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**A species of *Megaphragma* (Hymenoptera: Chalcidoidea: Trichogrammatidae),
one of the smallest known insects, new for Italy**

Abstract - A species of *Megaphragma*, new for Italy, has been collected with yellow sticky traps placed in a vineyard in Southern Italy (Basilicata). A preliminary description of this species, which belongs to the group *ghesquierei* Nowicki and is probably new to science, is given.

Riassunto - Una specie di *Megaphragma* (Hymenoptera: Chalcidoidea: Trichogrammatidae), uno degli insetti più piccoli noti, nuovo per l'Italia.

Una specie di *Megaphragma*, nuova per l'Italia, è stata raccolta con trappole cromotropiche gialle disposte in un vigneto nel Sud Italia (Basilicata). Di tale specie, che appartiene al gruppo *ghesquierei* Nowicki ed è probabilmente nuova per la scienza, è data una preliminare descrizione.

Key words: thrips, egg-parasitoid, vineyard.

The genus *Megaphragma* Timberlake (1924) includes 13 species world-wide, but several are poorly characterized and others are still undescribed. After the redescription of the type, *M. mymaripenne* Timberlake (Viggiani, 1997), a revision of the genus is underway by A. Polaszek and the present author.

Megaphragma are among the smallest insects, with their body length ranging from 0.17-0.55 mm. Some of the known species are egg-parasitoids of thrips. The first species of *Megaphragma* (*M. mymaripenne* Timberlake) has been recorded from Europe (southern Italy) by Viggiani (1994; 1997). Subsequently a new species (*M. amalphitanum* Viggiani) has been described from Italy by the same author (Viggiani & Bernardo, 1997). Both species have been found as egg-parasitoids of *Heliothrips haemorrhoidalis* (Bouché) (Thysanoptera). A third species, probably new to science, is preliminary described in the present note.

***Megaphragma* sp.**

FEMALE (Fig. 1). Body yellow with brown mostly on thorax; fore wings with the blade below the venation dark. Length: about 0.2 mm.

Head as high as wide. Mandibles with two teeth; palpi vestigial. Antenna (Fig. 2) with a short and transverse radicle, scape as long as the two basal segments of the club, pedicel as

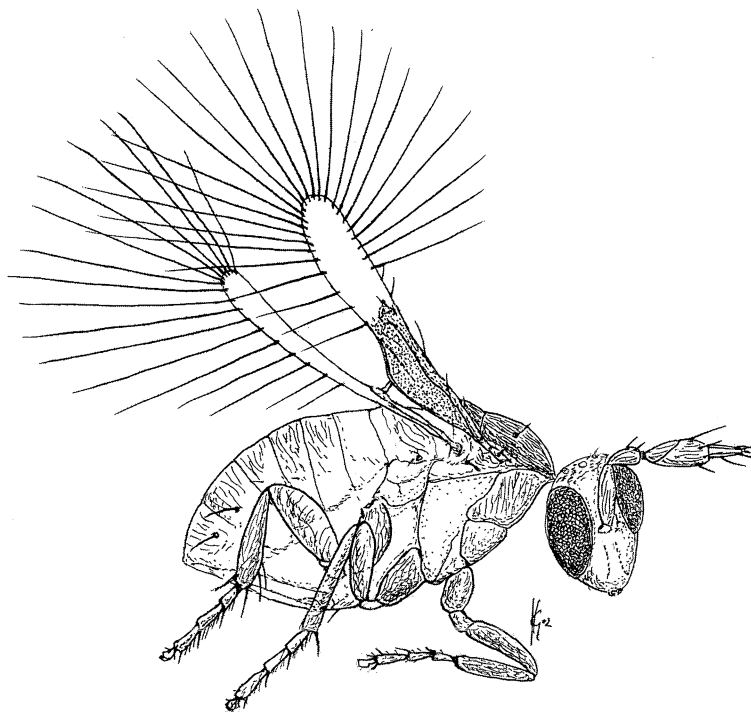


Fig.1 - *Megaphragma* sp.: female.

