

## First report of *Syrphophagus aphidivorus* (Hymenoptera: Encyrtidae) on *Aphidius ervi* in alfalfa crops in State of São Paulo, Brazil

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(With 3 Figures)

Encyrtidae is a large family of parasitic wasps with about 3000 described species in about 450 genera. Most species of Encyrtidae are primary endoparasitoids of other arthropods or secondary parasitoids via other hymenopterous parasitoids (Hanson and Gauld, 1995).

Among the koinobiont Encyrtidae, the *Syrphophagus aphidivorus* (Mayr 1876) host selection behavior is atypical. The hyperparasitoid females have two oviposition strategies: they can lay eggs in living parasitized aphids as in mummified aphids. Both strategies aim to attack the larvae of primary parasitoids (Kanuck and Sullivan, 1992).

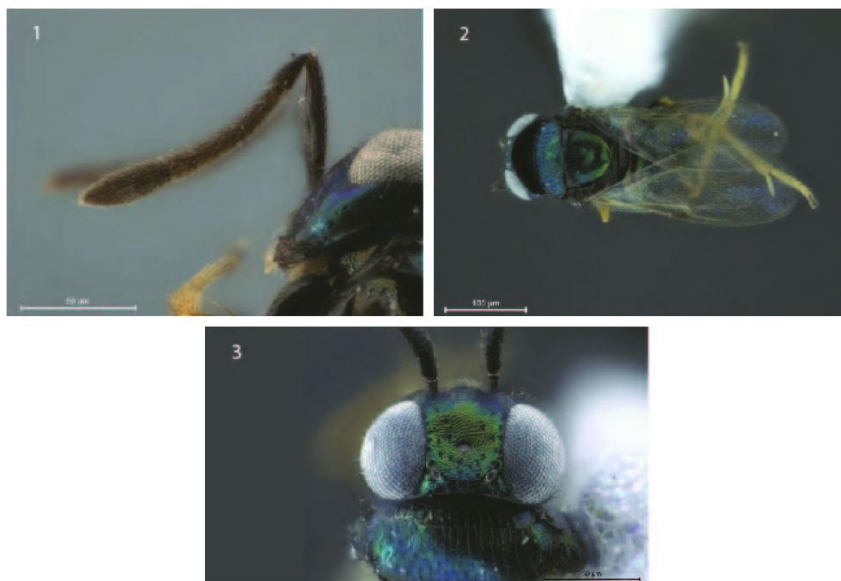
Specimens of *S. aphidivorus* were obtained from the primary parasitoid *Aphidius ervi* Haliday, 1834 (Hymenoptera: Braconidae) on *Acyrtosiphon pisum* Harris, 1776 (Hemiptera: Aphididae) host collected in alfalfa (*Medicago sativa*) in “Embrapa Pecuária Sudeste”, located in São Carlos - SP and individually separated into Eppendorf microtubes (1.5 ml). In the laboratory, the parasitized hosts were allocated in a room with temperature

around 25 °C. After the emergence of adults, the specimens were kept in the freezer until their identification.

The aphids were identified by the last author and the parasitoids and hyperparasitoids were identified by the first author, using a key of identification provided by Hanson and Gauld (1995) for parasitoids and Fergusson (1980). The specimens were studied under a Leica M125 stereomicroscope with a 16x ocular, Images were captured using an automated Z16 Leica system and a DFG495 Leica Digital camera.

During the sampling period, nine specimens of *Syrphophagus aphidivorus* were reared from the primary parasitoids

*S. aphidivorus* have a clava apically with at least a short oblique truncation (Figure 1), scutellum more or less evenly sculptured, never with a sculpture at base contrasting so strongly with that at apex (Figure 2). Median region of propodeum smooth and venation of forewing usually dark brown (Figure 2). The antennae have a scape at least three and a half times as long as broad (Figure 3).



**Figures 1-3.** *Syrphophagus aphidivorus*. (Mayr, 1876) (Hymenoptera, Encyrtidae) (1- Antennae; 2- Body, dorsal view; 3-Head and Antennae, dorsal view).

This species has documented occurrence to the State of Paraná wheat crops (Zanini, 2004) and to the State of São Paulo in oatmeal crops (Ronquim et al., 2004), this is the first report of this species to the State of São Paulo in alfalfa crop.

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