

Notes on *Aphidius ephippium* Haliday

(Hymenoptera: Braconidae: Aphidiinae)

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(With 7 figures)

Aphidius ephippium Haliday is known as the only wingless (in the female sex) species in the braconid subfamily Aphidiinae. According to all previous authors this species was considered belonging to the genus *Aphidius*. From the material reared in Czechoslovakia, including also males of the quoted species, I come to the conclusion *Aphidius ephippium* doing not belong to the genus *Aphidius* but to *Diaeretus* Förster. The redescription of the female of *Diaeretus ephippium* (Haliday), n. comb., and description of the hitherto unknown male, are given below.

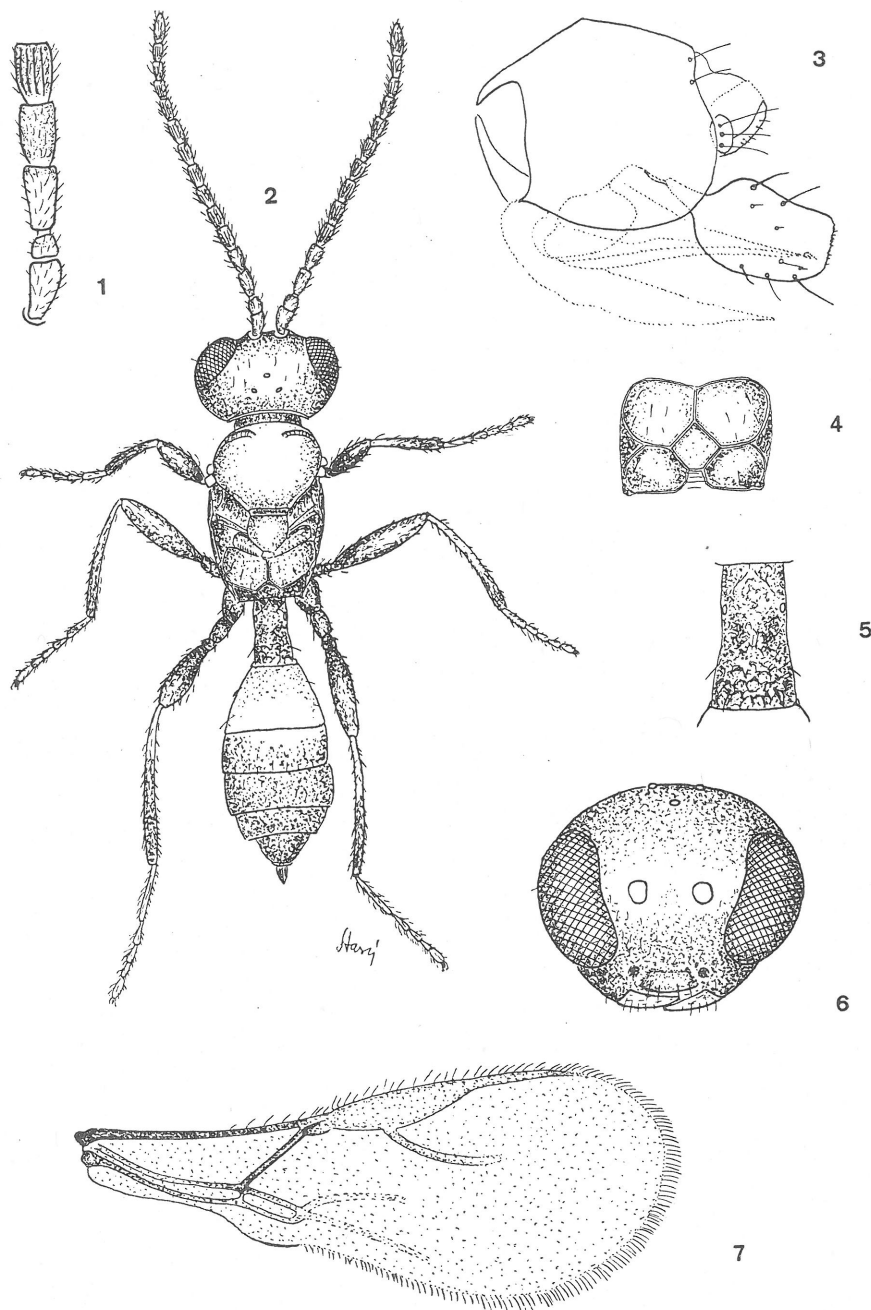
The nomenclature of wing venation used is the same as in the precedent paper of the author (Acta Faun. Ent. Mus. Nat. Pragae, 1958).

Diaeretus ephippium (Haliday), n. comb.

