# PHYTOECIA NAUSICAE, A NEW SPECIES FROM CONTINENTAL GREECE (Coleoptera Cerambycidae Lamiinae Phytoeciini)

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**Abstract**. *Phytoecia nausicae* n. sp. (Coleoptera: Cerambycidae: Lamiinae: Phytoeciini) from north-western Greece, related to *P. behen* Sama et Rejzek, 1999 and *P. nepheloides* Sama, 1997, is described and depicted. The systematic position of these species is briefly discussed. **Résumé**. *Phytoecia nausicae* n. sp. (Coleoptera: Cerambycidae: Lamiinae: Phytoeciini) du nordouest de la Grèce, proche de *P. behen* Sama et Rejzek, 1999 et de *P. nepheloides* Sama, 1997, est décrit et représenté. La position systématique de cette espèce est brièvement discutée. **Key words**. Cerambycidae, Lamiinae, Phytoeciini, *Phytoecia nausicae* n. sp., Greece.

In 1997, SAMA described *Phytoecia nepheloides* from northern Syria and although he recognised its specific taxonomic position he temporarily included the species into the genus *Phytoecia* Dejean, 1835 *sensu lato*. Two years later, SAMA and REJZEK (1999) described *P. behen* from north-eastern Turkey and suggested that the species was closely related to *P. nepheloides*. Here, we describe a third species, undoubtedly belonging to the same group.

*Phytoecia nausicae* **n. sp**. (fig. 1-3, 6 and 7)

**Type material**: holotype:  $\circlearrowleft$ , north-western Greece, Hassia Mts., Anixi village, 4.V.2003, 600 m, lgt.  $\circlearrowleft$ . Kakiopoulos, in coll.  $\circlearrowleft$ . Rejzek. Paratypes:  $\circlearrowleft$ , the same collecting data, in coll.  $\circlearrowleft$ . Rejzek;  $\circlearrowleft$  and  $\circlearrowleft$ , the same collecting data, 16.V.2003,  $\circlearrowleft$  and  $\circlearrowleft$  in coll.  $\circlearrowleft$ . Rejzek; 3  $\circlearrowleft$  and 3  $\circlearrowleft$ , the same collecting data, 9.V.2002,  $\circlearrowleft$  and  $\hookrightarrow$  in coll.  $\circlearrowleft$ . Rejzek, 2  $\circlearrowleft$  and 2  $\hookrightarrow$  in coll.  $\circlearrowleft$ . Kakiopoulos.

# **Description:**

Holotype: length 11.5 mm. Integument black with distinct bronze lustre, covered with white-grey and light brown pubescence.

Head punctate; punctation composed of scattered large punctures (individual punctures with diameter 40-50  $\mu m$ , much larger than one ommatidium) and fine punctures (individual punctures about as large as one ommatidium) located in space between the large punctures. The fine punctation is dense on the sides and fron, becoming sparser towards vertex, leaving the interspace glabrous. Head covered with long erect light brown setae and semi-recumbent white-grey pubescence. An indistinct median furrow is marked by denser semi-recumbent white-grey pubescence. Mandibular apex unidentate.

Antennae long and slender, reaching apical sixth of elytra; third antennomere slightly longer than first or fourth. Antennae bearing recumbent white-grey pubescence, scape and pedicel with additional short uncinate hairs.

Pronotum transverse (1.3 times wider than long), strongly rounded at sides with widest part just beyond the middle; punctation composed of scattered large punctures and dense fine punctures filling spaces between the large punctures. Two well-defined glabrous areas of irregular shape are situated on pronotal disk just short of half its length. Pronotum covered with long erect light brown setae and semi-recumbent white-

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grey pubescence forming one median and two lateral longitudinal stripes on disk and fringing the apical and basal pronotal margins.

Scutellum transverse, bearing fine punctures only (large punctures missing) and covered with semi-recumbent, white-grey pubescence.

