

# Species of the genus *Metaphycus* Mercet (Hymenoptera: Encyrtidae) parasitizing whiteflies (Homoptera: Aleyrodidae)

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A review of and key to four *Metaphycus* species parasitizing whiteflies are given. *M. troas* (♀, ♂) is recorded for Mexico for the first time, with first data on the host, *Trialeurodes floridensis*.

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The genus *Metaphycus* Mercet comprises about 420 described species and has worldwide distribution. More than 200 species are Neotropical (Noyes, 2004). Species of *Metaphycus* are mainly reported as parasitoids of scales (Homoptera: Coccidae, Diaspididae), but 4 species (all Neotropical) have been reared from aleyrodids (Myartseva & Ruíz-Cancino, 2002, 2003; Noyes, 2004). They form a distinct group of species characterized by 2-segmented maxillary palpi, 1-segmented labial palpi (in one species, 2-segmented), mesoscutum without notaular lines, and scutellum with a few pairs of setae. *Philephedra tuberculosa* Nakahara & Gill considered by Noyes (2004: 364) as aleyrodid host for *Metaphycus flavus* (Howard, 1881) belongs to Coccidae.

## Key to species (females)

1. Mandible bidentate, palp formula 2-2 . . . . . **M. omega** Noyes  
– Mandible tridentate, palp formula 2-1 . . . . . 2
2. Head and body entirely yellow . . . . . **M. troas** Noyes  
– Head and body partly brown . . . . . 3
3. Scutellum with 4 pairs of setae. Scape yellow, with base infuscate, 4 or more times as long as wide. Ovipositor 3.6 times as long as third valvula . . . . . **M. acapulcus** Myartseva & Ruíz  
– Scutellum with 3 pairs of setae. Scape completely yellow, very slightly more than 3 times as long as wide. Ovipositor 2.3 times as long as third valvula . . . . . **M. aleyrodus** Myartseva & Ruíz

## *Metaphycus acapulcus* Myartseva & Ruíz, 2003

Myartseva & Ruíz Cancino, 2003: 752-754 (holotype ♀, Mexico, deposited at Insect Museum of University of California, USA).

*Host.* Undetermined species of Aleyrodicinae (probably *Aleyrodicus*) on *Pithecellobium* sp.

*Distribution.* Mexico: Guerrero.

## *Metaphycus aleyrodus* (Myartseva & Ruíz, 2002)

Myartseva & Ruíz, 2002: 175-177 (*Ooencyrtus*; holotype ♀, Mexico, deposited at Insect Museum of University of California, USA); Myartseva & Ruíz Cancino, 2003: 751 (*Metaphycus*).

*Host.* Unidentified aleyrodid (probably *Tetraleurodes*) on *Adelia barbinervis*.

*Distribution.* Mexico: Tamaulipas.

## *Metaphycus omega* Noyes, 2004

Noyes, 2004: 101-103 (holotype ♀, Trinidad, deposited at Natural History Museum, London; not examined).

*Hosts.* *Aleurothrixus floccosus* (Maskell), *Dialeurodes citri* (Ashmead), *Paraleurodes* sp. and possibly also *Aleyrodicus cocois* (Curtis) and *Aleyrodicus maritimus* Hempel.

*Distribution.* Brazil, Costa Rica, Ecuador, Guyana, Paraguay, Trinidad.

## *Metaphycus troas* Noyes, 2004

Noyes, 2004: 207-209 (holotype ♀, Costa Rica, deposited at Instituto Nacional de Biodiversidad, Costa Rica; not examined).

*Material examined.* **Mexico** (new record): 5 ♀, 5 ♂, *Guanajuato*, San Miguel de Allende, ex *Trialeurodes floridensis* on *Citrus sinensis*, 16.XI.2005 (coll. S. Myartseva).

*Comments.* The reared females were compared with the original description and figures of *M. troas* Noyes, 2004; no differences were found. The reared males are similar to males of *M. acapulcus* and *M. aleyrodus*, but the sculpture of scutellum is strongly reticulate, base of fore wing without bare spot, funicle segments subquadrate, with setae longer than their width, sixth segment slightly longer than wide, legs dirty yellow.

*Host* (first record). *Trialeurodes floridensis* (Quaintance).

*Distribution.* Costa Rica, Mexico.

## References

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