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G. VIGGIANI, U. BERNARDO

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Riassunto - *Due specie di* Megaphragma *(Hymenoptera Trichogrammatidae), ooparassitoidi di* Heliothrips haemorrhoidalis *Bouché (Thysanoptera) nel Sud Italia, con descrizione di una nuova specie.*

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Key words: *Megaphragma amalphitanum, Megaphragma mymaripenne, Megaphragma priesneri, Viburnum tinus.*

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Megaphragma amalphitanum sp. nov. Viggiani

FEMALE. Body yellow brown, lighter on lateral sides of mesonotum, metanotum and propodeum; ocelli and eyes blackish red; antennae pale yellow with slight infu-

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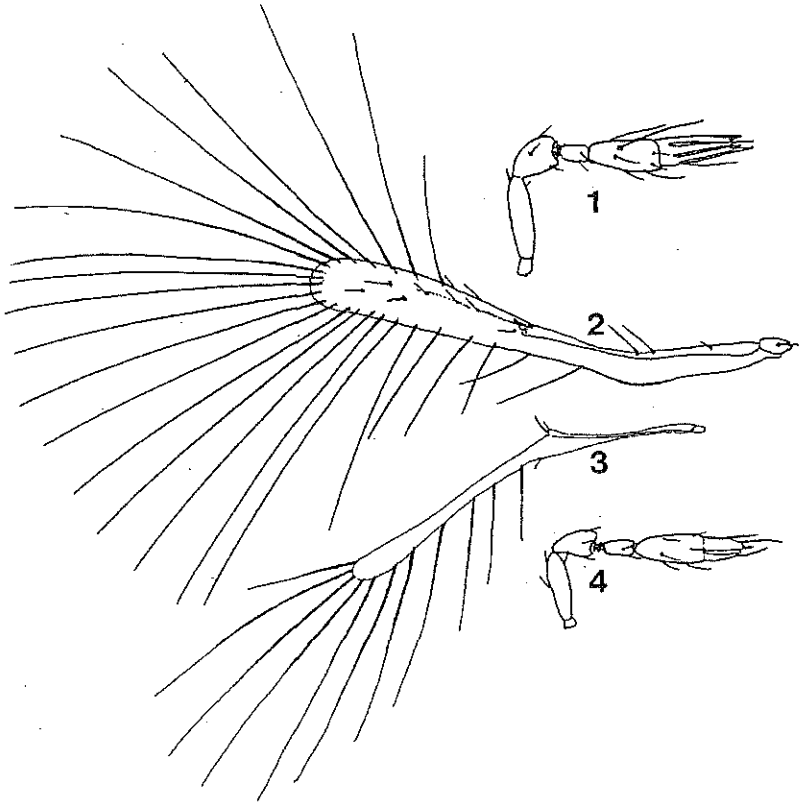
Megaphragma amalphitanum sp. nov. Viggiani

FEMALE. Body yellow brown, lighter on lateral sides of mesonotum, metanotum and propodeum; ocelli and eyes blackish red; antennae pale yellow with slight infu-

scation on funicle and club; legs pale yellow, with coxa, femur and last tarsal segment brown. Length: 0.225-0.275 mm.

