – a summary is provided below.

Special circumstances

The Government believes that these are special circumstances, in part because sugar beet is an "economically important domestic crop." In 2020, 25% of the national crop was lost due to the YV, resulting in a loss of over £65 million for the growers and processors of sugar beet. The Government adds that virus levels remain high and there is a "continued build up in background aphid populations."

Danger

The Government considered that there is a danger, because the 2020 experience is estimated to be a "reasonable worst-case" scenario for 2022.

No reasonable alternative

The Government argues that there is no reasonable alternative to the use of this NNI. The crop is most susceptible in its first 12-16 weeks, when a seed treatment, provided by the neonicotinoid thiamethoxam, is more effective than other pesticide applications. High aphid populations also mean that non-pesticide approaches, such as early sowing and good plant hygiene are not sufficient.

Necessity

Considering the above, the Government believes that, on balance, the potential benefits outweigh the possible adverse effects of using Cruiser SB. The Government notes that there should be no impact on human health, but

recognises that the main potential negative impact would be on bees. While bees are unlikely to be foraging on the sugar beet crops as they will not be flowering, the issue is that neonicotinoids remain active in soils and can be taken up by other plants. Bees could therefore be affected months after the initial application of the pesticide. The nature of any non-lethal effects is unclear although it is not expected to be acute or chronic mortality. As a result of this uncertainty, the Government has placed limitations on its use to keep applications to "an absolute minimum" (see below).

The Government highlighted that the Secretary of State and the HSE had differing opinions – HSE believed that the potential costs outweighed the potential benefits. The Secretary of State argued that there is a degree of uncertainty on both sides. The effectiveness of Cruiser SB is unclear due to unknown viral incidence at the time the decision was made. The impact on bees is also unclear. The safeguards placed on the usage of this pesticide (see below) "will ensure that use is avoided when the need is weak" and limit the risk to bees by limiting the amounts of seed treatment, banning the planting of flowering crops near to treated sugar beet, and ensuring that weeds are controlled.

Limited and controlled use

The Government highlighted that the emergency authorisation only applies for sugar beet, which will significantly limit its usage. Sugar beet is only grown around factories in West Norfolk, East Norfolk, West Suffolk and East Nottinghamshire. The authorisation will also only last for 120 days to cover the seed drilling season.

The authorisation also does not mean that the pesticide will necessarily be used. The Government has given the green light to its use only when the predicted virus incidence level (generated later in the year) amongst national sugar beet crops is 19% or higher.

Furthermore, in addition to the usual rules of sustainable use of pesticides, the Government imposed the following conditions of use for Cruiser SB:

- no flowering crop to be planted in the same field as treated sugar beet within 32 months
- no further use of thiamethoxam seed treatments on the same field within 46 months
- application rate of Cruiser SB reduced from 100 ml per 100,000 seeds to 75 ml per 100,000 seeds (this reduces the application rate of thiamethoxam from 60g per 100,000 seeds to 45g per 100,000 seeds)
- observance of industry-recommended herbicide programmes for weeds growing in treated fields
- a maximum drilling rate for treated seed of 115,000 seeds per hectare

- treated seed must be entirely incorporated in the soil and fully incorporated at the end of rows
- treated seed should not be left on the soil surface. Spillages should be buried or removed.[8]

If these restrictions are not followed, the emergency authorisation may be withdrawn.

The Government noted that the 32-month ban on planting flowering crops and the need for a virus incidence level of 19% or higher are stricter conditions than those required for a 2021 emergency authorisation (see below).

1.5 2021 emergency authorisation

A similar emergency authorisation for the pesticide Cruiser SB was granted in 2021. More details can be found within the Statement on the decision to issue – with strict conditions – emergency authorisation to use a product containing a neonicotinoid to treat sugar beet seed in 2021 (14 January 2021).

The conditions attached meant that there was no actual application of the pesticide. The Government had required a forecast virus level of 9% of the national sugar beet area for the pesticide to be used. The forecast was produced on 1 March 2021, and it predicted that only 8.37% of the crop would be affected, due to the low winter temperatures.

1.6 Future policy

In the 2022 decision, the Government said that there is currently no straight replacement for neonicotinoids but by 2023, the sugar beet sector hopes to no longer require neonicotinoid treatments. It is believed that the development of more pest-resistant crops and be using a more integrated pest management approach will suffice.

