

FERDINANDO BIN
Istituto di Entomologia - Facoltà di Agraria
Università Cattolica del S. Cuore - Piacenza

A NEW SPECIES OF *TELENOMUS* HALIDAY
(HYMENOPTERA, SCELIONIDAE)
REARED FROM *HYSTEROPTERUM FLAVESCENS* OLIV.
(RHYNCHOTA, FULGORIDAE)

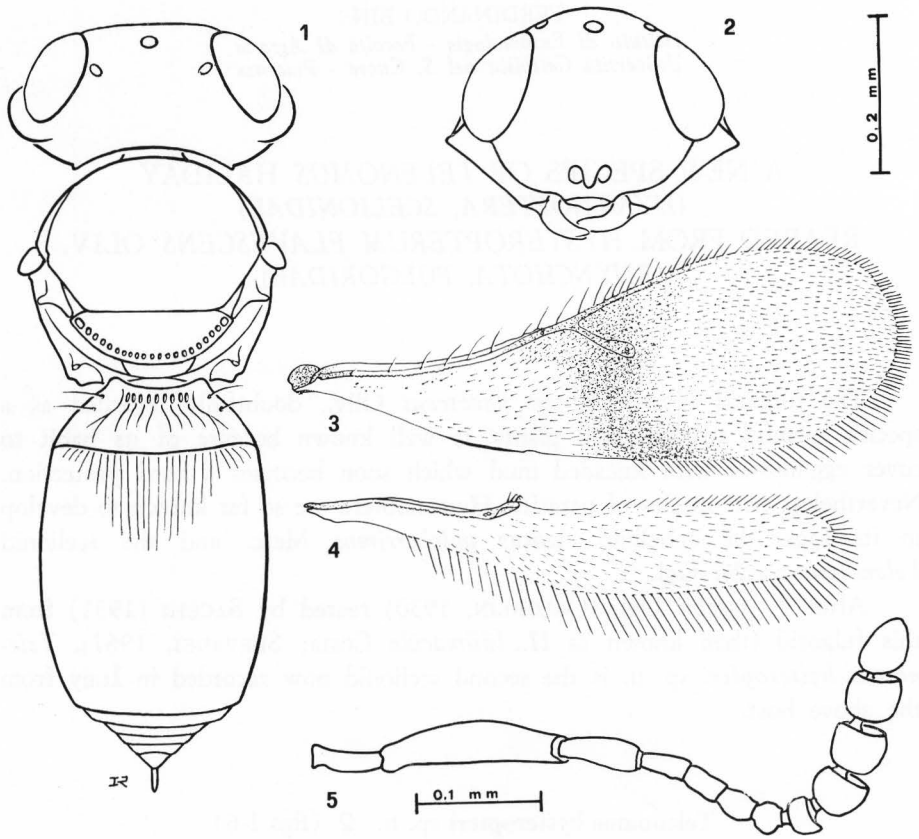
The fulgorid *Hysteropterum flavescens* Oliv., doubtfully regarded as a species harmful to cultivated plants, is well known because of its habit to cover egg-masses with kneaded mud which soon becomes a hard protection. Nevertheless two species of parasitic Hymenoptera are so far known to develop in its eggs, the aphelinid *Azotus pulcherrimus* Merc. and the scelionid *Telenomus sacchii* Ogl.

After *T. sacchii* Ogl. (OGLOBLIN, 1930) reared by SACCHI (1931) from this fulgorid (then known as *H. liliimacula* Costa; SERVADEI, 1967), *Telenomus hysteropteri* sp. n. is the second scelionid now recorded in Italy from the above host.

***Telenomus hysteropteri* sp. n., ♀ (figs 1-6)**

Colour. - Black.

Head (figs 1, 2, 6). - Characteristically distinct on account of upper part of cheeks which, seen frontally, are right angle-shaped and protrude out of the compound eyes on the line joining their lower orbits and, seen dorsally, are rounded with an edge disappearing on the occiput; finely striated from the edge to the insertions of mandibles; head wider than thorax, transverse, about twice as wide as long. Lateral ocelli distant from inner orbit less than a diameter. Eyes virtually bare. Mandibles with two rounded teeth, reddish. Head alutaceous almost everywhere with scattered white hairs; supra-antennal impression smooth.



Figs. - 1-5. *Telenomus hysteropteri* sp. n., ♀: 1, head, thorax and abdomen, dorsal view; 2, head, frontal view; 3, fore wing; 4, hind wing; 5, antenna. Scale 0,1 mm is referred only to antenna and 0,2 mm to all other figures.

Antennae (fig. 5). - Radicula a little less than $1/3$ of the scape; scape as long as pedicel, 2 and 3 segments combined; length of pedicel about 1,5 times that of 3; 3 a little shorter than 4 and 5 shorter than 6; 6 about globose; 7 distinctly transverse; club 4 segmented. Scape and pedicel yellow, somewhat infuscated; joints 3-11 brownish.

Thorax (fig. 1). - Seen laterally higher than long, convex; dorsally, almost as long as wide. Mesoscutum alutaceous with scattered hairs. Scutellum smooth and shining with a chain of pits close to the hind margin. Tegulae dark brown

Wings (figs 3-4). - Exceeding abdomen. Fore wings with darkened, transverse band medially; marginalis shorter than stigmalis; postmarginalis longer than stigmalis. Club of stigmalis with 3 pustulae. Hind wings not banded; almost parallel-sided beyond the nervature; longest fringes about 1/2 its greatest width. Three frenal hooks.

Legs. - Slender. Yellow, except the front coxae and fifth tarsal joints which are brownish.

