

A new species of chalcid wasp of the genus *Astymachus* Howard from Vietnam (Hymenoptera, Chalcidoidea: Encyrtidae)

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Astymachus phainae sp. n., a parasite of coccids of the family Aclerididae in Vietnam, is described.

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In shelters built by the ant *Crematogaster* sp. on large bamboo stems, coccids of the family Aclerididae were found living in leaf sheaths, along with their parasites belonging to a new species of the family Encyrtidae. Probably the chalcid wasps are not specific inhabitants of these shelters and ant nests but they may find their hosts in these formations.

All specimens were collected by the author. The holotype and all paratypes are kept in the Zoological Institute, St.Petersburg.

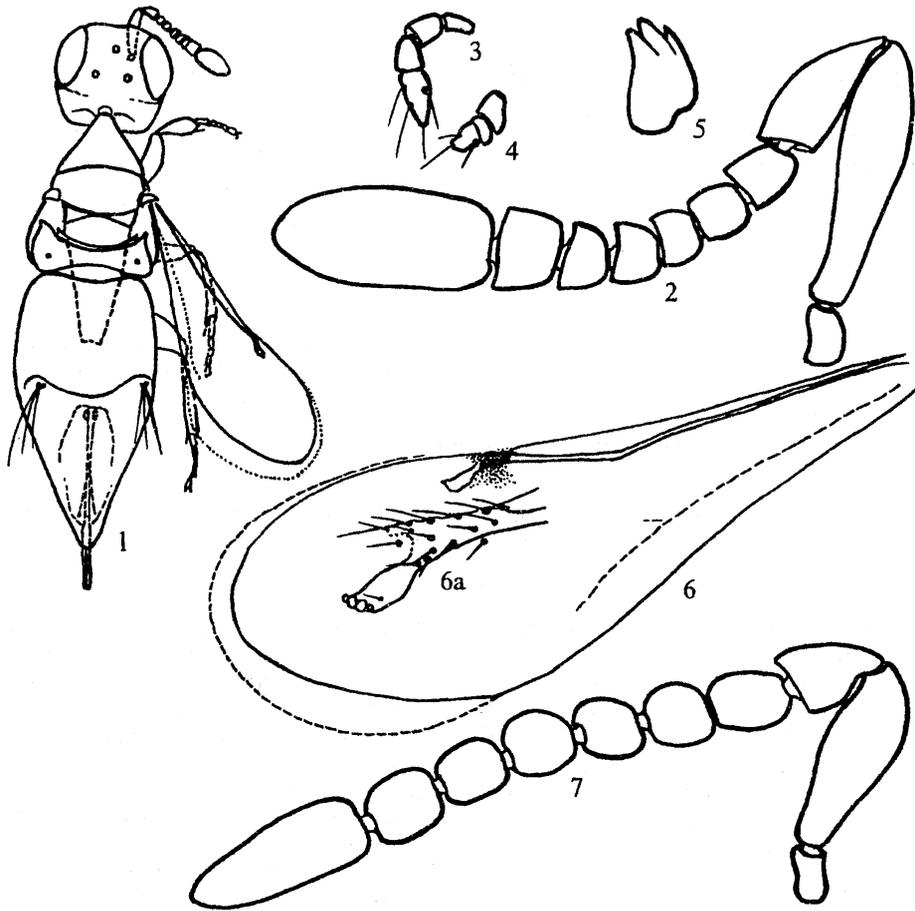
Astymachus phainae sp. n. (Figs 1-7)

Holotype. ♀, Vietnam, National Park Ba Vi, mountainous forest about 800 m above sea level, 11-14.XII.1995.

Paratypes. 9 ♀, 2 ♂, as holotype. All chalcid wasps reared from coccids of the family Aclerididae on bamboo partly in the shelters of the ant *Crematogaster* sp.

Description. Female. Head and body strongly flattened. Head strongly opistognathous, having only two surfaces in consequence: frontovertex and face forming the acute front margin of head. Occiput transformed into continuation of frontovertex, lying in one plane. Head slightly wider than long. Distance from lower margin of mandibles to back margin of head twice shorter than that from upper margin of mandibles to base of antennae. Frontovertex slightly longer than wide. Distance between hind ocelli slightly more than that between hind and front ocelli. Cheeks almost as long as