Integrated Pest Management

Under Article 4 of EU Directive 2009/128/EC, establishing a framework for the sustainable use of plant protection products (transposed into UK law via the Plant Protection Products (Sustainable Use) Regulations 2012), the UK Government must publish a National Action Plan (NAP) which considers how all pesticide users can be encouraged to reduce the risks and impacts of pesticides on health and the environment. The current NAP was published in

[8] DEFRA, Statement of reasons for the decision on the application for emergency authorisation for the use of Cruiser SB on sugar beet crops in 2022,

2013 and applies across the UK. Progress on measures within the NAP is monitored by the Pesticides Forum.

The EU Directive states that users should be supported to adopt the principles of Integrated Pest management (IPM). These are set out in annex 3 of the Directive and suggest that the suppression of harmful organisms should be achieved via various non-pesticide options as a priority. This might include crop rotation and better cultivation techniques. More detail is provided on the Agriculture and Horticulture Development Board's website on Integrated Pest Management.

The Government consulted on a new draft National Action Plan between 4 December 2020 and 26 February 2021. Its second target within the draft plan is to "support the development and uptake of Integrated Pest Management". To achieve this, the Government will:

- Regularly update training for anyone who manages, uses, sells, or advises on plant protection or pesticides
- Ensure that the new sustainable farming schemes in the UK incorporate IPM principles. These are known as Environmental Land Management (ELM) schemes, where farmers and land managers will be incentivised to manage their land in a more sustainable way via applying particular standards on their property. One of the core elements is the Sustainable Farming Incentive, launching this year, and the Government anticipates that IPM actions will be included. More details can be found in the Commons Library paper on Farm funding: implementation of new approaches. The UK Government is also looking at enhancing the Farming Investment Fund to facilitate IPM uptake.
- Support research on ways to reduce reliance on pesticides
- Develop new ways of supporting farmers, "working with a broad range of Government funded advisors and stakeholder groups to develop networks and accessible advice and guidance."

Much more detail is available in the draft National Action Plan. A summary of responses was published in December 2021, which stated that the revised NAP would be published in Spring 2022.

Supporting pollinators

On 12 November 2021, a Government response to PQ 73713 (Pollinators: Pesticides) outlined the measures that the government is taking to research and protect pollinators. It is printed in full below. The Government has a National Pollinator Strategy, a 10 year plan (2014-24) to protect pollinators, such as bees.

2 Stakeholder opinion

Many environmental and wildlife charities are against the 2022 emergency authorisation. Spokespersons from organisations such as the Royal Society for the Protection of Birds, Buglife, The Wildlife Trust and Friends of the Earth have criticised the decision, arguing that it is impossible to ensure that these pesticides will not damage pollinators. Some pointed to the fact that the Government had gone against the advice of the HSE when making the authorisation.[9] The Wildlife Trusts in particular flagged that insects are already on the decline in the UK and questioned why sugar, of "zero nutritive value" would warrant this decision.[10]

Other industry stakeholders welcomed the news. The National Farmers Union (NFU) Sugar board chairman, Michael Sly, was "relieved" as it was "desperately needed to fight this disease".[11] Both the NFU and British Sugar emphasised the "limited and controlled" way in which these pesticides will be applied.[12]

Neonicotinoids in Parliament

Some parliamentarians have called for the emergency authorisations to be granted by Parliament, or for more robust processes to be in place. [13]

There were several attempts, during the passage of the Environment Bill 2019-20, to add clauses mandating the publication of a pollinator risk assessment report before any pesticide, active ingredient, safener or synergist could be approved. That report would need to consider the impact on all pollinators as well as the acute and chronic effects of the relevant substance on honeybees, bumblebees, solitary bees, butterflies and hoverflies. Further detail can be found in the Library briefing on Environment Bill 2021-22: Lords amendments and "ping pong" stages.

Further sources can be found below.

