

Oral presentation

[B] Taxonomy, Morphology, Histology

Fri. Mar 29, 2024 1:30 PM - 6:00 PM Site B (Hagi)

5:45 PM - 6:00 PM

[B-28] Rediscovery of *Amitus hesperidum variipes* (Hymenoptera: Platygasteridae) in Japan after more than 90 years of disappearance

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Amitus hesperidum is one of the prominent natural enemies of *Aleurocanthus woglumi* whitefly while *Am. hesperidum variipes* is a typical parasitoid of *Al. spiniferus*. This species had been reported in Kyushu in the 1930s. However, since then, no cases of parasitism have been documented, even when *Al. camelliae* has been extensively invaded Japan since 2004. Hence, the disappearance of this species led The MOKUROKU database (2nd Ed., Tadauchi and Inoe 1999) to doubt their existence in Kyushu. Field survey on three Prefectures i.e., Kyoto, Shizuoka, and Miyazaki from May to November 2023 found evidence of parasitism of this parasitoid again in *Al. camelliae* and *Al. spiniferus*. To clarify the identity of the parasitoid, morpho-molecular analysis has been conducted targeting COI, 28S-D2 & 18S genes. The current *Amitus* was identical to *Am. hes. variipes* morphologically instead of *Am. hesperidum*. And it was supported by a distinct clade among those parasitoids. It suggests that *Am. hes. variipes* is perhaps a valid species as cataloged by Vlug in 1995 as *Amitus variipes* rev. stat.