

SCIENCE

Lost and found after 130 years: A bee-mimicking moth



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Scientists from Poland have rediscovered a moth which was recorded way back in 1887 and then termed as 'lost species'. They stumbled upon the moth *Heterosphecia tawonoides*, known for its mimicry and deceptive appearance. The moth looks like a bee with tufts of hair-like scales on its hind legs.

This is the first time that the moth has been observed and filmed in its natural habitat. During the field visits in 2013, 2016, and 2017 in the rainforests of peninsular Malaysia, the authors from University of Gdansk and ClearWing Foundation for Biodiversity, Poland, noticed the moth with a strong blue sheen on its wings, abdomen, and legs.



It has a strong blue sheen on its wings, abdomen, and legs. | Photo Credit: **SAGE Publications Inc.**

Entire forewing and hindwing show bright blue colour with small black hairs which have a metallic sheen. In May 2016, four individuals were collected and studied. Genitalia morphology confirmed that the collected specimens were indeed *H.tawonoides*. All the moths were seen on the mud on the river banks of the rainforest. The knowledge on their food choice, behaviour, and conservation status is scarce and further studies need to be carried out.

DNA barcoding or sequencing revealed that the new species was highly different from its related species *Heterospehia bantanaka*. The sequence was submitted to the Barcode of Life database and a new identification number has been assigned to the moth.

In the report published in *Tropical Conservation Science*, the authors write that the moth seems to be associated with a very specific habitat: banks of clean rivers flowing through Malaysian primary lowland dipterocarp forests. As these highly vulnerable ecosystems are vanishing rapidly, conservation efforts need to be taken to save these tiny pretty creatures.