A new species of *Ooencyrtus* Ashmead (Hymenoptera: Encyrtidae) reared from an aleyrodid (Homoptera) in Mexico

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Ooencyrtus aleyrodis sp. n. is described from Mexico. The species is reared from an aleyrodid (Homoptera); this is the first record of *Ooencyrtus* from this group of hosts.

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The genus *Ooencyrtus* Ashmead, 1900 includes more than 100 described species and is represented in all geographic regions. More than 30 species are known from Palaearctic (Trjapitzin, 1989), 12 described and, probably, at least as many undescribed species from Nearctic (Noyes, Woolley & Zolnerowich, 1997), 10 species from Africa (Prinsloo, 1984), and 15 species from the Neotropics (Noyes, 1985); the Indo-Pacific Region with 70 species, included in the revision of this genus (Huang & Noyes, 1994), has the richest fauna. The genus *Ooencyrtus* was recorded from Mexico as well (Trjapitzin & Ruíz-Cancino, 1995), but without record of species.

Recently, *Ooencyrtus* sp. n. has been reared in Mexico from eggs of a chrysopid (Myartseva & Chouvakhina, in press). Another new species of *Ooencyrtus* was reared by the senior author from "puparia" of a whitefly. From both host families, Chrysopidae (Neuroptera) and Aleyrodidae (Homoptera), species of the genus *Ooencyrtus* are recorded for the first time. Species of *Ooencyrtus* are known mainly as parasitoids of eggs of Heteroptera and Lepidoptera, but some species attack also preimaginal stages of hosts from the orders Lepidoptera, Diptera, Coleoptera, Hymenoptera, Homoptera and Megaloptera (Noyes & Hirose, 1997). Many species are parasitoids of insect pests and thus have potential value for using in biological control and IPM programmes of plant protection.

Ooencyrtus aleyrodis sp. n.
(Figs 1-7)

Holotype. ♀, **Mexico**, *Tamaulipas*, 5 km S Gómez Farías, Ejido La Azteca, ex Aleyrodidae on *Adelia barbinervis*, 23.I.2002 (S. Myartseva).

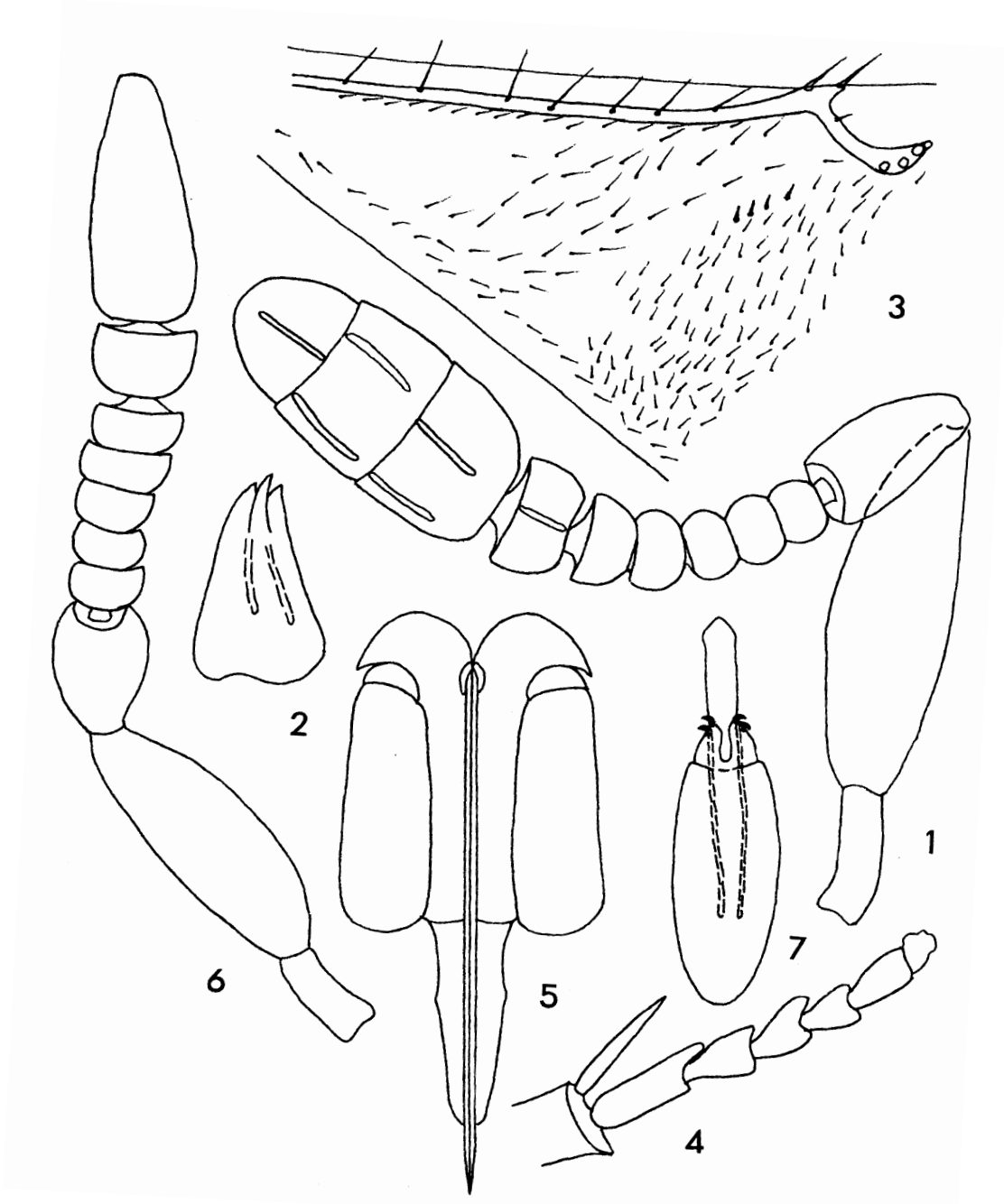
Paratypes. 4 ♀, 6 ♂, same data as for holotype.

