

# Bees and neonicotinoids - what's it all about?

An overview by Dr Chris Hartfield (NFU horticultural adviser)

There are concerns about the harmful impact of a particular group of important and widely used insecticides – the neonicotinoids – on bees and other pollinating insects.

While scientific studies show that dosing bees in the laboratory with neonicotinoids has harmful effects on their behaviour and life cycles, other studies (including one published by Defra last month) show these harmful effects are not seen under normal field conditions. And there is no evidence to single out neonicotinoids as causing widespread declines in bee and pollinator populations. For these reasons, the NFU doesn't support calls to ban the use of neonicotinoids. While such calls are popular, in the absence of good evidence such bans would not deliver any measurable benefits for bee health.

In mid-January the European Food Safety Authority published reports following its re-assessment of risks posed to bees by three neonicotinoids – clothianidin, imidacloprid and thiamethoxam. The reports highlighted some theoretical high risk uses of neonicotinoids, but did not assess whether overcoming them would actually provide bee health benefits. However, the European Commission deemed the risks 'unacceptable' and decided to manage them by proposing a ban on certain uses of these insecticides.

In the UK, the Commission's proposed ban would mainly affect maize, oilseed rape, spring-sown cereal crops, and outdoor horticultural crops that flower before harvesting. The proposal was voted on by a Standing Committee in March, but there was no qualified majority support for or against. UK Government has taken a very evidence-based approach to this issue and was expected to vote against the proposal. Disappointingly, it abstained. The Commission is now taking the proposal to an appeals committee at the end of April. If the appeals committee vote also fails to reach a qualified majority, the Commission still has the option of going ahead with the proposal, particularly if the balance of voting favours this route. It is essential that the UK votes against the proposal in the appeals committee.

A socio-economic study by the Humboldt Forum for Food and Agriculture published in January reported that banning the use of neonicotinoid seed treatment technology would cost the UK economy approximately £630million a year. This study was funded by chemical companies, and the exact figures have been questioned. However, it is clear that the benefits of this technology have a significant value in terms of food and ornamental crop production.

Earlier this month, parliament's Environmental Audit Committee published a report following its inquiry on pollinators and pesticides (where the NFU gave evidence). The most reported recommendation has been for Defra to ban the use of imidacloprid, clothianidin and thiamethoxam on crops attractive to bees by 1 January 2014. The report also includes recommendations to increase Government incentives to drive the uptake of IPM and agri-environment measures that benefit pollinating insects. The NFU has been actively lobbying in the UK and Brussels on this issue and has done numerous radio and press interviews.

Environmental NGO's with existing anti-pesticide agendas, like Friends of the Earth and Greenpeace, are actively campaigning to get neonicotinoids banned and alongside online sites encouraging one-click activism on this issue, these organisations have attracted considerable media attention and public support. The resulting pressure has resulted in DIY and garden centre retailers removing neonicotinoid bug sprays from their shelves, and most recently moves from Waitrose to 'avoid' the use of the three neonicotinoids in their supply chain.

These actions will prove popular with many, but the tragedy is that without good evidence they will do nothing to measurably improve pollinator health. However they will bring costs for the supply chain and the risk of unintended consequences for the environment.

*Look out for the pull-out on helping pollinators in next month's BF&G.*