9 'Banned' bee-harming pesticide approved for use, despite expert advice, BBC News Online, 17 January 2022

10 Bad news for bees: Government reverses ban on bee-killing neonicotinoids, The Wildlife Trusts press release, 11 January 2022

11 Emergency use application for neonicotinoid seed treatment on sugar beet granted, NFU, 11 January 2021

12 Statement on the emergency authorisation for limited use of a neonicotinoid seed treatment for the 2022 sugar beet crop, British Sugar press release, 14 January 2022

13 Harmful pesticides must be banned for good to save our bees, The House magazine, 19 January 2022

3 Parliamentary material

3.1 Debates

House of Lords Debate
Sugar Beet: Neonicotinoids
HL Deb 15 December| Vol 817 c303

House of Lords Debate
Bee Population
HL Deb 19 Jun 2018 | Vol 791 cc1991-2013

Westminster Hall Debate
Neonicotinoids on Crops
HC Deb 07 Dec 2015 | Vol 603 cc227-254WH

3.2 PQs

Pesticides: Thiamethoxam

Asked by: **Baroness Bennett of Manor Castle**

To ask Her Majesty's Government what assessment they have made of the potential negative impacts of their decision to permit the use of the pesticide thiamethoxam for sugar beet cultivation on (1) bee health, and (2) the spread of antimicrobial resistance; and what steps they will take to mitigate the concerns raised by their scientific advisors about the use of this pesticide.

Answered by: **Lord Benyon**

My Lords, the Government have given emergency authorisation for the use of thiamethoxam in 2022 to protect sugar beet from viruses. The environmental assessment identified potential risks to bees and the authorisation imposes strict restrictions to minimise these risks. In particular, the pesticide will be used only if, according to independent modelling, the predicted level of virus is at or above 19% of the national crop. No flowering crop may be planted within 32 months of sugar beet having been treated.

HL Deb 20 Jan 2022| Oral questions | Vol 817 cc1763-57

Pesticides: Thiamethoxam

Asked by: **Lord Jones of Cheltenham**

My Lords, Countryside Online tells us that the sugar beet industry supports 9,500 jobs, produces half of the UK's sugar and is environmentally friendly because of the low number of miles beet travels from farm to processing plant to consumer. Mr Gove supported a total ban on neonicotinoids when he was Environment Secretary because they harm populations of bees and other pollinators. By allowing their use now, why are the Government breaking their promise to maintain high environmental standards?

Answered by: **Lord Benyon**

My Lords, we are not. We are in exceptional circumstances, responding to an exceptional problem. We are imposing very high standards. I repeat that no flowering crop may be planted on land where this seed dressing is used within 32 months of treated sugar beet. There is a minimal effect on pollinators because sugar beet is not harvested after it has flowered. The other conditions that we have applied might well mean that it will not be used this year.

HL Deb 20 Jan 2022 | Oral questions - Supplementary | Vol 817 c1765

Bees: Neonicotinoids

Asked by: **West, Catherine**

To ask the Secretary of State for Environment, Food and Rural Affairs, what assessment he has made of the impact of neonicotinoid Cruiser SB on bee health.

Answering member: **Victoria Prentis | Department for Environment, Food and Rural Affairs**

Cruiser SB is a plant protection product containing the active substance thiamethoxam, which is a neonicotinoid insecticide. Approval for the outdoor use of the neonicotinoids clothianidin, imidacloprid and thiamethoxam on any crops, including non-flowering crops such as sugar beet, has been completely withdrawn in the UK. These restrictions are justified by the growing weight of scientific evidence that neonicotinoids are harmful to bees and other pollinators.

Under GB pesticides legislation, emergency authorisations for the limited and controlled use of pesticides may be granted where the legal requirements are met, including that use of the pesticide appears necessary because of a danger which cannot be contained by any other reasonable means. Defra granted an emergency authorisation for the limited use of Cruiser SB on the 2021 sugar beet crop to provide emergency protection against viruses that significantly impacted yields the previous year. Ultimately, Cruiser SB was not used on the 2021 crop as the conditions set by the Government as part of the emergency authorisation for the use of the product were not met.

HC Deb 16 Dec 2021 |PQ 89631

Pollinators: Pesticides

Asked by: **Hayes, Sir John**

To ask the Secretary of State for Environment, Food and Rural Affairs, whether the revised national action plan for the sustainable use of pesticides will recognise pollinator sustainability as a core principle.

Answering member: **Rebecca Pow | Department for Environment, Food and Rural Affairs**

Defra's indicator of the status of UK pollinating insects shows that overall distribution has declined since 1980, but with little change over the short term. Although not yet definitive, there are encouraging signs; for example the average distribution of wild bees has shown some stability over recent years. While indicators of the abundance of UK butterflies show long term declines since 1976, there has also been no significant change since 2015.