Abdomen (fig. 1). - When segments are not retracted, somewhat longer than thorax and head combined; a little less twice as long as wide. First tergite transverse, laterally with 2 bristles at each side; front margin medially with a row of grooves from which run longitudinal striations not reaching the hind margin. Second tergite the longest, smooth and shining except short striations laterally and longitudinal striations medially reaching about 1/3 of the length of tergite. Third to seventh tergite distinctly transverse.

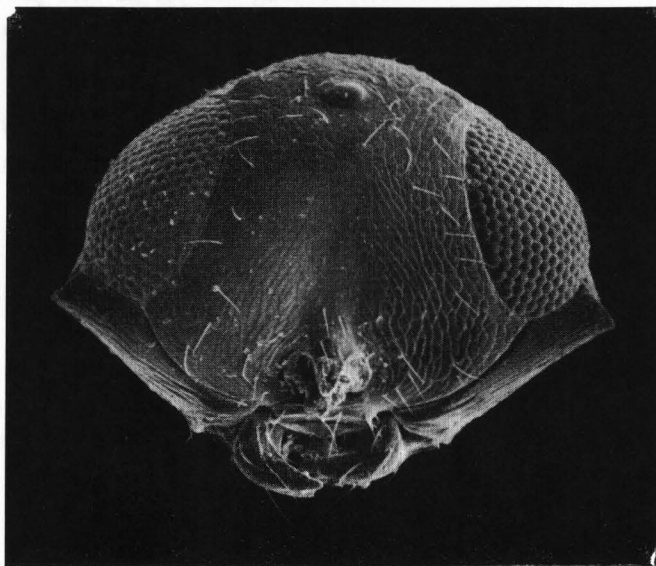


Fig. 6. - *Telenomus hysteropteri* sp. n., ♀: head, frontal view (stereoscan electron micrograph, 175 x).

Length. - 0,9 mm.

Material examined. - Holotype ♀, Italy, Piacenza 4-11-VIII-73, ex eggs of *Hysteropterum flavescens* Oliv. Paratypes 16 ♀♀ (11 specimens same data

as holotype; the other specimens from: Piacenza Velleia 14-VIII-73, Malaise trap; Genova Monte Fasce 2-X-72, suction sampler; Asti Nizza Monferrato 8-X-72, ex *Hysteropterum flavescens* Oliv.).

Holotype and paratypes in my collection; 1 paratype in the « Canadian National Collection » in Ottawa.

Male. - Unknown.

Biology. - Egg-masses of *Hysteropterum flavescens* Oliv. were collected by tens but relatively few specimens of *T. hysteropteri* were found, included specimens to have died inside the egg-masses.

In the same localities also *T. sacchii* was reared but this is much more common. According to SACCHI's (1931) observations the latter species has three generations a year, as recently confirmed also by VIGGIANI (1973); females are common whilst males make only 15-20% and it seems that the overwintering generation is parthenogenetic.

As little information is available, nothing can yet be said about the life-cycle and possible interrelationships among these two *Telenomus* and the aphelinid *Azotus pulcherrimus* Merc. which were reared in the same localities from the same host.

From a morphological point of view, *Telenomus hysteropteri* resembles an usual *Telenomus* apart its most obvious difference: the peculiar shape of the cheeks. Banded wings are also a distinctive character already known in *T. fasciatus* Kozlov (KOZLOV, 1967) and in a few other species of *Telenomus* from Mongolia (KOZLOV, 1972).

Acknowledgements

I am very grateful to Dr LUBOMIR MASNER, of the Biosystematic Research Institute in Ottawa, for suggestions and for reading the manuscript.

SUMMARY

Telenomus hysteropteri sp. n. (Hym., Scelionidae, Telenominae) has been reared in Italy from eggs of *Hysteropterum flavescens* Oliv. (Rhynchota, Fulgoridae). Only the female is known. The shape of the cheeks, protruding at right angles to the level of the lower orbit of compound eyes, is an unusual and distinctive character.

From the same host and in the same localities also *Telenomus sacchii* Ogl. has been reared, so far the only known *Telenomus* parasite of this fulgorid.

Occasionally, *Azotus pulcherrimus* Merc. (Hym., Aphelinidae) has also been reared from eggs of *Hysteropterum*.

REFERENCES

- KOZLOV, M. A., 1967 - Palearctic species of egg parasites of the genus *Telenomus* Haliday (*Hymenoptera, Scelionidae, Telenominae*). *Ent. Obzr.*, 46, 2, 361-378. (in *Ent. Rev., Wash.*).
- KOZLOV, M. A., 1972 - Of the fauna of *Hymenoptera Proctotrupoidea* of the Mongolian People's Republic. I. *Heloridae, Proctotrupidae, Scelionidae*. *Insects of Mongolia*, Vol. 11, No. 1, 645-672. (in *Russian*).
- OGLOBLIN, A. A., 1930 - A new species of *Telenomus* parasite of *Hysteropterum liliimacula* Costa. *Mem. Soc. Ent. It. Genova*, 9, 41-45.
- SACCHI, R., 1931 - Contributo allo studio d'*Hysteropterum liliimacula* Costa (*Homoptera, Issidae*). *R. Oss. fitopat. Sez. Entom. Agr. Perugia, Note e appunti sper.*, Fasc. I, 21-31.
- SERVADEI, A., 1967 - *Rhynchota (Heteroptera, Homoptera, Auchenorrhyncha)*. Catalogo topografico e sinonimico. *Fauna d'Italia*, Vol. IX, Ed. Calderini, Bologna. pp. 1-851.
- VIGGIANI, G., 1973 - Ricerche sugli *Hymenoptera Chalcidoidea*. XL. Osservazioni morfologiche sull'*Azotus pulcherrimus* Merc. (*Hymenoptera: Apbelinidae*). *Boll. Lab. Ent. agr. Filippo Silvestri*, 30, 300-311.