longitudinal diameter of eyes. Mandibles with 3 teeth, the dorsal tooth being the shortest. Maxillary palpi 4-jointed; labial palpi 3-jointed. Antennal sockets close to eye orbits, distance from them to front margin of head 3 times less than length of head. Scape slightly more than 4 times as long as wide. Pedicel almost twice longer than 1st funicle joint, the latter scarcely longitudinal. 2nd-6th funicle joints more or less transverse, 6th 1.5 times as wide as long. Club inarticulate, without any joint traces, slightly conically-rounded at apex, slightly longer than succeeding four funicle joints combined. Thorax 1.5 times as long as wide. Pronotum conical, its length twice less than basal width. Mesoscutum transverse, twice as wide as long. Scutellum transverse, almost twice as wide as long, with straight parallel sides length of which 3 times less than length of scutellum. Fore wings markedly narrow, about 3 times as long as wide. $m : pm : R = 10 : 3 : 11$. Radial vein with trapeziform swelling in most part of its length, with slight beak-like projection at apex. Hind femora swollen at upper margin, more than twice as long as wide. Middle tibiae almost linear in basal half, slightly swollen in apical half; tibial spur slightly shorter than basitarsus. Abdomen markedly longer than thorax, conical at apex, twice as long as wide. Exerted part of ovipositor 1/6 of abdomen length. Ovipositor sheaths not separated from ovipositor inner plates, with small hollows only at upper margins, blade-like, 6 times as long as



Figs 1-7. 1-7, *Astymachus phainae* sp. n. 1, total view; 2, antenna; 3, maxillary palpus; 4, labial palpus; 5, mandible; 6, 6a, fore wing and details of its venation in female; 7, antenna of male.

wide. Outer plates film-like, hardly visible. Ovipositor base reaching apical margin of 7th tergite; hidden part of ovipositor twice shorter than abdomen.

In balsam-mounted specimens, upper surface of head poorly reticulated, occiput with two remarkable lateral spots of scale-like reticulation. Mesoscutum and scutellum with longitudinal reticulate sculpture. Propodeum in middle part with triangular figure formed by reticulated sculpture; apex of this figure directed backwards. 7th tergite with delicate transverse reticulation at apical margin, 8th entirely reticulated, the reticulation largely scale-like, 9th almost smooth at middle.

Head yellowish; surface behind cheeks with longitudinal blackish stripes. Eyes grey; ocelli reddish. 6th funicle joint and base of club yellow, the rest of antennae mainly or entirely dusky to black. Body yellowish;

sclerites of thorax and abdomen more or less dusky or with brownish borders; apex of abdomen (8-9th tergites) blackish; exerted part of ovipositor black. Fore wings faintly infuscated, with small irregular black spot under marginal vein. Submarginal vein dusky, except its very apex; marginal vein black. Legs yellowish; femora mainly along lower margin, bases of tibiae and last joints of tarsi blackish. Length (without exerted part of ovipositor) 1.2-1.4 mm.

Male. Scape 3 times as long as wide. Pedicel scarcely longer than first funicle joint, the latter slightly longitudinal; 2-5th funicle joints subequal, rounded; 6th joint slightly transverse. Club inarticulate, subequal in length to three succeeding funicle joints combined, as wide as 6th funicle joint. Funicle joints with relatively long setae equal in length to transverse diameter of

joints. $m : pm : R = 9 : 5 : 10$. Radial vein short, gradually swelling to apex, the latter almost truncate. Phallobase slightly more than 4.5 times as long as wide.

Sculpture of head and body as in female but more distinct and abundant.

Surface of head morphologically belonging to occiput blackish; frontovertex yellow; area between ocelli dusky. Face above and borders below eyes yellow, the rest of face and cheeks blackish. Fore wings faintly infuscated. Legs more or less dusky; apex of middle femora and middle tarsi light, except the last joint of tarsi which is black. Base of hind femora and apical parts of hind tibiae light; hind tarsi blackish. Length 1.0 mm.

Comparison. The new species is similar to *A. japonicus* Howard but differs in the inarticulate club and longer scape which is slightly more than four times as long as

wide. The new species differs from *A. phragmitis* Trjapitzin (Trjapitzin, 1962, 1989) in the 3-jointed labial palpi and slightly beak-like projection at the apex of radial vein.

Etymology. The new species is named for Mrs. Phaina A. Nilov who backed me during my stay in Vietnam.

References

- Trjapitzin, V.A. 1962. Encyrtid-wasp (Hymenoptera, Encyrtidae) parasitizing *Nipponaclerda turanica* Arch. (Homoptera, Aclerdidae) in the Nogay steppe. *Zool. Zhurn.*, **41**(4): 560-570. (In Russian).
- Trjapitzin, V.A. 1989. Parasitic Hymenoptera of the fam. Encyrtidae of Palearctics. *Opredeliteli po Faune SSSR*, **158**: 1-487. (In Russian).

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