

Report: Virus, fungus new suspects in bee disease

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Researchers have a pair of new suspects in the mysterious collapse of honey bee colonies across the country.

The widespread damage to the [bees](#) has caused concern because the insects are needed to pollinate scores of crops.

Researchers say samples collected from hives affected by the syndrome indicated the presence of a virus as well as a fungus. The two pathogens were not found in [bee colonies](#) not affected by the syndrome, called [colony collapse disorder](#), the researchers reported in Wednesday's edition of the journal [PLoS ONE](#).

"We truly don't know if these two pathogens cause CCD or whether the colonies with CCD are more likely to succumb to these two pathogens,"

Jerry J. Bromenshenk of the University of Montana said in a statement.

Previous studies have looked at the possibility of multiple viruses found in the bee colonies as well as the potential harm from pesticides, but researchers have yet to pin down an exact cause.

The new study said the suspect virus is insect iridescent virus, which is similar to a virus first reported in India 20 years ago, as well as a [virus](#) found in moths.

They said it affects the abdomens of bees, and the tissues may take on a bluish-green or purplish hue. The fungus is called *Nosema ceranae*, and this can sicken bees if they ingest the spores.

Robert Cramer, a pathologist at Montana State University in Bozeman said, "There seems to be a correlation between the presence of these two [pathogens](#) together. We envision the bee gets an infection from one or the other, and this causes the bees to become stressed, which then allows the second infection to come in and more effectively cause disease."

The analysis of the bees was done at the Army's Edgewood Chemical Biological Center at Aberdeen Proving Grounds in Maryland.

More information: PLoS ONE: <http://www.plosone.org/home.action>

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