Of the 148 species of bee and 229 species of hoverfly in our pollinating insects indicator, over the long term, 19% of species became more widespread (7% showed a strong increase), and 49% became less widespread (24% showed a strong decrease). By contrast, over the short term, a greater proportion of species were increasing (46%, with 34% exhibiting a strong increase) than decreasing (43%, with 36% exhibiting a strong decrease).

The size of the honey bee population is dependent to a large extent on the numbers of beekeepers. Defra has performed an annual hive count since 2015 and the latest count, at the end of the 2020 season, indicated a total UK population of approximately 260,000 honey bee colonies. As the calculations rely on several assumptions, the hive count figure is termed an experimental statistic. Distribution of hives is determined by where beekeepers arrange to locate their apiaries. The National Bee Unit collates information on apiary location by county, for example, but no formal assessment of geographic distribution has been made.

In 2019, alongside academic partners, we published evidence statements on what is known about the status, values, drivers of change, and responses to management of UK insect pollinators. This concluded that the service of pollination, provided by wild and managed insects, is dependent on insect numbers, and can be improved by diverse pollinator communities, therefore it is possible that pollination services to crops and wild plants have declined in the long term.

The review also highlighted the biggest risk factors to UK pollinator species, such as habitat loss and fragmentation, invasive species, pests and disease, climate change and risks from pesticide use. We continue to act on these issues while keeping other threats under review alongside our partners on the National Pollinator Strategy. For managed honey bees, current major risks are from endemic pests and disease, on which we act alongside our partners on the Healthy Bees Plan 2030.

Our 2019 review showed that historical declines in nectar resources across Great Britain have slowed since the 1970s. While they remain below 1930 levels, total potential nectar resources increased by 25% between 1998 to 2007. Our annual indicator of the extent and condition of priority habitats, many of which are crucial for supporting pollinators, shows that in 2021, almost 1.23 million hectares, or 65.6% of all priority habitats, were in a favourable or unfavourable recovering condition. We are taking a range of actions to improve this position and to restore and create further pollinator habitat.

For example, between 2014 and 2019, Natural England estimates that the area of farmland covered by agri-environment scheme options delivering food and fuel for pollinators increased by 30,000 hectares, largely driven by Countryside Stewardship's Wild Pollinator and Farm Wildlife Package, while pollinators also benefited from managing existing habitat such as protected sites or hedgerows.

We are also working with landowners, farmers and growers alongside conservation bodies, to facilitate pollinator-friendly environments outside agri-environment schemes, for example through Natural England's 'Back from the Brink' species recovery programme and most recently, our Green Recovery Challenge Fund, including Butterfly Conservation's project to restore habitats at 18 woodland sites in the Morecambe Bay area to promote the recovery of threatened butterfly species.

We are building on these measures and projects in the design of our new environmental land management schemes, which will enable many more farmers and land managers to take positive action for pollinators.

In urban spaces, managing public land such as parks or roadside verges for pollinators will be one way that authorities can discharge their biodiversity duty under the Natural Environment and Rural Communities Act, a duty which the Environment Act 2021 strengthens. We are working across Government on ways to support them, such as by providing guidance. Local planning authorities and other designated public authorities will also be required to produce regular Biodiversity Reports setting out the action they have taken, and these reports will provide a valuable source of good practice.

Research also shows that urban gardens are a significant source of nectar provision and can support substantial pollinator populations. We established and coordinate 'Bees' Needs Week', an annual event working alongside our many partners to raise awareness of the steps that everyone can take to protect pollinators in gardens, allotments, window boxes or other community spaces. We work with our partners to provide year-round guidance and to celebrate examples of best practice in schools, community groups and local authorities through our 'Bees' Needs Champions Awards'.

Pesticides are strictly regulated and only authorised pesticides can be used. Authorisation is only given if, among other requirements, there are expected to be no unacceptable effects on non-target species.

Linking pesticide usage directly to changes in wild bees and other pollinators remains challenging because of the range of pressures which affect pollinators, in addition to the complexities of assessing and attributing pesticide usage and risk to impacts.

We have funded research into the exposure of honeybees to pesticides through analysing pesticide residues in honey samples from across the country and using metabarcoding to understand how honeybees are exposed to these pesticides. We are also currently funding research looking at how we could develop our monitoring to better understand the effects of pesticides on pollinators, as well as routes of exposure.