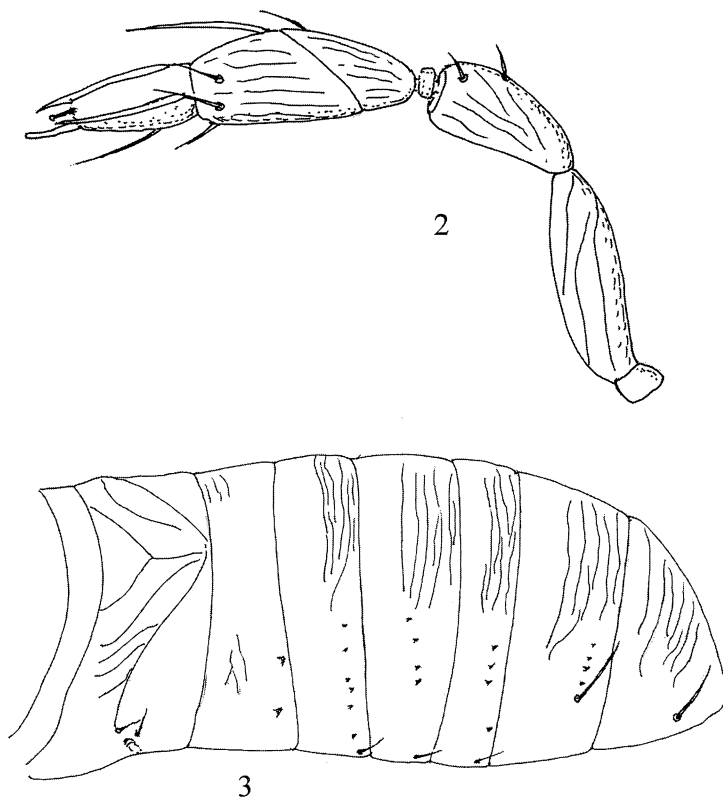
long as the two third of the scape, anellus small, club 3-segmented with the first segment flute-beak shaped and closed to the second one, last segment slightly shorter than half of the preceding two segments combined. Other characters as in Fig. 2.

Thorax high, slightly longer than the gaster. Mid lobe of mesoscutum and scutellum with a longitudinally striped sculpturing, without reticulation, each with a pair of short setae. Mesophragma largely developed and intruded into the gaster. Propodeum about three times as long as metanotum, medially with some slanting striations (Fig. 3) and two very small setae near each spiracle. Fore wing longer than body, about six times as long as wide; marginal vein with one small seta at the base, one longer seta around the middle, other two short setae, placed one on each side before the stigmal vein and one small seta on the stigma; hind margin of the wing sinuous below the venation, fringe setae 25-27 in number, the longest about 4 times as long as the maximum discal width. Hind wing very narrow, without setae on the disc and fringe with 15-17 setae. Legs normal with basitarsus slightly shorter than the subsequent segments.

Gaster with tergites not reticulate, but bearing some transverse striations in the middle, very reduced on the basal segment, and laterally with a row of 2-7 denticles; last two segments with a rather long seta on each side. Ovipositor slightly longer than the hind tibia.

MALE. Not known.

MATERIAL EXAMINED. 10 females on slides. ITALIA: Basilicata, Rivello (PZ), VII. 2002, collected by using yellow sticky traps in a vineyard.



Figs. 2-3 - *Megaphragma* sp.: antenna (fig. 2); gaster in dorso-lateral view (fig. 3).

COMMENTS. This species of *Megaphragma* belongs to the group of *M. ghesquierei* Nowicky, which includes, *M. deflectum* Lin, *M. striatum* Viggiani and a *Megaphragma* sp. (Viggiani, 1997). In order to evaluate the differences of *Megaphragma* sp. here described, particularly with *M. deflectum*, a careful comparison with the latter species is needed.

Presumably *Megaphragma* sp., as other species of the genus, is an egg parasitoid of thrips. *M. priesneri* (Kryger) is known as egg parasitoid of *Retithrips syriacus* (Mayet) damaging also grapevine in Egypt and Israel (Kryger, 1932).

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