

**NOTES ON *ARCHIPHANURUS MINOR* (WATANABE)
(HYMENOPTERA, SCELIONIDAE)**

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Abstract

The holotype of *Archiphanurus minor* (Watanabe, 1954) is illustrated and the first-instar larva of the species is newly described.

Archiphanurus minor (Watanabe, 1954) was described as an egg parasitoid of the plataspid bug, *Megacopta punctatissimum* (Montandon). Ryu and Hirashima (1989) redescribed the adult wasps in detail. In this paper, the holotype of *A. minor* is illustrated and the first-instar larva of the wasp is newly described.

I am indebted to Prof. S. Takagi and Dr. M. Suwa of Hokkaido Univ., for examination of the type material. I am grateful to Dr. L. Masner of Agriculture Canada, and Dr. M. Takagi of Kyushu Univ., for their kind suggestion.

Genus *Archiphanurus* Szabó, 1975

Archiphanurus Szabó, 1975. Annal. hist.-nat. Mus. nation. Hung., 67 : 268. Type species: *Aphanurus graeffei* Kieffer, 1917, by monotypy.

The genus *Archiphanurus* Szabó, 1975, is distinguished from the other genera of Telenominae by having the yellowish first metasomal segment and the longitudinal striae on the cheeks. Because of the former character, the members of the genus *Archiphanurus* had been included in the genus *Aporophlebus* Kozlov, 1970, until Kozlov and Lê (1977) corrected the latter genus as a junior synonym of the genus *Telenomus* Haliday, 1833 (see Johnson, 1984).

***Archiphanurus minor* (Watanabe, 1954)**

(Japanese name : Marukame-tamagokurobachi. Renamed)

Asolcus minor Watanabe, 1954. Trans. Shikoku ent. Soc., 4 : 20. (Female and male. Zentsuji, Shikoku, Japan).

Archiphanurus minor, Takasu & Hirose, 1986. Jpn. J. appl. Entom. Zool., 30 : 302.

Aporophlebus minor, Ryu & Hirashima, 1989. Esakia, 28 : 50.

Watanabe (1954) described this species under the genus *Asolcus* Nakagawa, 1900. After that, Masner (1964) treated the genus *Asolcus* as a junior synonym of the genus *Trissolcus* Ashmead, 1893. By some morphological features, however, *A. minor* is not a species of the genus *Trissolcus*. Hirose (in Takasu & Hirose, 1986) correctly combined the species with the genus *Archiphanurus* Szabó, 1975.