Aphidius ephippium Haliday, 1834, Ent. Mag., 2, 105 (♀ descr., Locality: England). — MARSHALL, 1891, Spec. Hym. Eur. d'Alg., 5, 559—560 (♀ descr., Locality: England). — THOMSON, 1895, Opusc. Entom., 20, 2338 (♀ descr., Locality: Sweden). — DALLA TORRE, 1898, Cat. Hym., 4, 8 (sine descr., Localities: Sweden, England). — MARSHALL, 1899, Trans. Ent. Soc. London, 1899, p. 37 (♀ descr., Locality: England). — SZÉPLIGETI, 1904, Genera Insect., Fasc. 22, p. 186 (sine descr., Localities: England, Sweden). — KLOET & HINCKS, 1945, Check List of Brit. insects.

This species differs from its congeners in being apterous in the female sex and by the shape of parapsidal furrows, by areolation of propodeum, and by the shape of the first abdominal tergite.

Female: (fig. 2). Head (fig. 6) transverse, smooth, shining, sparsely haired. Occiput distinctly margined. Ocelli oval, their mutual distance being as long as 3 longitudinal diameters of an ocellus. Eyes large, oval, comparatively prominent, sparsely haired, convergent to clypeus. Temples as wide as about transverse eye-diameter. Genae rather short, as long as about one-fourth of transverse eye-diameter. Face smooth, shining, comparatively elevated in the environment of antennal bases. Clypeus slightly prominent, smooth, shining, with few long hairs, with deep tentorial pit on either side; straight and margined frontally. Mandibles bidentate, with long hairs on outer surface, comparatively prominent. Maxillary palpi 3-segmented, labial palpi probably 2-segmented. Antennae (fig. 1) 14-segmented, situated at about the middle of the eyes, reaching about half of abdomen,



Diaeretus ephippium (Haliday): Fig. 1. Female, part of antenna. — Fig. 2. General habitus, female. — Fig. 3. Female, genitalia. — Fig. 4. Female, propodeum. — Fig. 5. Female, first abdominal tergite. — Fig. 6. Female, head, frontal view. — Fig. 7. Male, fore wing

filiform, comparatively slender, densely haired. Scapus stout, pedicellus subglobular, first flagellar segment just a little longer than the following, smooth; beginning with the third segment all flagellar segments longitudinally striated; apical segment longer than the preceding, gradually narrowing towards apex.

Thorax smooth, sparsely haired. Pronotum smooth, slightly crenulate in lower part. Mesonotum without covering pronotum when seen from above, smooth, shining. Parapsidal furrows deep, crenulate, short, beginning on lateral sides of mesonotum, with prominent fore margins. Mesonotum margined distally till scutellum, in the lower region laterad scutellum towards tegulae with deep smooth impressions. Praescutellar groove deep, wide and smooth. Scutellum large, smooth, shining, sparsely haired, margined laterally, prominent, widely triangular to pentagonal, and roundly narrowing towards apex. Mesopleurae smooth, shining, prominent below tegulae, with lateral sutures crenulate. Tegulae developed. Metanotum impressed laterally, slightly rugose, with lateral sutures crenulate; a little prominent and smooth centrally (= postscutellum). Metapleurae smooth, crenulate along sutures. Propodeum (fig. 4) prominent, comparatively vertically falling down to insertion of first abdominal tergite; areolated, with larger or smaller central pentagonal areola; surface of areolae granulate (especially along carinae) to nearly smooth; with several hairs. Wings undeveloped. Legs: comparatively slender, sparsely haired. Fore and middle femora, tibiae and tarsi nearly of equal length. Hind tibiae distinctly longer than hind femora. Hind metatarsus as long as three following segments combined. Claws simple, as long as praetarsus.

Abdomen: lanceolate, as long as about head and thorax combined. First abdominal segment (fig. 5) slender, about twice longer than wide at spiracles, a little broadened towards apex, coarsely granulate, granulorugose in the distal region. Spiracles situated at first third, not prominent. Following abdominal segments smooth, sparsely haired. Genitalia figured (fig. 3).

Coloration: Head, lower part of mesopleurae, metanotum, metapleurae, propodeum, distal part of first abdominal tergite, abdomen (except for paler spot in the middle) and ovipositor sheaths brown black to brown. Prothorax and greater part of mesothorax rufotestaceous. Antennae brown, except for scape, pedicellus and greater part of first flagellar segment which are yellow. Mandibles and palpi yellow. Face and clypeus sometimes paler. Legs rufotestaceous; coxae, femora and distal part of tibiae brownish; claws and praetarsi obscure.

Measures: Head: width, 0.38–0.42 mm; interocular l., 0.28–0.31; transfacial l., 0.17–0.19; facial l., 0.30–0.31; clypeoantennal l., 0.10–0.14. Antennae: first flagellar segment, 0.09–0.10; second flagellar segment, 0.07–0.09. Thorax: width at tegulae: 0.28–0.31. Abdomen: first tergite, width at spiracles, 0.09–0.10; length, 0.23–0.24. Length of body: 1.4–1.8 mm.

