# Phytoecia (s.l.) behen n.sp. from North-East Anatolia (Turkey) (Coleoptera: Cerambycidae: Phytoeciini)

#### GIANFRANCO SAMA & MARTIN REJZEK

Abstract: *Phytoecia behen* n.sp. (Cerambycidae, Lamiini: Phytoeciini) from North-East Anatolia, related to *P. nepheloides* Sama, 1997, is described and depicted. Systematic position of both species is briefly discussed.

Key words: Cerambycidae, Lamiinae, Phytoeciini, North-East Anatolia, Turkey.

### Type material

Holotypus: male, NE Turkey, Gemecik, W. of Refahiye, 2000 m, 2.–3.VI.1998, M. Rejzek leg.; Paratypes: 1 male, the same locality, 2.–4.VI.1994, M. Johanides leg.; 4 males, 9 females, the same collection data as the holotype, 2.–3.VI.1998, M. Rejzek leg.; 4 females, the same collection data, S. Kadlec leg.; 6 males, 6 females, the same collection data, M. Johanides leg. Holotypus in coll. G. Sama, paratypes in coll. M. Johanides, S. Kadlec, Z. Koštál, M. Rejzek and G. Sama.

## Description

Holotypus: length 14 mm. Mandibular apex unidentate, not bidentate. Antennae reach apical fourth of elytra; third antennal segment as long as first or fourth. Integument black with distinct bronze lustre, covered with light brown and white-grey pubescence. Pronotum with one median and two lateral longitudinal stripes of white-grey pubescence; elytra covered with short uncinate hairs and scattered, semi-recumbent, white-grey pubescence forming two marbled longitudinal stripes on disk; a very narrow line running the length of these stripes (better visible in females), lateral margin and narrow band along suture covered with light brown pubescence. There are long, erect light brown setae on head, pronotum, and basal part of each elytron.

Ventral side of body densely covered with white-grey pubescence; abdomen with many small shiny areas surrounding bases of erect setae.

Head and pronotum with double puncturation composed of large oval punctures (diameter 40-50  $\mu$ m), and dense finer punctation filling inter-space between the large punctures. Puncturation of elytra similar but the large punctures of more irregular shape; towards elytral apex punctures becoming smaller (diameter 30  $\mu$ m) and puncturation less dense.

Pronotum regularly, moderately rounded at sides, with two well-defined glabrous areas of irregular shape situated on pronotal disk just before middle of its length. Elytra with convex base, otherwise concave along most of its length.

All abdominal sterna without teeth, last sternum with a deep impression before apex. Legs stout, covered with white-grey pubescence. Both sides of protibia, and inner side of meso- and metatibiae covered with long setae. Inner claw of tarsi shorter and stouter than the outer one.

General shape of aedeagus similar to *Phytoecia nepheloides* Sama, 1997. Lateral lobes large and stout, apically bearing strong hairs; endophallus distally with large thin plate (lamella) and long thin sclerite.

Paratypes: body length varies from 11 to 14 mm. Females differ from males as follows: antennae do not exceed third quarter of elytra (those of males reach the apical quarter), first antennal segment more robust than in males; pronotum more transverse (1.5 times

as wide as long, in males 1.3 times as wide as long); last sternum deeply notched at apex and here out-lined by many protruding light brown hairs.

### Differential diagnosis

The general morphology and the male genital structure of *P. behen* n.sp. are similar to *Phytoecia* (*Phytoecia*) nepheloides which was described according to a single male from Slinfeh (North Syria). *P. behen* n.sp. and *P. nepheloides*, which also share the unidentate mandibles, are undoubtedly congeneric. *P. behen* n.sp. differs from *P. nepheloides* by its black integument with distinct bronze lustre, elytra with light brown or white-grey pubescence forming marbled longitudinal stripes on disk and a distinct sutural stripe (in *P. nepheloides* elytral pubescence is scattered and no stripes are visible), lateral lobes of aedeagus larger, median lobe acuminate apically.

The structure of the elytral pubescence of *P. behen* n.sp. resembles to some extent that of *Coptosia tauricola* as described by Breuning (1943): "...couvert d'une dense pubescence jaune grisâtre, cette pubescence moins dense par place sur les élytres, qui paraissent ainsi densément marbrés de cette couleur". *Coptosia tauricola* was described according to a single male from the Taurus mountains. From the description it follows that this species differs from *P. behen* n.sp. by its smaller size (6 mm), shorter antennae ("ne depassant que peu le milieu des élytres") and convex elytra.

#### **Discussion**

The systematic position of both *P. behen* sp.n. and *P. nepheloides* is uncertain; *P. behen* n.sp. does not resemble any known species of Phytoeciini. In its general appearance (pronotum simply rounded at sides and elytral pattern) it resembles to a certain extent species of *Pilemia* Fairmaire, 1864. However, the male genital structure (chiefly endophallic sclerites) and the unidentate mandibles (those of all known *Pilemia* are bidentate) readily separate it from this genus.

The shape of pronotum and endophallic sclerites also separate *P. behen* n.sp. from *Coptosia* Fairmaire, 1864 (distal sclerites of the latter are very similar to *Pilemia*).

The general morphology of *P. behen* n.sp. and particularly the simply rounded sides of the pronotum resemble some species of the North African genus *Conizonia* Fairmaire, 1864, and primarily those species close to *C. allardi* Fairmaire, 1866. However, the newly described species differs from *Conizonia* by its slender antennae, elytra in both sexes almost parallel until apical fourth and without longitudinal carinae (in *Conizonia* strongly narrowed from the humeri and with three distinct longitudinal carinae), last sternum of female deeply notched at apex (in *Conizonia* rounded at apex and with a light transverse impression).

On the basis of the features discussed above, a new supraspecific taxon may be necessary for *P. nepheloides* and *P. behen*. However, we consider it would be premature to increase the number of genera and/or subgenera in the Phytoeciini before a general revision of this tribe. A revision of *Conizonia* (a North African genus) is now in print, while a revision of *Coptosia* (a genus occurring in the Balkan Peninsula, Asia Minor, Near East, and Central Asia) is under preparation; both by G. Sama.

#### **Biology**

All specimens of *P. behen* n.sp. were collected on a plant identified by Dr. G. Alziar (Jardin Botanique de la ville de Nice) as probably being a species of the *Centaurea behen* (L.) group (Asteraceae). This plant most likely serves as the host. Beetles were collected on a relatively cold and wet day. The first adults were found sitting on their host plant at noon when the sun appeared for the first time that day. When disturbed, the males flew quickly away whereas the females only tried to hide under the leaves of the

Sama G., Rejzek M.: Ent. Zeits.: 109(8), 330-333 (1999).

host. The beetles never appeared on the host plant when there was no sunshine. In such conditions, several beetles were still found on the ground, hiding in close proximity to the host plant. At the time of collecting, the plants were small, and therefore only larger ones with a more complex leaf system were used for shelter. A few specimens of a *Helladia* sp. (close to *orbicollis* Reiche & Saulcy, 1858) and one adult of *Agapanthia schmidti* Holzschuh, 1974 were found on the same plant in a nearby locality (G. Sama leg.).

## Acknowledgement

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## **FIGURES**

FIG. 1 = Phytoecia (s.l.) behen n.sp.: Holotypus male