Elytra elongate, narrowing towards the apex; bearing double punctation composed of large irregular oval shaped punctures (diameter 40-50  $\mu m$ , becoming about 30  $\mu m$  and sparser towards elytral apex) and dense fine interspersed punctures. Elytral base with long, erect light brown setae; both elytra covered with short uncinate hairs and scattered, semi-recumbent, white-grey pubescence forming two poorly defined marbled longitudinal stripes on disk. Lateral margin and narrow band along suture covered with light brown semi-recumbent pubescence.

Legs slender, covered with semi-recumbent white-grey pubescence. Both sides of protibia and inner side of meso- and metatibiae covered with scattered long setae. Each claw has a stout inner tooth extending from its base to slightly beyond half the length of the parent claw. Tarsomere 1 of metatarsi as long as 2 and 3 together. Tarsomere 3 of all tarsi deeply bilobed, lobes rounded apically.

Ventral side of body densely covered with white-grey pubescence. Abdomen with scattered shiny areas surrounding bases of erect setae. Abdominal sterna without any conspicuous processes or teeth, last sternum with a deep impression before apex.

General shape of **aedeagus** similar to *P. behen* and *P. nepheloides*. Median lobe as in fig. 6; parameres (lateral lobes) large and stout, bearing strong apical hairs (fig. 7); internal sac (endophallus) distally with large thin plate (lamella) and long thin sclerite.

**Paratypes**: body length ranges from 10.8 to 13.3 mm. Colour of body pubescence varies slightly (in some specimens light brown pubescence is more abundant than in others). Females differ from males as follows: body larger and stouter, light brown pubescence more abundant, antennae slightly shorter and thicker, reaching apical fourth of elytra (in males reaching apical sixth), pronotum more transverse (1.4 times wider than long, in males 1.3 times); last sternum notched at apex (fig. 3), the notch is shallow and nearly rectangular with many protruding light brown hairs.

#### **Differential diagnosis:**

Phytoecia nausicae n. sp. is very similar to P. behen and P. nepheloides. The last abdominal sternum in females of all three species is notched at apex. In P. nausicae n. sp. the notch is shallow and nearly rectangular (fig. 3). Apically this notch is bearing many protruding light brown hairs. In P. behen this notch is deep and clearly rounded (fig. 4) bearing very long protruding light brown hairs. In P. nepheloides the notch is very shallow and rounded (fig. 5) bearing short light brown hairs apically. In both P. nausicae n. sp. and P. behen the lobes of tarsomere 3 of all tarsi are rounded apically. In P. nepheloides these lobes are clearly pointed.

*P. behen* differs from *P. nausicae* n. sp. in having thicker and shorter antennae and in the third antennomere being as long as the first or fourth; in the pronotum more transverse (particularly in females), only moderately rounded at sides, being widest in middle and bearing much denser punctation on disk; and in tarsomere 1 of metatarsi being distinctly shorter than 2 and 3 together.

*P. nepheloides* differs from *P. nausicae* n. sp. in having much shorter antennae just reaching the apical fourth of elytra; in pronotum that is strongly rounded at sides, widest just before the middle and strongly narrowed towards the base, by bearing much denser punctation on disk, large punctures nearly contiguous, by having denser semi-recumbent white-grey pubescence forming a median longitudinal stripe and indistinct

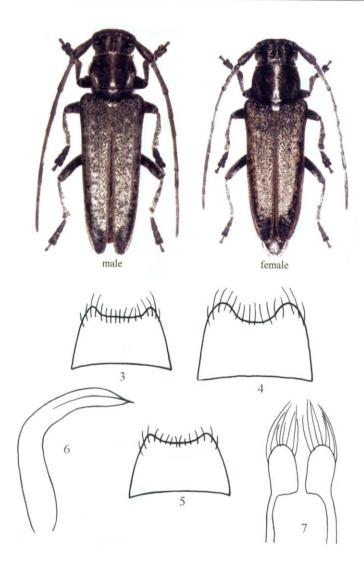


Fig. 1 and 2. *Phytoecia nausicae* n. sp. 1. Male holotype. 2. Female paratype. Fig. 3 to 5. Last abdominal sternum. 3. *Phytoecia nausicae* n. sp. 4. *Phytoecia behen* Sama et Rejzek, 1999. 5. *Phytoecia nepheloides* Sama, 1997. Fig. 6 and 7. *Phytoecia nausicae* n. sp. 6. Median lobe. 7. Tegmen (lateral lobes).

lateral stripes; and in having tarsomere 1 of metatarsi distinctly shorter than 2 and 3 together.