Male. Antennae 16-segmented; all flagellar segments longitudinally striated; apical segment about as long as the penultimate. Mesonotum slightly granulate, shining, sparsely haired. Parapsidal furrows of same shape frontally as in female but narrower and more slightly crenulate, without prominent fore margin; then slightly visible till praescutellar groove, nearly parallel-sided, with scattered hairs along their length. Fore wings (fig. 7) fully developed, hyaline, longer than thorax and abdomen combined; only basal, first, and second cubital cells complete. Pterostigma narrow, lanceolate, a little longer than metacarpus. Radial vein slightly arched, coloured about one-third its length. Cubital vein beyond second cubital cell also partially coloured. Measures, fore wing: Pterostigma, width, 0.07—0.10; length, 0.42; metacarpus, 0.35—0.38; radial vein, 0.24—0.31. Hind wings: fully developed, hyaline, with undistinctly complete basal cell.

Coloration: black. Mandibles and palpi yellow. Legs brown black; trochanters, proximal part of tibiae and tarsi lightened. First abdominal tergite brown black, sometimes yellowish at base. Abdomen brownish, base of second and third tergite of lighter colour. Venation of wings brownish.

Otherwise like female except sexual differences.

General distribution: Palaearctic region (Europe-England, Sweden, Czechoslovakia).

Locality in Czechoslovakia: Bohemia — centr.: Praha - Ruzyně, April 1954, (6 ♀♀, 2 ♂♂ bred from "dried herbs"), lgt. BOUCEK.

Host: Unknown. Probably aphid-parasite.

Acknowledgments

The present author is indebted to Dr. Zd. BOUCEK for lending material.

Summary

In this paper the redescription of *Diaeretus ephippium* (Haliday) is given. Only the female of this species was known up to now and it was included in the genus *Aphidius*. On the ground of material reared in Czechoslovakia it was stated that the wings are fully developed in the male which was unknown to this time. According to many characters, especially to those in the neuration of wings in the male, and to those in the female genitalia, it is necessary to place this species in the genus *Diaeretus* Förster (n. comb.).

Zusammenfassung

Von *Diaeretus ephippium* (Haliday) wird das ♀ nochmals, das bisher unbekannte ♂ neu beschrieben. Morphologische Charaktere machen es notwendig, diese bisher zur Gattung *Aphidius* Nees gestellte Art in die Gattung *Diaeretus* Förster zu versetzen.

Резюме

Дается редескрипция вида *Diaeretus ephippium* (Hal.). До сих пор была известна только самка и вид включался в род *Aphidius*. На основании выведенного материала в Чехословакии было установлено, что самцы, которые до сих пор не были известны, обладают крыльями. По ряду признаков, в особенности по жилкованию крыльев самцов и по строению половых органов самок, вид следует включить в род *Diaeretus* Förster [n. comb.].

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A Revision of the Genus *Aclitus* Förster

(Hymenoptera: Braconidae: Aphidiinae)

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(With 7 figures)

This paper includes the redescription of the genus *Aclitus* and the species *A. obscuripennis*, which were very unsatisfactorily described in 1862 (p. 248) by FÖRSTER: „Radius stark verlängert, mehr als 2/3 des Radialfeldes schließend ... *Aclitus m* Typ.: *Acl. obscuripennis* n. sp.“ There are two more species included in this genus and *Aclitus nawaii* Ashmead being stated as the genotype by FAHRINGER in 1937 (l. c.).

In the present paper the genus *Aclitus* is considered as probably monotypic genus and FÖRSTER's original designation of *Aclitus obscuripennis* as the genotype is confirmed. The second known species — *Aclitus hedini* (Fahringer) is stated as a new synonym of *Myiocephalus boops* (Wesmael). The third known species — *Aclitus nawaii* Ashmead is considered to be a species of another genus of the Aphidiinae probably similar to *Prota-phidius* Ashmead (sensu STARY, 1958).

The nomenclature of wing venation used is the same as in the precedent paper of the author (Acta Faun. Ent. Mus. Nat. Praegae, 1958).

Genus: *Aclitus* Förster

Aclitus Förster, 1862, Verh. naturh. Ver. preuß. Rheinl., 19, 248. — SZEPLIGETI, 1904, Genera insectorum, Fasc. 22, p. 185.

Genotype: *Aclitus obscuripennis* Förster, 1862 (design. by FÖRSTER, 1862).

This genus may be distinguished from the other genera of the braconid subfamily Aphidiinae by the combination of following criteria: Eyes small; antennae short and moniliform; pterostigma short, narrow and lanceolate; pterostigmal cell in fore wing nearly complete; abdomen rounded.