The draft 'National Action Plan for the Sustainable Use of Pesticides' (NAP) sets out the key ambition to support the development and greater uptake of Integrated Pest Management to reduce pressures on biodiversity and the natural environment. It also set out the intention to improve indicators of pesticide usage, risk and impacts and to ensure those who use pesticides do so safely and sustainably. This includes working in line with the National Pollinator Strategy. The draft NAP was the subject of a public consultation.

The key risk posed by non-native pollinator species is from the non-native pest Asian hornet, whose diet includes honey bees and other pollinating insects. A pest risk assessment and contingency plan were developed as the spread of the species in parts of Europe became clear. Since 2016 there have been small numbers of confirmed UK sightings, and the National Bee Unit has delivered a successful response in each of these cases. There is no evidence to suggest that Asian hornet has become established in the UK.

There are also risks to managed honey bees from other non-native species such as Small hive beetle. Imports of honey bees into the UK are only accepted from approved countries and are subject to rules relating to notification and health certification to ensure that imports are free of key pests and diseases. Post-import checks, including follow-up inspections, are also carried out.

We continue to work within Defra and across Government to maintain and increase the understanding of pollinator species' health and needs through our collaborative work under the National Pollinator Strategy and the Healthy Bees Plan 2030, to integrate action for wild pollinators and managed honey bees across Government policy.

HC Deb 22 Nov 2021 | PQ 73713

Pollinators

Asked by: **Anderson, Fleur**

To ask the Secretary of State for Environment, Food and Rural Affairs, whether his Department has had recent discussions with stakeholders on the long term effects of pesticides on wild bees and other pollinators.

Answering member: **Victoria Prentis | Department for Environment, Food and Rural Affairs**

Linking pesticide usage directly to changes in wild bees and other pollinators remains challenging because of the range of pressures which affect pollinators, in addition to the complexities of assessing and attributing pesticide usage and risk to impacts. In 2019, alongside leading academics, we published evidence statements on what is known, and not known, about the status and responses to pressures and management of pollinators, including in relation to pesticide use.

We have funded research into the exposure of honeybees to pesticides through analysing pesticide residues in honey samples from across the country and using metabarcoding to understand how honeybees are exposed to these pesticides. We expect the results of this work to be published soon. We are also currently funding research looking at how we could develop our monitoring to better understand the effects of pesticides on pollinators, as well as routes of exposure.

Furthermore, Defra is developing a Pesticide Load Indicator which takes account of both the chemical properties of pesticides used and the weight applied. This uses pesticide usage data, ecotoxicity and environmental data to better understand how the pressure from pesticides on the environment, including bees, has changed over time. Much of this research will be published in 2022.

We also publish an indicator of the status of pollinating insects, which measures how widespread each of almost 400 species is in each year since 1980. It shows long-term decline, but minor change over the short term. Although not yet definitive, there are encouraging signs of improvement, for example the average distribution of wild bees has shown some stability over recent years. We are keeping these trends under review and continue to discuss all these issues with stakeholders, including with our advisory group under the National Pollinator Strategy.

HC Deb 28 Oct 2021 | PQ 62882

Pesticides: Pollinators

Asked by: **Lord Hylton**

To ask Her Majesty's Government what assessment they have made of House of Lords report stage amendment 53 to the Environment Bill, which would insert a clause on the protection of pollinators from pesticides.

Answering member: **Lord Goldsmith of Richmond Park**

Decisions on pesticide authorisation are based on expert assessment by the Health and Safety Executive. The independent UK Expert Committee on Pesticides advises on novel scientific issues. Current legislation already requires that active substances and pesticide products have "no unacceptable effects on the environment … having particular regard to its impact on non-target species", which can include impacts on bees and other pollinators.

The scientific risk assessment relies on detailed data requirements and processes, carried across from EU law at the end of the transition period. The Government will ensure that these are updated to keep in step with developments in scientific understanding. Risk assessments made for active substances are already subject to public consultation. These assessments establish the key risks posed by pesticide substances in representative conditions of use.

Protecting pollinators is a priority. The National Pollinator Strategy, developed and updated alongside many partners following thorough scientific review, identifies pressures on pollinators on which we are acting, including potential harm from pesticide use, habitat loss and fragmentation, and invasive species.