The holotype and three paratypes (1 ♀, 2 ♂) of the new species are deposited in the collection of the Entomological Museum of University of California, Riverside, USA, two paratypes (♀ and ♂) in the collection of the National Museum of Natural History, Washington, D.C., USA, and three paratypes (1 ♀, 2 ♂) in the Entomological Collection of the University of Tamaulipas, Ciudad Victoria, Mexico.

Description. Female. Length: 0.5-0.6 mm (holotype: 0.5 mm).

Head and mesosoma black; antennae yellow with radicle black and pedicel basally brownish. Palpi whitish. Coxae black; hind coxae yellow apically; fore and middle femora black, tibiae yellow with base black; hind femora yellow with apices dark, tibiae yellow with base dark. Wings hyaline; venation slightly infuscate. Metasoma yellow ventrally and in basal half dorsally. Ovipositor sheaths brown.

Head slightly wider than mesosoma, slightly wider than high and about 1.5 times as wide as long. Frontovertex about twice as long as wide, about half as wide as head, transversely striate generally between and behind posterior ocelli. Occipital margin acute, slightly concave. Mandible (Fig. 1) with three acute teeth. Labial and maxillary palpi 1- and 2-segmented, respectively. Eyes finely pubescent, about twice as long as cheeks, with a row of short setae along internal orbits. Malar space with malar sulcus, finely striate. Ocelli in almost rectangular triangle; posterior ocelli separated from eyes by about their diameter. Antennae (Fig. 2) inserted below lower margin of eyes. Scape slightly more than 3 times as long as wide and longer than clava. Pedicel about 1.5 times as long as wide. All funicle segments transverse, 5-6th about 1.5-2.0 times as wide as long. Clava slightly less than twice as



Figs 1-7. *Ooencyrtus aleyrodis* sp. n.: **1**, antenna of female; **2**, mandible; **3**, fore wing, basal part; **4**, middle tarsus and midtibial spur; **5**, ovipositor; **6**, antenna of male; **7**, genitalia.

long as wide and subequal in length to 5 preceding funicular segments combined. 6th funicular segment and 3rd claval segment each with one linear sensillum, 1st-2nd claval segments with two sensilla each. Setation of funicle short, not longer than width of 5-6th funicular segments. Mesosoma with mesoscutum about twice as wide as long, with reticulate sculpture. Scutellum

about as long as mesoscutum, with smooth, superficial, more or less elongate, reticulate sculpture almost reaching its apex. Fore wing (Fig. 3) slightly more than twice as long as maximum width; marginal fringe short, about 1/6 of wing width. Marginal vein punctiform; postmarginal vein almost absent. Hind wing about 5 times as long as maximum width of wing, its marginal fringe slightly shorter than wing width. Midtibial spur very slightly longer than basitarsus (Fig. 4). Metasoma slightly shorter than mesosoma. Ovipositor (Fig. 5) slightly exerted, slightly longer than middle tibia; sheaths about 0.6 times as long as inner plates.

Male. Length: 0.5-0.6 mm.

Head and mesosoma as in female; metasoma brown. Antennae yellow, with light brown tinge. All coxae blackish; legs brown; middle femora yellow in apical half; hind femora yellowish apically. Frontovertex slightly wider than long. Eyes slightly longer than cheeks. Antennae (Fig. 6) inserted just under lower margin of eyes. Scape 3 times as long as wide. All funicle segments transverse, 3rd-5th about twice as wide as long, 6th 1.5 times as wide as long. Clava about 2.5 times as long as wide and slightly longer than 5 preceding funicular segments combined. Mesoscutum and scutellum with distinct elongate-reticulate sculpture. Digital sclerites of genitalia (Fig. 7) with two teeth at apex; phallobase about half as long as middle tibia.

Comparison. *Ooencyrtus aleyrodis* sp. n. is close to *O. syrphidis* Noyes from the Neotropical Region, but is separated by many morphological and biological characters. In female of *O. aleyrodis*, body length 0.5-0.6 mm, antennal scape about 3 times as long as wide, 1st-2nd funicular segments transverse, 3rd-5th segments without sensilla, ovipositor always longer than middle tibia; in male, antennal scape 3 times as long as wide, all funicular segments transverse, digital sclerites of genitalia with 2 teeth at apex, mesoscutum and scutellum with distinct elongate-reticulate sculpture; host: Aleyrodidae (Homoptera). In female of *O. syrphidis* Noyes, body length 1.03-1.57 mm, antennal scape more than 5 times as long as wide, 1st-2nd funicular segments in smaller specimens and also 3rd-4th segments in large specimens longer than wide, 3rd-5th segments with 1-2 linear sensilla, ovipositor usually shorter than middle tibia; in male, antennal scape slightly less than 5 times as long as wide, all funicular segments longer than wide, digital sclerites of genitalia with one tooth at apex, mesoscutum with shallow reticulate sculpture, scutellum in posterior one-third or so and on sides completely smooth and polished; host: Syrphidae (Diptera).

O. syrphidis belongs to a circumtropical group of species, which have been reared as primary parasitoids of syrphid larvae and puparia in Africa, India and the Pacific (Noyes, 1985). *O. aleyrodis* sp. n. is a primary parasitoid of "puparia" of aleyrodid, which is a new host for the genus *Ooencyrtus*.

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