Huge insect diversity revealed by genetic technologies

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"With the availability of inexpensive DNA sequencing technology it has become apparent that the number of distinct species is much higher than previously thought.

"Our recent research into scale insects revealed triple the number of recognised species, and we expect that the further we look into insect diversity, the more species will be revealed."

The researchers focussed on Apiomorpha minor, which are scale insects that live inside woody lumps, called galls, on eucalypt trees.

The insects induce and control the growth of the gall, relying on it for survival.

Ms Mills said that previous studies had identified four species, but genetic analyses had shown more variation in chromosome numbers than expected to occur within one species.

"We found that there were at least 12 distinct species," Ms Mills said.

"As we continue to look more closely at the DNA of insects it is very likely thousands of new species will be uncovered.

"Your next bushwalk could yield a species that we haven't seen before."


Provided by University of Queensland