# Key to P. nausicae n. sp. and related species

#### Name derivation:

We wish to dedicate the new species to George's daughter Nausica.

#### **Discussion:**

*P. nausicae* n. sp., *P. behen* and *P. nepheloides* form a homogenous, so far unnamed group, which is defined by the following unique combination of characters: an unidentate mandibular apex; each claw with a stout inner tooth extending from its base to slightly beyond half the length of the parent claw; abdominal sterna without any conspicuous processes or teeth; the male genital structure (general shape of aedeagus and form of endophallic sclerites), and the last abdominal sternum in females notched at apex.

The new group especially resembles the genera (or subgenera respectively) *Pilemia* Fairmaire, 1864, *Coptosia* Fairmaire, 1864 and *Conizonia* Fairmaire, 1864. This group can be separated from *Pilemia* by mandibles which are unidentate apically (in *Pilemia* mandibles are bidentate) and the male genital structure (mainly endophallic sclerites). From *Coptosia* the group can be separated by the shape of pronotum and the structure of endophallic sclerites (distal sclerites of *Coptosia* are very similar to *Pilemia*) and finally from *Conizonia* by slender antennae, by elytra of both sexes being almost parallel until apical fourth and without longitudinal carinae (in *Conizonia* strongly narrowed from the humeri and with three distinct longitudinal carinae) and by the last sternum of females notched at apex (in *Conizonia* the last sternum is rounded at apex with only a shallow transverse impression).

Although it may appear that the above mentioned group of three species is homogenous and well enough defined to describe a new genus we would prefer not to increase the number of higher taxa within Phytoeciini before a thorough revision of this tribe is completed. For this reason we have decided to temporarily include *P. nausicae* n. sp. in the genus *Phytoecia* Dejean, 1835 *sensu lato*.

### **Biology**:

The type locality of *P. nausicae* n. sp. is situated within an extensive area of light oak woodland alternating with woodland pasture. All specimens of *P. nausicae* n. sp. were collected on a *Centaurea* (Asteraceae) plant growing at an altitude of about 600 m and we therefore believe it likely, that this plant serves as the species' host. The host plant, however, has only been found in a very restricted area and the number of individual plants present is also small. Our colleague Jiří Sádlo determined the plant as *Centaurea* 

thracica (Janka) Hayek using incomplete herbarium specimens comprising vegetative parts and young capitula with involucral bracts, but without flowers. This plant species belongs to the subgenus *Microlophus* (Cass.) Dostál. The subgenus is mainly distributed in the East Mediterranean region (Turkey, Syria, Iran) and *C. thracica* is its only European representative (known from Greece, Bulgaria, Rumania and Turkey).

As reported previously (REJZEK, SAMA and ALZIAR 2001) the Turkish *P. behen* develops in *Centaurea urvillei* DC. (Asteraceae). Although the host of the Syrian *P. nepheloides* is still unknown, it seems likely that this group of Phytoeciini is associated with herbaceous plants of the family Asteraceae.

**Additional material examined**: *P. nepheloides*:  $\circlearrowleft$  (topotype), NW Syria, Latakia - Slinfah, 26.-29.V.1998, M. Johanides lgt., G. Sama det.;  $\circlearrowleft$  (topotype), the same collecting data, 30.V.1998, M. Formánek lgt., G. Sama det. *P. behen*:  $4 \circlearrowleft$  (paratypes) and  $6 \backsim$  (paratypes), NE Turkey, Gemecik W Refahiye, 2.-3.VI.1998, M. Rejzek lgt., Sama and Rejzek det.;  $5 \backsim$  (topotypes), the same collecting data, 3953N 3825E, 1967 m, 5.VI.2003, M. Rejzek lgt. and det.

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