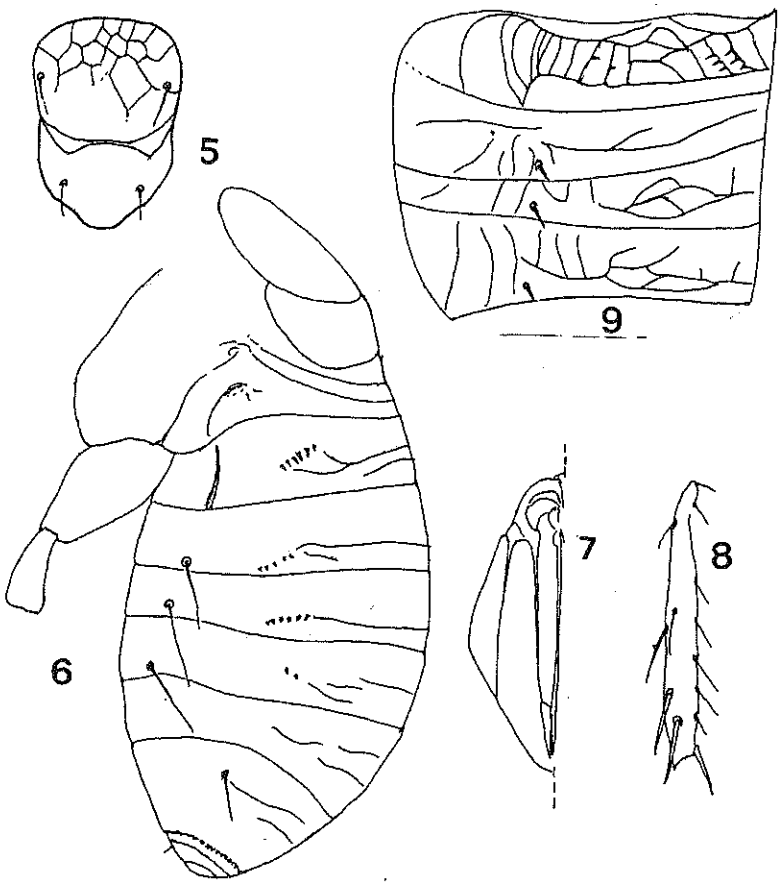
Head twice as wide as long, slightly higher than wide; post-ocellar distance three times the ocell-ocular distance; temple length equal to the distance between the middle and lateral ocellus. Mandibles with two teeth; palpi vestigial. Antennae (fig. 1) inserted above the level of the lower margin of the eyes, with scape five times as long as wide (length = 0.074-0.119 mm; mean 0.089; S. D. = 0.008; n = 25), pedicel wider



Figs. 1-4 - *Megaphragma amalphitanum* sp. nov. Female. Antenna (fig. 1), fore (fig. 2) and hind wing (fig. 3). Male. Antenna (fig. 4).

than scape (length = 0.043-0.062 mm, mean = 0.052; S. D. = 0.004; n = 25), but about one half the length, anellus inconspicuous, funicular segment subcylindrical (length = 0.021-0.036 mm; mean = 0.030; S. D. = 0.004; n = 25) 1.6-1.8 times longer than wide, narrower than pedicel, club four times longer than funicular segment, with C1 (length = 0.054-0.074 mm; mean = 0.064; S. D. = 0.005; n = 25) twice as long as C2 (length = 0.047-0,070 mm; mean = 0.061; S. D. = 0.006; n = 25).

Thorax slightly wider than head. Pronotum very short. Mid lobe of mesoscutum and scutellum as in fig. 5, both with one pair of setae; mesoscutum with a reticulate sculpturing on the basal half, visible at a minimum of 400x. Metanotum and propodeum short, without obvious sculpturing. Forewing (fig. 2) longer than body; total



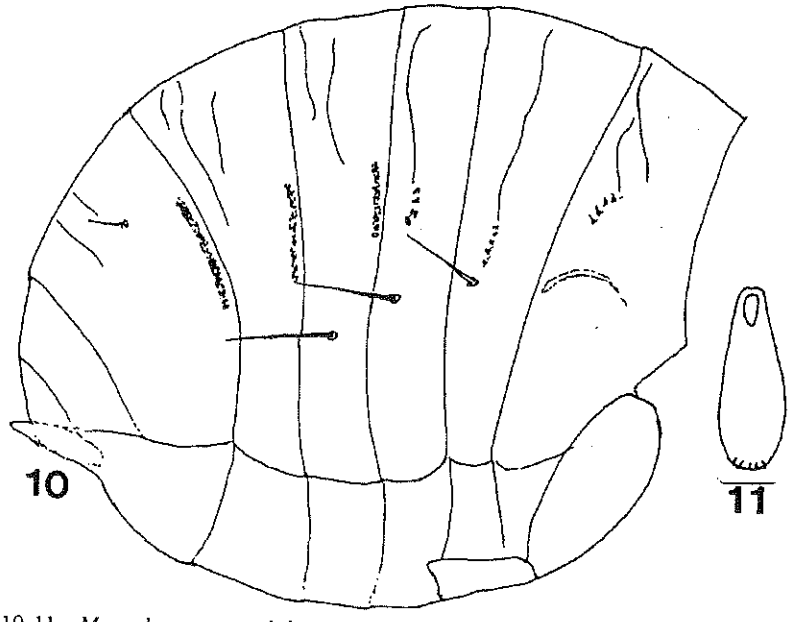
Figs. 5-9 - *Megaphragma amalphitanum* sp. nov. Female. Mid lobe of mesoscutum and scutellum (fig. 5), thorax and gaster in lateral view (fig. 6), ovipositor (fig. 7) and hind tibia (fig. 8). *Megaphragma mymaripenne* Timberlake. Female. Tergites 1-4 in dorso-lateral view (fig. 9).

