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SYNONYMICAL AND OTHER NOTES ON  
*PROTAPHIDIUS WISSMANNII* (RATZBURG)

(Hymenoptera, Braconidae: Aphidiinae)

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The present author has revised in 1958 the genus *Protaphidius* ASHMEAD. According to the revision of the type of *Coelonotus rufus* FÖRSTER, which is the synonym of *Protaphidius wissmannii* (RATZ.), it was stated that it represents the genotype of the separate genus *Protaphidius* ASHMEAD (for preocc. *Coelonotus* FÖRSTER; see STARÝ, 1958). The latter was described in 1934 from Italy as *Menozzia* GOIDANICH. *Protaphidius* ASHM., however, was generally accepted as the subgenus of *Aphidius* NEES and a series of species from the Palaearctic and Nearctic regions are now included in it. The quoted series of species represents, of course, a well-characterized subgenus of *Aphidius* (i.e. *Paraphidius* STARÝ, 1958; subgenotype: *Aphidius californicus* ASHM.); it was included in *Protaphidius* ASHM. on the base of the very incomplete and unsatisfactory description of FÖRSTER based especially on the character "excavated propodeum". It must be added that also WATANABE (1957) had included "*Aclitus nawai*" in the subgenus *Protaphidius* ASHM. auct.

In the same year the present author has revised the genotype of the genus *Aclitus* FÖRSTER (i.e. *Aclitus obscuripennis* FÖRSTER) and other species included in this genus by various authors. As the species *Aclitus nawai* was described from Japan by ASHMEAD in 1906, the author took part of his interest in this species, too. The accurate study of *Aclitus nawai* ASHM. was enabled by the kindness of Dr. C. F. W. MUESEBECK who sent the female-paratype of this species with some private notes to me for the purpose to revise it. When examining this paratype I found out that it is *Protaphidius wissmannii* (RATZ.). The Japanese specimen (i.e. "*Aclitus nawai*") differs from the European specimens known to the author especially in having parapsidal furrows punctate

till praescutellar groove and in having first tergite of abdomen slightly slender. In my opinion these characters are not of specific value and therefore it seems to be necessary to take into consideration that *Aclitus nawaii* is a new synonym of *Protaphidius wissmannii*. *Protaphidius* ASHMEAD represents therefore a monotypic genus of the subfamily Aphidiinae.

The synonymy of *Protaphidius wissmannii* is as follows:

***Protaphidius wissmannii* (RATZBURG)**

*Aphidius wissmannii* RATZBURG, 1848, Ichn. d. Forstins. 2 : 59 (♀ ♂ descr., Locality : Germany ; host : *Aphis (Lachnus) quercus*).—MARSHALL, 1896, in ANDRÉ, Spec. Hym. Europe d'Algerie 5 : 562 (♀ descr., Locality : Germany ; host : *Stomaphis quercus* RÉAUM.).—DALLA TORRE, 1898, Cat. Hym. IV : 13 (sine descr., Locality : Germany).—SZÉPLIGETI, 1904, in WYTSMANN, Genera insectorum, Fasc. 22 : 187 (sine descr., Locality : Germany).—STARÝ, 1958, Acta Faunistica Entomologica Mus. Nat. Pragae 3 : 89-93 (transferred to *Protaphidius* ASHM.).

*Coelonotus rufus* FÖRSTER, 1862, Verh. Nat. Ver. Preuss. Rheinl. 19 : 248 (descr., Locality : Germany).—STARÝ, 1958, Acta Faunistica Entomologica Mus. Nat. Pragae 3 : 89-93 (syn. with *Protaphidius wissmannii* (RATZ.)).

*Aphidius rufus* (FÖRSTER) : DALLA TORRE, 1898, Cat. Hym. IV : 12 (sine descr., Locality : Germany).

*Aclitus nawaii* ASHMEAD, 1906, Proc. U. S. Nat. Mus. 30 : 188 (♀ ♂ descr., fig., Locality : Japan ; host : *Lachnus* sp.).—FAHRINGER, 1937, Festschr. 60. Geb. E. Strand, Riga 3 : 240 (♀ ♂ descr., Locality : Japan ; host : "*Lachnus (Cinara)* sp.").—FULMEK, 1957, Ann. Naturhist. Mus. Wien 61 : 173 (sine descr., Locality : Japan ; host : "*Cinara* sp."). N. syn.

*Ccelonotus wissmannii* (RATZBURG) : FAHRINGER, 1937, Festschr. 60. Geb. E. Strand, Riga 3 : 241 (♀ descr., Locality : Germany ; host : *Stomaphis quercus*).—FULMEK, 1957, Ann. Naturhist. Mus. Wien 61 : 175, 222 (sine descr., Locality : Germany ; host : *Clavigerus salicis* L., *Stomaphis quercus* L.).

