

Two insecticides a risk for human nervous system: EU

December 17 2013, by Catherine Boitard

The EU warned Tuesday that two widely used insecticides, one of which has been implicated in catastrophic bee population decline, may pose a risk to human health by harming brain development.

The neonicotinoid insecticides acetamiprid and imidacloprid "may affect the developing human nervous system," the European Food Safety Authority said.

This marked the first time such a link has been made with the neonicotinoid family of pesticides, three of which the European Union restricted earlier this year on concerns they were causing a dramatic fall in bee numbers and so threatened food crop pollination.

EFSA experts wanted "some guidance levels for acceptable exposure ... to be lowered while further research is carried out to provide more reliable data on developmental neurotoxicity (DNT)," it said.

The findings were based on recent research and existing data on "the potential of acetamiprid and imidacloprid to damage the developing human nervous system—in particular the brain."

The research suggested the two insecticides "may adversely affect the development of neurons and brain structures associated with functions such as learning and memory," EFSA said in a statement.

"It concluded that some current guidance levels for acceptable exposure

... may not be protective enough to safeguard against developmental neurotoxicity and should be reduced," the EFSA added.

The European Commission, the EU's executive arm, said it noted the EFSA findings which it will onpass for comment to the manufacturers concerned—German giant Bayer for imidacloprid and Nisso Chemical of Japan for acetamiprid.

"In principle, the next step would be to amend the reference values," a Commission spokesman said.

Critics were not necessarily totally reassured but did welcome the EFSA announcement.

"Reducing the thresholds is not necessarily the solution," said French Green MEP Michele Rivasi.

"We must also ask the question about the effects of the whole 'cocktail' and the cumulative impact over time following repeated exposure," Rivasi said.

At the same time, it was at least positive that the EFSA, often criticised for not acting forcefully enough, had taken this stand, she said.

In May, the EU restricted for two years the use of imidacloprid—cited in Tuesday's action—and clothianidin, both produced by Bayer, along with thiamethoxam made by its Swiss peer Syngenta, citing the threat to bees.

In July, it restricted the use of another insecticide from a different class, fipronil, made by Germany's BASF, for similar reasons.

Bee numbers have slumped in Europe and the United States in recent

years due to a mysterious plague dubbed colony collapse disorder (CCD), sparking concerns crop pollination and thus food production could be put dangerously at risk.

It is estimated bees account for some 80 percent of plant pollination by insects and are absolutely crucial for fruit production.

The companies involved insist that their products are not at fault and Sygenta and Bayer said in August they would take legal action against Brussels.

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