Leading entomologist Marla Spivak: 'We can have both pesticides and pollinators'

Marla Spivak, who holds a McKnight professorship in entomology at the University of Minnesota and directs the <u>Bee Lab</u> there, knows as much about bees as anyone. The notion that bees are dying off in just one way – the way labeled "colony collapse disorder," with bees suddenly vacating their hives en masse, never to return – is outmoded. National surveys made since the initial appearance of CCD in 2006 and 2007 have now established that "actually, a very small proportion of colonies that are dying are dying from those particular symptoms."

It happens – but the majority of colonies are dying for many, many reasons. From the mites, from bad nutrition, from not enough honey, from pesticides. ... Surprisingly few are being killed only by pesticides, really, but from diseases and pests and all of the interactions that seem to be happening.

Addressing indirectly the calls to ban neonicotinoids, said that analysis of pesticide residues in beegathered pollen is showing neonics "very rarely – but you find *everything else*."

And the other thing we need to understand about our insecticides is that – let me put it this way: If you go to the pharmacy, or if you take an aspirin, any drug for yourself, the active ingredient will be labeled, and the inert ingredients will be labeled.

If you go to a pesticide label, only the active ingredient will be there. The inert ingredients are all proprietary information, they're not revealed, and some of these, quote, inactive ingredients are actually more toxic than the active ingredient.

Genetically modified crops aren't a problem per se for bees, Spivak said, but their widespread use has driven a massive increase in herbicide applications. No direct toxicity, again, but a major hit to habitat.

We grow Roundup-ready plants, which allows us to apply a lot of herbicide to kill of all the weedy flowers in the field without killing the crop. But many of those weedy plants have flowers that bees depend on for their food, and so the dramatic increase in herbicides is killing off the food for bees in many locations.

Read full, original article: Marla Spivak: To grasp our bees' plight and prospects, stay focused on food