*Menozzia formicaria* GOIDANICH, 1934, Boll. Lab. ent. Bologna 6 : 217-227 (♀ ♂ descr., Locality : Italy ; bionomics).—STARÝ, 1956, Acta Musei Silesiae, Opava 5 : 47-48 (part. descr., Locality : Czechoslovakia).—FULMEK, 1957, Ann. Naturhist. Mus. Wien 61 : 122, 148 (sine descr., Locality : Italy ; host : ?).—STARÝ, 1958, Acta Faunistica Entomologica Mus. Nat. Pragae 3 : 89-93 (syn. with *Protaphidius wissmannii* (RATZ.)).

*Aphidius (Protaphidius) nawai* (ASHMEAD): WATANABE, 1957, Ins. Mats. 21: 2 (n. comb., host: orig. data revised, "*Cinara* sp." supposed to be *Stomaphis yanonis* TAK.).

*Protaphidius wissmannii* (RATZEBURG): STARÝ, 1958, Acta Faunistica Entomologica Mus. Nat. Pragae 3: 89-93 (n. comb.; synonyms; Localities: Germany, Czechoslovakia, Italy; host).

Bionomics: GOIDANICH (1934) gives comparatively precise description of bionomics of *Protaphidius wissmannii*. Larvae of this species were found in a nest of *Lasius fuliginosus* in a *Salix* and pupated inside globular cocoons which are described and figured in the cited paper. The short description of a cocoon from which the female-specimen was reared was given by STARÝ (1956) from Czechoslovakia, too; this cocoon is of globular shape but slightly depressed laterally—the depression was evidently caused by the pupation of the larva in the restricted space under the rind of a stump where the cocoon had been found. RATZEBURG (1848), however, reports *Protaphidius* (i. e. *Aphidius* of RATZEBURG) *wissmannii* to be reared from the aphid *Stomaphis quercus*. ASHMEAD also remarks the following on his *Aclitus nawai*: "One male and two female specimens were sent, bred from a large *Aphis*, which, judging from the dry pupa skins, I identified as a species of *Lachnus*, or certainly a genus in the subfamily Lachninae". The host aphid species was later identified as *Stomaphis yanonis* by WATANABE (1957).

According to the data given above bionomics of *Protaphidius wissmannii* seems to be not known satisfactorily for the present. The data can be divided into two groups:—

1. *Protaphidius wissmannii* pupates inside the parasitized aphid (*Stomaphis*). (RATZEBURG, 1848; ASHMEAD, 1906).
2. *Protaphidius wissmannii* pupates at a distance from the parasitized aphid in a separate cocoon (GOIDANICH, 1934; STARÝ, 1956, 1958).

A more detailed research on bionomics of this species is necessary.

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## References

- ASHMEAD W. H., 1906: Descriptions of new Hymenoptera from Japan. Proc. U. S. Nat. Mus. 30 : 169-201, Pl. XII-XV.
- FAHRINGER J., 1937: Die Parasiten der Baumläuse (Lachnini) aus der Gruppe der Aphidiinae FÖRST. Festschr. 60. Geb. E. STRAND, Riga 3 : 240-245.
- FÖRSTER A., 1862: Synopsis der Familien und Gattungen der Braconen. Verh. naturh. Ver. Preuss. Rheinl. 19.
- FULMEK L., 1957: Insekten als Blattlausfeinde. Ann. Naturhist. Mus. Wien 61 : 110-227.
- GOIDANICH A., 1934: Materiali per lo studio degli Imenotteri Braconidi II. Boll. Labor. Ent. Bologna 6 : 209-230.
- RATZEBURG J. T. C., 1848: Ichneumonon der Forstinsekten. Bd. 2. Berlin.
- STARÝ P., 1956: Notes on the Braconidae of Czechoslovakia II. Acta Musei Silesiae, Opava, A, 5 : 47-48.
- STARÝ P., 1958: A Taxonomic Revision of some Aphidiine Genera with Remarks on the Subfamily Aphidiinae. Acta Faunistica Entomologica Mus. Nat. Pragae 3 : 53-96, 110 figs.
- STARÝ P., 1959: A Revision of the Genus *Aclitus* FÖRSTER. Beitr. z. Ent. 9 : (in litt.).
- WATANABE CH., 1957: Notes on ASHMEAD's Japanese Braconidae. Ins. Mats. 21 : 1-5.