We continue making decisions on pesticides use based on scientific risk assessments, while aiming to achieve high levels of protection for people, wildlife, and the environment.

HL Deb 27 Sep 2021 | PQ 2540

Pesticides: Licensing

Asked by: **Zeichner, Daniel**

To ask the Secretary of State for Environment, Food and Rural Affairs, whether new processes for determining pesticide use applications will be compliant with the environmental decision-making aspects of the Aarhus Convention.

Answering member: **Victoria Prentis | Department for Environment, Food and Rural Affairs**

EU Exit legislation has carried across the statutory requirements of the EU regime relating to standards of protection. We now operate an autonomous

GB pesticides regime, and decisions on standards are a matter for the UK Government and Devolved Administrations. EU pesticides legislation continues to apply in Northern Ireland, under the terms of the NI Protocol.

Decisions on pesticide authorisation are based on expert assessment by the Health and Safety Executive. The independent UK Expert Committee on Pesticides advises on novel scientific issues. The scientific risk assessment relies upon detailed data requirements and processes, carried across from EU law at the end of the Transition Period.

Risk assessments made for pesticide active substance approvals are subject to public consultation. These assessments establish the key risks posed by pesticide substances in representative conditions of use. There are requirements in the retained pesticides regulation to make the applicant's summary dossier, the draft assessment report (on which a period of time is permitted for written comments) and the conclusion publicly available. There are no similar requirements in the regulation in respect of applications for emergency authorisation. We continue making decisions on pesticides use based on scientific risk assessments, while aiming to achieve high levels of protection for people, wildlife and the environment.

The Government is committed to the continued effective implementation of our international obligations under the Aarhus Convention on access to information, public participation in decision making and access to justice in environmental matters. The Government strongly supports the contribution the Convention makes to enhancing environmental protection and remains committed to its objectives. The three pillars of the Convention have been implemented via a number of measures, including legislation such as the Environmental Information Regulations 2004.

HC Deb 06 Sep 2021 | PQ 40934

Pesticides

Asked by: **Zeichner, Daniel**

To ask the Secretary of State for Environment, Food and Rural Affairs, what criteria were met that led to his Department granting the emergency authorisation of Vydate 10G for use on sugar beet crops in 2021.

Answering member: **Victoria Prentis | Department for Environment, Food and Rural Affairs**

Emergency authorisation allows, in narrow circumstances, a short-term derogation from the normal requirements for pesticide authorisation. Emergency authorisation of a pesticide product for limited and controlled use may be granted in special circumstances where, strict regulatory requirements are met, and the authorisation appears necessary to control a danger that cannot be controlled by any other reasonable means. In

assessing whether the requirements are met, the decision maker considers the benefit of granting an emergency authorisation and the potential harm from the proposed use of the product, taking into account relevant mitigation measures.

In the case of Vydate 10G, used to control nematodes, grower groups submitted applications earlier this year for emergency authorisation for use on a range of crops. The application for use on a small proportion of the sugar beet crop was granted, with conditions, as the requirements for emergency authorisation were considered to be met.

HC Deb 21 May 2021 | PQ 763

Bees: Neonicotinoids

Asked by: **Zeichner, Daniel**

To ask the Secretary of State for Environment, Food and Rural Affairs, whether the risk assessment undertaken by the Health and Safety Executive for the application for emergency use of the neonicotinoid thiamethoxam on sugar beet granted in January 2021 considered the risk to (a) wild bumblebees, (b) solitary bees and (c) managed honey bees.

Answering member: **Victoria Prentis | Department for Environment, Food and Rural Affairs**

Any consideration of possible authorisation of a pesticide, including emergency authorisation, starts from the information provided by the applicant. Those carrying out the risk assessment will also draw on their wider knowledge. In this case, the assessment carried out by the Health and Safety Executive (HSE) for Cruiser SB took account of an earlier assessment by the European Food Safety Authority (EFSA).

The EFSA work considered honeybees, bumblebees and solitary bees, although the available data mostly relates to honeybees. HSE's assessment considered the risks from residues of thiamethoxam in the soil being taken up by flowering plants attractive to bees in future years. The assessment focussed on following crops such as oilseed rape, which have a greater potential to expose bees than wildflowers in field margins.

