

## Contribution to the study of Mexican species of *Oedemopsis* Tschek, 1869 (Hymenoptera: Ichneumonidae: Tryphoninae)

### Вклад в изучение мексиканских видов *Oedemopsis* Tschek, 1869 (Hymenoptera: Ichneumonidae: Tryphoninae)

A.I. Khalaim<sup>1,2</sup>, J.I. Figueroa de la Rosa<sup>3</sup>, A.M. Martínez-Castillo<sup>3</sup>,  
S. Pineda-Guillermo<sup>3</sup> & E. Ruíz-Cancino<sup>1</sup>

А.И. Халаим<sup>1,2</sup>, Дж.И. Фигероа де ля Роса<sup>3</sup>, А.М. Мартинес-Кастийо<sup>3</sup>, С. Пинеда-Гийермо<sup>3</sup>, Э. Руис-Канцино<sup>1</sup>

<sup>1</sup> División de Estudios de Postgrado e Investigación, Facultad de Ingeniería y Ciencias, Universidad Autónoma de Tamaulipas, 87149 Cd. Victoria, Tamaulipas, México.

<sup>2</sup> Zoological Institute, Russian Academy of Sciences, Universitetskaya Emb. 1, St. Petersburg 199034, Russia; e-mail: ptera@mail.ru.

<sup>3</sup> Instituto de Investigaciones Agropecuarias y Forestales, Universidad Michoacana de San Nicolás Hidalgo, 58880 Tarímbaro, Michoacán, México.

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КЛЮЧЕВЫЕ СЛОВА: Мичоакан, Мексика, новые находки, хозяин, *Oedemopsis*, Tryphoninae.

**ABSTRACT.** Two tryphonine species of the tribe *Oedemopsini*, *Oedemopsis dentipara* Gauld and *O. riyittoi* Gauld, are reported from the State of Michoacán in central Mexico. *Oedemopsis riyittoi* is recorded from Mexico for the first time. Both species were reared from vegetative buds of blackberry plants containing two leafroller species, *Argyrotaenia* sp. and *Amorbia* sp. (Lepidoptera: Tortricidae). Colour photos of these two species of *Oedemopsis* are given for the first time.

**РЕЗЮМЕ.** Сообщается о двух видов трифонин из трибы *Oedemopsini*, *Oedemopsis dentipara* Gauld и *O. riyittoi* Gauld, в штате Мичоакан в центральной Мексике. *Oedemopsis riyittoi* отмечается из Мексики впервые. Оба вида выведены из вегетативных почек ежевичных растений, содержащих два вида листо-вёрток, *Argyrotaenia* sp. и *Amorbia* sp. (Lepidoptera: Tortricidae). Впервые даны цветные иллюстрации этих двух видов *Oedemopsis*.

#### Introduction

*Oedemopsis* Tschek, 1869 is a moderately sized tryphonine genus with 18 species occurring in the Holarctic, Oriental, Australasian and Neotropical regions [Yu et al., 2012], and probably is most species-rich in South America [Gauld, 1997]. The majority of host records of species of *Oedemopsis* belongs to larvae of Tortricidae (Lepidoptera), and some rearings are from other lepidopterous families, including the Lymantriidae and Blastobasidae [Gauld, 1997].

Only two species of the genus are known from U.S.A. and Canada [Townes et al., 1992], and ten

species occur in Costa Rica [Gauld, 1997]. Four species, *O. davisi* Carlson, 1979, *O. dentipara* Gauld, 1997, *O. haberi* Gauld, 1997 and *O. noyesi* Gauld, 1997, were mentioned from Mexico by Ruíz-Cancino et al. [2002], but no details on their distribution in Mexico were provided. Nothing about hosts of Mexican species is known.

In this paper two Costa Rican species, *O. dentipara* and *O. riyittoi* Gauld, are reported from the State of Michoacán, central Mexico. *Oedemopsis riyittoi* is recorded from Mexico for the first time. New data on biology of *O. dentipara* and *O. riyittoi* are provided.

#### Material and Methods

Photographs were taken at the Zoological Institute of the Russian Academy of Science (St. Petersburg, Russia) with a DFC 290 digital camera attached to a Leica MZ16 stereomicroscope; images were combined using Helicon Focus software. Examined specimens are deposited in the Universidad Autónoma de Tamaulipas, Cd. Victoria, Tamaulipas, Mexico.

