

Parma, 28 February 2018

Q&A: Conclusions on neonicotinoids 2018

1) On what basis did EFSA conclude that overall the risk to bees from neonicotinoids is confirmed?

EFSA compared the expected levels of neonicotinoid pesticides to which bees are likely to be exposed in the environment to those that cause effects to bees. Whenever the estimation of the environmental contamination was higher than the levels considered safe for bees, a high risk was concluded. For all the outdoor uses of these substances, there was at least one aspect of the assessment indicating a high risk, leading to the conclusion that overall these neonicotinoids represent a risk to bees.

The key word is "overall". So in most of the cases where some low risks were identified for a particular use, high risks were also identified for the same use. For example:

| Neonicotinoid | Type of bee | Crop | Route of exposure | Risk |
|---------------|-------------|--------------------------------|---|------|
| Imidacloprid | Honeybees | Oilseed rape (winter & spring) | Residues in nectar & pollen from treated crop | Low |
| Imidacloprid | Honeybees | Oilseed rape (winter & spring) | Residues via dust drift | High |
| Imidacloprid | Bumblebees | Oilseed rape (winter & spring) | Residues in nectar & pollen from treated crop | High |

The conclusions on risk varied according to factors such as the bee species, the intended use of the pesticide and the route of exposure (residues in bee pollen and nectar; dust drift during the sowing/application of the treated seeds; and water consumption). However, taken as a whole the conclusions confirm that neonicotinoids pose a risk to bees.

2) What were the risks to bees identified by EFSA?

Bees can be exposed to neonicotinoids in multiple ways, depending on the use of the pesticide. The assessments indicated that in many cases bees foraging on the treated crop in the field as well as in its vicinity are likely to be exposed to harmful levels of the neonicotinoid pesticides. This is because pollen and nectar of the treated crop contain pesticide residues, and plants in the vicinity can also be contaminated by dust drifting away from the field.

In addition, the soil where the crop is planted can become contaminated with the pesticide. In some situations, the pesticide may persist and accumulate in the soil. These residues end up in the pollen and nectar of the newly grown plants. The information on this phenomenon is somewhat limited, but EFSA concluded that, in some cases, bees might still be exposed to harmful level of neonicotinoids pesticides through this route.

3) Did the assessments look at effects on wild bees?

Yes. Apart from honeybees, the assessments considered the risk to bumblebees, which can either be managed or wild, and to some representative species of wild solitary bees, such as the red mason bee (*Osmia bicornis*). However, most of the available information was on honeybees.

4) Are wild bees more at risk?

Most of the available information was on honey bees; studies on wild bees were scarcer. As such, a direct comparison between the outcome of the assessment performed for honeybees and wild bees would not be appropriate.

In general, most uses were predicted to pose a high risk for both managed and wild bees, but for some scenarios the assessment resulted in variable outcomes between the three pesticides. We did not see a particular pattern for these differences.

5) What evidence did EFSA consider for the new assessments?

In 2015 EFSA carried out an open call for data from studies, research and monitoring activities relevant for the uses under consideration. EFSA also considered the data available from the systematic literature review carried out for the previous assessments in 2013. Furthermore, an [update of this systematic review](#) was performed in June 2016, to collect all published scientific literature relevant for the current evaluation. Data was received from academia, beekeeper associations, chemical companies, farmers' associations, NGOs and national authorities. More than 1,500 studies were considered by EFSA prior to beginning the assessments.

6) As risks are confirmed, is EFSA recommending an EU-wide ban of neonicotinoids?

No. In the EU regulatory system, EFSA acts as a scientific risk assessment body and does not make decisions regarding authorisations of regulated products, including pesticides. These are the responsibility of the European Commission and Member State authorities in their capacity as risk managers and legislators.