Bumblebees fed high doses of neonicotinoids in laboratory setting did not buzz as much or release pollen

The world's most widely used <u>insecticides</u> harm the ability of bees to vibrate flowers and shake out the pollen to fertilise crops, according to preliminary results from a new [lab-based] study.

Some flowers, such as those of crops like tomatoes and potatoes, must be shaken to release pollen and bumblebees are particularly good at creating the buzz needed to do this. But the research shows that bumblebees exposed to realistic levels of a <u>neonicotinoid</u> pesticide fail to learn how to create the greatest buzz and collect less pollen as a result. [The impacted bees were fed doses of 10ppb.]

The research is consistent with previous work that has shown neonicotinoid pesticides reduce learning and memory in bees.

A spokesman for Syngenta, which manufactures thiamethoxam, said: "Crop-measured pollen and nectar residues from thiamethoxam seed-treated oilseed rape is typically less than 3ppb. In all our thiamethoxam seed-treated oilseed rape field studies we have never recorded a pollen or nectar residue as high as 10ppb."

There is strong evidence that <u>neonicotinoids harm individual bees</u> but only a little evidence to date that this harms colonies. Bees and other pollinators fertilise about three-quarters of the world's food crops and have seen widespread declines due to habitat loss, disease and pesticide use.

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[Editor's note: There are claims in this study that contradict mainstream research on the nemonic issue. For a comprehensive review of the latest in the controversy, we suggest <u>reading the transcript of a Reddit</u> <u>Ask Me Anything on Bee Health and Pesticides with the Genetic Literacy Project's Jon Entine held</u> <u>December 14</u>:

Science AMA Series: I'm Jon Entine, Executive Director of the Genetic Literacy Project, here to discuss the exaggerated claims that we are facing a Bee-apocalypse caused by pesticides, AMA! from science

ScreenfShot at AMnown

For background on the bee health controversy, read GLP's *Beepocalypse Myth Handbook: Dissecting claims of pollinator collapse* <u>here</u>.

For more information on the bee controversy, we have compiled a list of archived GLP articles and resources <u>here</u>.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Pesticides stop bees buzzing and releasing pollen, says study