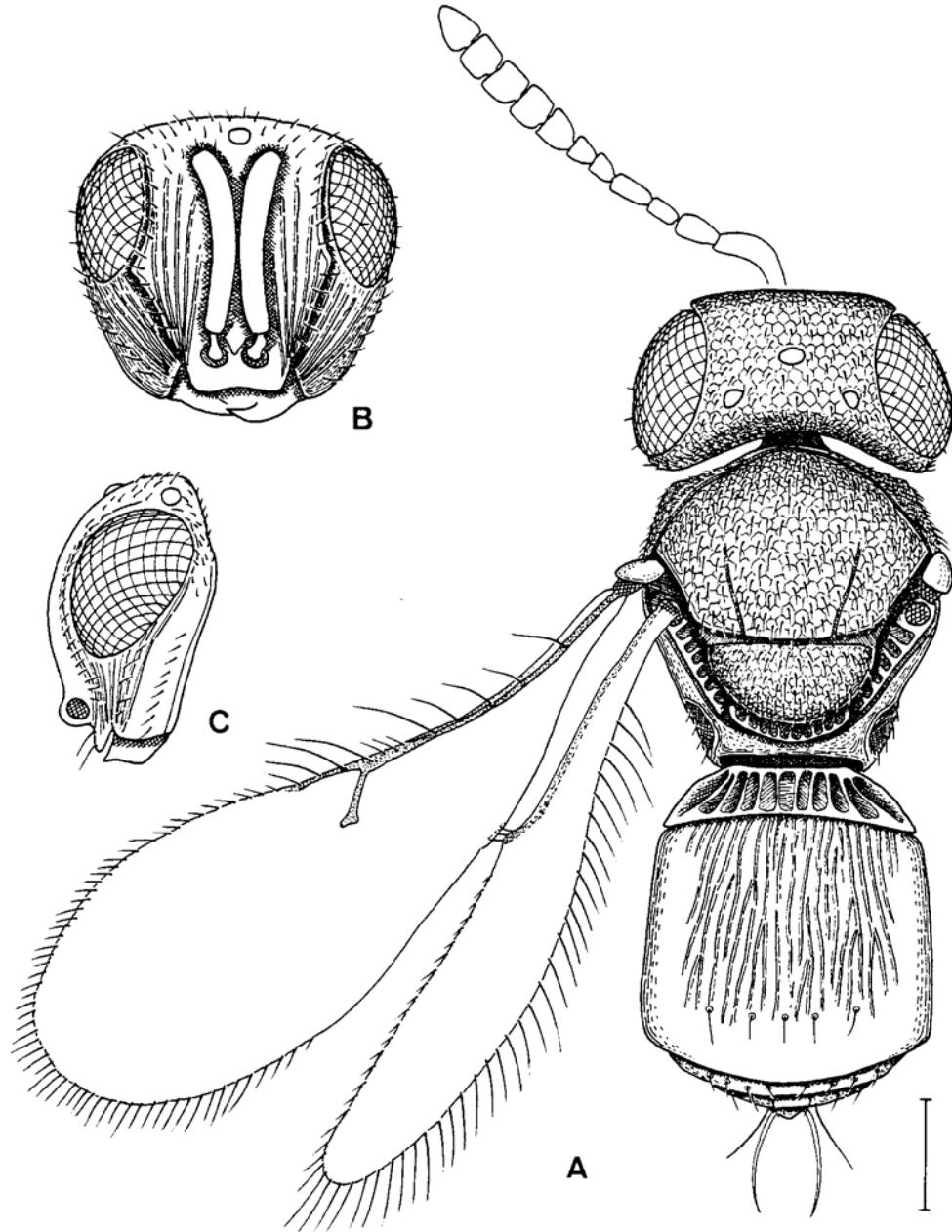


Fig. 1 Holotype of *Archiphanurus minor* (Watanabe). A: Body, dorsal view. B: Head, frontal view. C: Head, lateral view. Scale 0.1 mm.

Ryu & Hirashima (1989) incorrectly combined it with the genus *Aporophlebus* Kozlov, 1970, which is a junior synonym of the genus *Telenomus* Haliday.

Holotype (Figs. 1A-C): Female. Length 0.75 mm. Zentsuji, Kagawa Pref., Shikoku, Japan; 20.

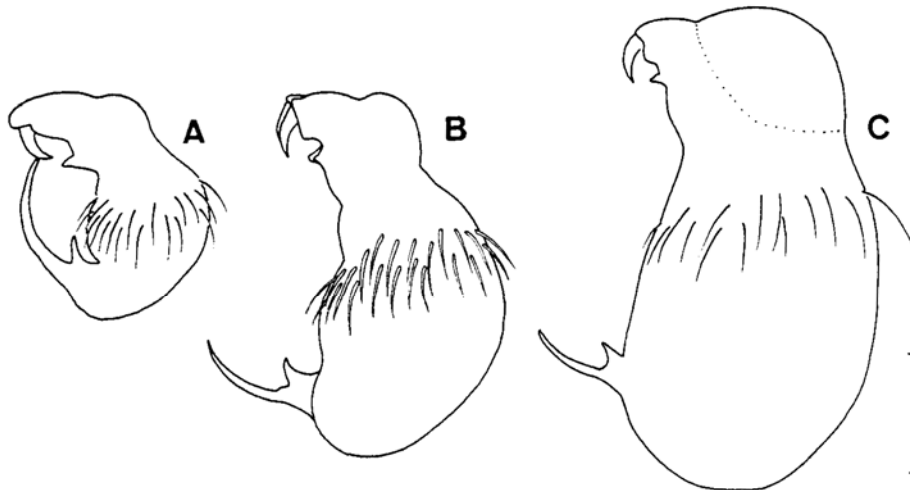


Fig. 2 First instar larva of *Archiphanurus minor* (Watanabe). A: Within 24 hours after oviposition. B: About 24 hours after oviposition. C: About 48 hours after oviposition. Scale 0.1 mm.

VII. 1951; bred from egg of *Coptosoma punctissimum*; T. Kobayashi leg.

BIOLOGICAL NOTES: This species is a solitary egg parasitoid of the plataspid bad, *Megacocta punctatissimum* (Montandon). The wasps had multivoltine and high percentage parasitism from late May to early September in Nagoya, Japan.

The first-instar larva of the wasp was observed solitary in the host plataspid egg (Fig. 2A) within 24 hours after oviposition by the wasp and then entered into feeding (Figs. 2B, 2C). The shape of larva is so-called teleaform like a species of the genus *Trissolcus*. The mandibles are large, directed ventrally and translucent. The abdomen has long sparse hairs in a broad ring and a long blade-like process apically, which is directed ventrally with a basal tooth.

References

- Johnson, N. F., 1984. Systematics of Nearctic *Telenomus*: Classification and revisions of the *podisi* and *phymatae* species groups (Hymenoptera: Scelionidae). *Bull. Ohio biol. Survey*, new ser., 6(3): 1-113.
- Kozlov, M. A. and X. H. Lê, 1977. Palearctic species of egg parasites of the genus *Trissolcus* Ashmead, 1893 (Hymenoptera, Scelionidae, Telenominae). *Insects of Mongolia*, 5: 500-525. (In Russian)
- Masner, L., 1964. A comparison of some Nearctic and Palearctic genera of Proctotrupeoidea (Hymenoptera) with revisional notes. *Cas. Cs. Spol. ent.*, 61(2): 123-155.
- Ryu, J. and Y. Hirashima, 1989. Taxonomic studies on the genera *Aporophlebus*, *Eumicrosoma* and *Platytelenomus* of Japan and Korea (Hymenoptera, Scelionidae, Telenominae). *Esakia*, 28: 49-62.
- Szabó, J. B., 1975. Neue Gattungen und Arten der paläarktischen Telenominen (Hymenoptera, Scelionidae). *Annal. hist.-nat. Mus. nation. Hung.*, 67: 265-278.
- Takasu, K. and Y. Hirose, 1986. Kudzu-vine community as a breeding site of *Ooencyrtus nezarae* Ishii (Hymenoptera: Encyrtidae), an egg parasitoid of bugs attacking soybean. *Jpn. J. appl. Ent. Zool.*, 30: 302-304. (In Japanese)

- Watanabe, C., 1954. Discovery of four new species of Telenominae, egg-parasites of pentatomid and plataspid bugs, in Shikoku, Japan. (Hymenoptera : Proctotrupoidea). *Trans. Shikoku ent. Soc.* 4(2) : 17-22.