#### Results

Subfamily Tryphoninae

Tribe Oedemopsini

Genus *Oedemopsis* Tschek, 1869

Type species: *Oedemopsis rogenhoferi* Tschek, 1869 (= *Tryphon scabriculus* Gravenhorst, 1829).

Females of *Oedemopsis* are easily recognized by their characteristically swollen clypeus (Figs 2, 3, 7, 8); males are

less immediately recognized. Two Mexican species recorded in this paper, *O. dentipara* and *O. riyittoi*, are very similar morphologically and both run to the couplet 10 of the key to species of *Oedemopsis* in the revision of Gauld [1997: 381]. They can be distinguished from other Mexican and Central American species by having the occipital carina dorsally complete (Figs 4, 9), genae extensively yellow with black marks (Figs 2, 7), flagellum with a median white band

occupying 3–4 flagellomeres, upper eye orbits yellow (Figs 4, 9), frons (except narrowly white eye orbits) and interocular area black, pronotum with sharp white stripe along its upper margin (Figs 1, 6), clypeus in profile strongly swollen (Figs 2, 7) and with apex of swelling nipple-like (Figs 3, 8), and mesoscutum entirely orange. *Oedemopsis dentipara* differs from *O. riyittoi* by the characters given in the table below:

	<i>O. dentipara</i>	<i>O. riyittoi</i>
Propodeum mediodorsally	blackish (Fig. 5)	generally reddish orange, infuscate (Fig. 10)
Area dentipara of propodeum	entire, not subdivided longitudinally (Fig. 5, marked by white line)	divided in half longitudinally by an auxiliary carina (Fig. 10, arrow)
Tergites 5 to 8 posteriorly	without a distinct white membranous region, at most only margin narrowly pale (Fig. 1)	with a distinct white membranous area mediodorsally, this area broadest on tergite 7 (Fig. 6, arrow)



Figs 1–5. *Oedemopsis dentipara*, ♀: 1 — whole insect (wings and antennae incomplete); 2–4 — head; 5 — propodeum; 1–2 — lateral view; 3 — frontal view; 4–5 — dorsal view.

Рис. 1–5. *Oedemopsis dentipara*, ♀: 1 — целое насекомое (крылья и антенны неполные); 2–4 — голова; 5 — пропodeум; 1–2 — сбоку; 3 — спереди; 4–5 — сверху.

Both these species were reared from vegetative buds that contained two leafroller species, *Argyrotaenia* sp. and *Amorbia* sp. (Lepidoptera: Tortricidae), on blackberry plants in Mexico. Nothing was known about biology of these species hitherto.

*Oedemopsis dentipara* Gauld, 1997

Figs 1–5

MATERIAL. Mexico, Michoacán, Los Reyes, Atapan, Rancho Santino, 2007, coll. I. Lopez, 1 ♀ (apices of antennae, fore legs and ovipositor tip absent).



Figs 6–10. *Oedemopsis riyittoi*, ♀: 6 — whole insect (wings and antennae incomplete); 7–9 — head; 10 — propodeum; 6–7 — lateral view; 8 — frontal view; 9–10 — dorsal view.

Рис. 6–10. *Oedemopsis riyittoi*, ♀: 6 — целое насекомое (крылья и антенны неполные); 7–9 — голова; 10 — пропodeум; 6–7 — сбоку; 8 — спереди; 9–10 — сверху.

DISTRIBUTION. Mexico (Michoacán), Costa Rica.

REMARKS. This species was mentioned from Mexico by Ruíz-Cancino et al. [2002], but without any details on its distribution in Mexico.

BIOLOGY. Reared from vegetative buds of blackberry plants in Mexico containing two leafroller species, *Argyrotaenia* sp. and *Amorbia* sp. (Lepidoptera: Tortricidae).

*Oedemopsis riyittoi* Gauld, 1997

Figs 6–10

MATERIAL. Mexico, Michoacán, Los Reyes, Atapan, Rancho Santino, 11.XI.2009, coll. A.C. Juárez Gutiérrez, 1 ♀.

DISTRIBUTION. Mexico (Michoacán), Costa Rica. **First record from Mexico.**

BIOLOGY. Reared from vegetative buds of blackberry plants in Mexico containing two leafroller species, *Argyrotaenia* sp. and *Amorbia* sp. (Lepidoptera: Tortricidae).

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