HC Deb 23 Apr 2021 | PQ 181289

Neonicotinoids

Asked by: **Baroness Bennett of Manor Castle**

To ask Her Majesty's Government what assessment they have made of the report by Dr Susan Willis Chan and Dr Nigel Raine Population decline in a ground-nesting solitary squash bee (Eucera pruinosa) following exposure to a

neonicotinoid insecticide treated crop (Cucurbita pepo), published in February 2021; and what plans they have (1) to take account of its recommendations before making any further application for exceptional approval to use neonicotinoid seed treatments, and (2) to review current approval methods to ensure that they take account of the impact of pesticide application on solitary and ground-nesting bees.

Answering member: **Lord Goldsmith of Richmond Park**

The emergency authorisation recently granted for a neonicotinoid seed treatment for sugar beet was for the thiamethoxam-based product Cruiser SB. Because the cold winter conditions have reduced the likely pest pressures in 2021, the product will not be used.

The Chan and Raine study did not find significant effects on the solitary bees from use of a thiamethoxam seed treatment although it did find effects from a product containing a different neonicotinoid called imidacloprid. It would be wrong to draw firm conclusions from the study, particularly as the bee species used (the hoary squash bee) is not a UK native.

The Government recognises the need to protect pollinators, including solitary bees, from the effects of pesticides. As we build our national pesticides regime, we will ensure that potential risks to bees are carefully assessed.

HL Deb 19 Mar 2021 | PQ 13892

Sugar Beet: Neonicotinoids

Asked by: **Baroness Bennett of Manor Castle**

To ask Her Majesty's Government what assessment they have made of the impact of the decision to approve a neonicotinoid pesticide for use on sugar beet seed on (1) the population numbers and population health of bees and other pollinators, (2) soil health and loss, (3) other insects, (4) fish and other water-dwelling species, and (5) other species of animals.

Answering member: **Lord Gardiner of Kimble**

The process for considering emergency authorisation for a pesticide is derived from the legislation and includes consideration of potential risks to people and to the environment. This process was followed for application to use the neonicotinoid seed treatment Cruiser SB on sugar beet in 2021.

The assessment of risks included consideration of risks to bees, other insects, soil organisms, fish, aquatic invertebrates, birds and mammals. Risks to bees were identified arising from soil residues taken up by flowering weeds or following crops. Mitigation measures were therefore built into the requirements of the emergency authorisation. These included a reduced application rate, effective control of weeds and minimum periods set between the planting of treated sugar beet and a subsequent flowering crop. For most

crops this period was set at 22 months but a longer period of 32 months was chosen for oilseed rape as it is particularly attractive to bees

HL Deb 25 Jan 2021 | PQ 11959

4 News items and related material

4.1 News items

The Independent
Bees will die as ministers approve toxic banned pesticide for second time, warn experts
19 January 2022

BBC News Online
'Banned' bee-harming pesticide approved for use, despite expert advice
17 January 2022

Farmers weekly
Defra approves neonics seed treatment for sugar beet crops
17 January 2022

The Guardian
UK charities condemn 'betrayal' of allowing bee-killing pesticide in sugar beet crops
14 January 2022

The Wildlife Trust
Bad news for bees: Government reverses ban on bee-killing neonicotinoids
11 January 2021

The Guardian
Bees may take generations to recover from one exposure to insecticides
22 November 2021

Ecologist
Time to beet neonicotinoids?
21 May 2021

The Guardian
Toxic impact of pesticides on bees has doubled, study shows
1 April 2021

The Times
Climate change and pesticides cause bees to vanish from east of England
20 May 2019

4.2 Related material

Defra
Statement on the decision to issue – with strict conditions – emergency authorisation to use a product containing a neonicotinoid to treat sugar beet seed in 2021
14 January 2022

Nature
Neonicotinoids disrupt memory, circadian behaviour and sleep
21 January 2021

Defra
National Pollinator Strategy 2014 to 2024: implementation
10 April 2019

Press release GOV.UK
Environment Secretary backs further restrictions on neonicotinoid pesticides
9 November 2017

Soil Association
Looking at the full picture: the neonicotinoid debate
November 2015

Buglife Charity: Neonicotinoid insecticides

Buglife Charity report
The impact of neonicotinoid insecticides on bumblebees, Honey bees and other nontarget invertebrates

Pesticide Action Network UK: https://www.pan-uk.org/about_neonicotinoids/

The Task Force on Systemic Pesticides: http://www.tfsp.info/en/worldwide-integrated-assessment/

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