



HAL
open science

First Rearing Egg Parasitoid *Ooencyrtus pityocampae* (Mercet) (Hymenoptera: Encyrtidae) on *Philosamia ricini* (Danovan) (Lepidoptera: Saturniidae) in Türkiye

Hilal Tunca Cosic, Evrim Arslantas, Fikriye Ocal, Burak Bingül, Eylem Demir, I. Meltem Ozçankaya, Elisabeth Tabone, Ety Colombel, Mathilde Capelli, Ozgur Toprak, et al.

► To cite this version:

Hilal Tunca Cosic, Evrim Arslantas, Fikriye Ocal, Burak Bingül, Eylem Demir, et al.. First Rearing Egg Parasitoid *Ooencyrtus pityocampae* (Mercet) (Hymenoptera: Encyrtidae) on *Philosamia ricini* (Danovan) (Lepidoptera: Saturniidae) in Türkiye. 4th International Forest Entomology and Pathology Symposium (Enfito 2022) 12-14 May,2022 Trabzon Turkey, May 2022, TRABZON, Turkey. hal-03713960

HAL Id: hal-03713960

<https://hal.science/hal-03713960>

Submitted on 5 Jul 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



First Rearing Egg Parasitoid *Ooencyrtus pityocampae* (Mercet) (Hymenoptera: Encyrtidae) on *Philosamia ricini* (Danovan) (Lepidoptera: Saturniidae) in Türkiye^a

Hilal Tunca Cosic^{1*}, Fikriye Öcal², Evrim Arslantaş², Burak Bingül², Eylem Demir², İ. Meltem Özçankaya³, Elisabeth Tabone⁴, Ety-Ambre Colombel⁴, Mathilde Capelli⁴, Özgür Toprak⁵, Akın Emin⁵, Tuncay Can⁶, Benjamin Cosic¹, Özden Açıci⁷, Hacer Can⁷, Yaşar Aksu⁸

^a Research Project

¹Ankara University, Agriculture Faculty, Department of Plant Protection, 06110, Ankara, Turkey

²Izmir Regional Directorate of Forestry, Örnekköy Biological Control Laboratory, 35510, Izmir, Turkey

³Izmir Regional Directorate of Forestry, 35430, Izmir, Turkey

⁴INRAE UEVT, Biological Control Laboratory, 06160, Antibes, France

⁵General Directorate of Forestry, 06705, Çankaya, Ankara, Turkey

⁶Adana Regional Directorate of Forestry, 01120, Seyhan, Adana, Turkey

⁷Bursa Regional Directorate of Forestry, 16250, Osmangazi, Bursa, Turkey

⁸Artvin Regional Directorate of Forestry, 08000, Merkez, Artvin, Turkey

*htunca@ankara.edu.tr



INRAE



Ooencyrtus pityocampae (Mercet)
(Hymenoptera: Encyrtidae)

Philosamia ricini Donovan
(Lepidoptera: Saturniidae)

Ooencyrtus pityocampae (Mercet) (Hymenoptera: Encyrtidae) is a polyphagous egg parasitoid that targets the insect pests of various heteropteran and lepidopteran families. *Leptoglossus occidentalis* (Heidemann) (Hemiptera: Coreidae) and *Thaumetopoea pityocampa* (Den. & Schiff.) (Lepidoptera: Thaumetopoeidae), which are among the hosts of the parasitoid, cause significant damage to the forests of our country.

Biological control is one of the eco-friendly and effective control methods in forest areas. For this purpose, rearing studies of the parasitoid *O. pityocampae* were started in the Izmir Örnekköy Biological Control Laboratory. *Philosamia ricini* Donovan (Lepidoptera: Saturniidae) has been chosen as a laboratory host. This host was obtained from the INRAE UEVT Antibes Biological Control Laboratory. Rearing of parasitoid and host were performed under controlled conditions of $25 \pm 1^\circ\text{C}$, $75 \pm 5\%$ R.H (relative humidity) and a photoperiod of 16 : 8 h (L : D = light : dark). *P. ricini* larvae were fed every day with *Ailanthus* sp. and *Ligustrum* sp. leaves.

We were obtained over 3000 *Philosamia* eggs per day. For the first time, *O. pityocampae* was reared for more than ten generations on the eggs of *P. ricini* in our country. Our current studies are focused on mass rearing and release studies of the egg parasitoid *O. pityocampae*.