length averaging 0.401 mm (0.380-0.420) (S.D. = 0.016; n = 10); fringe length averaging 0.150 mm (0.130-0.170) (S. D. = 0.011; n = 10); venation reaching 3/4 the discal length, with setae as illustrated in fig. 2; disc narrow, distally rather parallel sided, with a row of 6-8 setae (mean = 7.12; S. D. = 0.33; n = 25) distal to venation;

fringe setae 25-31 in number (mean = 27.60; S. D. = 1.41; n = 25), the longest 4.07-5.86 times (on average 5.01; S. D. = 0.45; n = 25) the maximum discal width. Hind wing as in fig. 3, without setae on the disc and fringe with 11-12 setae.

Legs normal, with basitarsus slightly shorter than the subsequent tarsomeres.

Gaster (fig. 6) longer than thorax (6:10); gastral tergites not reticulate, with a few transverse carinae and with a row of 6-8 denticles laterally on T1-3; pleural sides of T2-4 with one rather long seta. Ovipositor (length = 0.100-0.110 mm; mean = 0.1002; S. D. = 0.0042; n = 10) slightly longer than hind tibia (length = 0.080-0.100 mm; mean = 0.088; S. D. = 0.0063; n = 10 (figg. 7-8) .



Figs. 10-11 - *Megaphragma amalphitanum* sp. nov. Male. Gaster in lateral view (fig. 10) and genitalia (fig. 11).

MALE. Similar to female in color and most other characters, but antenna (fig. 4) with a different length ratio between C1 (length = 0.061-0.076 mm; mean = 0.069; S. D. = 0.004; n = 25) and C 2 (length = 0.038-0.058 mm; mean = 0.047; S. D. = 0.005) and longer apical setae. Gaster (fig. 10) with a pair of pleural porous stripes on T4-T6; genitalia 0.03 mm in length, as in fig. 11.

MATERIAL EXAMINED. Holotype. Female on slide. ITALIA: Campania, Vietri sul Mare (SA), 15-20.ix.1994; coll. G. Viggiani; ex egg of *Heliothrips haemorrhoidalis* on *Viburnum tinus*. Paratypes: 15 females and 15 males; same data as holotype. Several additional specimens, dried or mounted on slides, have also been studied.

The type material will be deposited in the collections of the Centro di Studio CNR sulle Tecniche di Lotta Biologica (CETELOBI), Via Università, 133 (Parco Gussone), 80055 Portici (NA), Italy, Dipartimento di Entomologia e Zoologia Agraria dell'Università di Napoli "Federico II", Natural History Museum, London, and U.S. National Museum, Washington.

COMMENTS. Among the known species of *Megaphragma*, *M. amalphitanum* is apparently most similar to *M. mymaripenne* Timberlake. It is distinguished primarily by the lack of reticulate sculpturing on the tergites and by the presence of 1 pair of long setae on T2-4 (fig. 6). These setae are very short in *M. mymaripenne* (fig. 9). In addition, the male is very rare in the latter species. From *M. priesneri* (Kryger) the new species is distinguished by the fore wing features.

Megaphragma mymaripenne Timberlake

Megaphragma mymaripenne Timberlake, 1924. Proc. Haw. Ent. Soc. 5 (3): 414-415.

Megaphragma mymaripenne, Viggiani. 1997. Boll. Lab. Ent. agr. Filippo Silvestri 53: 118-119.

This species is at present widely distributed in Campania (southern Italy) where it was found in 1993 (Viggiani, 1994). It is also known to occurr with *M. amalphitanum* at some localities of the Amalfitan Coast where both reproduce in eggs of *H. haemorrhoidalis*.

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