

A NEW SPECIES OF THE SUBGENUS *PHYTOECIA* (*PARACOPTOSIA*) DANILEVSKY, 2017 (COLEOPTERA: CERAMBYCIDAE) FROM KARAMAN PROVINCE, TURKEY

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ABSTRACT: *Phytoecia* (*Paracoptosia*) *schuleae* sp. nov. is described from Karaman Province (South part of Central Anatolian region of Turkey). The new species is most close to *Ph*. (*P*.) *brunnerae* (Sama, 2000), *Ph*. (*P*.) *urartica* Kasatkin, 2015 and *Ph*. (*P*.) *schuberti* (Fuchs, 1965).

KEY WORDS: Coleoptera, Cerambycidae, Phytoecia, Paracoptosia, new species, Turkey

The subgenus *Phytoecia* (*Paracoptosia*) was erected by Danilevsky (2017) with the type species *Saperda compacta* Ménétriés, 1832. Danilevsky (2017) stated *Phytoecia* (*Paracoptosia*) comprises 11 species: *Ph.* (*P.*) albovittigera Heyden, 1863, *Ph.* (*P.*) bithynensis Ganglbauer, 1884, *Ph.* (*P.*) brunnerae (Sama, 2000), *Ph.* (*P.*) compacta (Ménétriés, 1832), *Ph.* (*P.*) demelti (Breuning, 1973), *Ph.* (*P.*) ganglbaueri (Pic, 1936), *Ph.* (*P.*) gianassoi (Sama, 2007), *Ph.* (*P.*) minuta Pic, 1891, *Ph.* (*P.*) schuberti (Fuchs, 1965), *Ph.* (*P.*) tauricola (Breuning, 1943), and *Ph.* (*P.*) urartica Kasatkin, 2015. In Turkey, the subgenus is represented with 9 species an exception for the species *Ph.* (*P.*) brunnerae (Sama, 2000) from Syria and *Ph.* (*P.*) gianassoi (Sama, 2007) from Iran (Özdikmen, 2021). As a result of the second author's fieldwork a new species of the subgenus was collected in Karaman province in 2020.

Phytoecia (Paracoptosia) schuleae sp. nov.

(Figs. 1, 2, 3A)

Material. Holotype, \mathcal{Q} : Turkey, Karaman Prov., Central district, Lale village, latitude 37.030246 – longitude 33.284266, 27.V.2014 (leg. Ö. Koçak) (in second author's collection). \mathcal{Q} : The same locality of holotype (leg. Ö. Koçak) (in second author's collection) (Fig. 5).

Description. Body length 9 mm. Underside of the body black, upperside of the body (except for light colored stripes) brown or dark brown; tibiae and tarsi almost completely, and apical parts of femora red-brown; apical tarsomer obscured; antennae almost completely red-brown.

Head with long erect brown hairs and dense recumbent cream-colored public dense punctated. Antennae short, relatively thick, reaching beyond



the middle elytral length; 3^{rd} antennomer almost equal with 1^{st} and a bit longer than 4^{th} . Antennomers 1-3 completely covered with not dense yellowish pubescence and some long erect dark brown hairs; at least antennomers 3-4 (or 3-8) with more or less darkened ring-like apically; antennomers 4-9 with pair of long erect hairs on low side.

Pronotum transverse (1.5 times as wide as long), with long erect brown hairs; covered with dark brown recumbent ground pubescence and with 3 creamcolored or whitish longitudinal stripes: 1 in middle of pronotum and 2 on margins of pronotal disc.

Elytra elongated, 4.15 times as long as pronotum, 2.30 times as long as its own width; slightly narrowed on level between humori and the middle, and tapering towards to apex (not parallel); punctation coarse and moderately dense. Elytra covered with dark brown recumbent ground pubescence; light pubescence forming bright white sutural, cream-colored or whitish humeral and cream-colored or whitish external dorsal stripes; marginal and internal dorsal stripes (presutural stripes) forming light-brown pubescence; additionally, elytra densely covered with long erect dark-brown hairs entire all length.

Ventral side of body and legs covered with dense recumbent cream-colored public public and with some long erect light hairs.

Differential diagnosis. As mentioned above, the subgenus *Phytoecia* (*Paracoptosia*) Danilevsky includes 11 species. Thus, the new species becomes the 12th and newest member of the subgenus.

The new species is most similar to *Ph.* (*P.*) *brunnerae* (Sama, 2000) (Fig. 3B) distributed in Syria, Jordan and Lebanon; Irano-Anatolian species *Ph.* (*P.*) *urartica* Kasatkin, 2015 (Fig. 3C); and Anatolian endemic species *Ph.* (*P.*) *schuberti* (Fuchs, 1965) (Figs. 3D, 4).

In my opinion, I should point out that *Ph.* (*P.*) brunnerae, *Ph.* (*P.*) urartica and the new species clearly differ from most of other species [e.g. *Phytoecia* (*P.*) albovittigera Heyden, 1863, *Ph.* (*P.*) bithynensis Ganglbauer, 1884, *Ph.* (*P.*) compacta (Ménétries, 1832), *Ph.* (*P.*) ganglbaueri (Pic, 1936), *Ph.* (*P.*) minuta Pic, 1891 and *Ph.* (*P.*) schuberti (Fuchs, 1965)] in the subgenus in terms of body pubescence. In this respect, it is clear that there are 2 distinctly different groups within this subgenus, and in this regard, the subgenus needs still revision. I think that a new subgenus description may be needed for this group.

The new species differs from *Ph.* (*P.*) *brunnerae* (Sama, 2000) by legs and antennal coloration, unequal in color of elytral stripes and narrower pronotal lateral stripes etc. Also, it differs from *Ph.* (*P.*) *urartica* Kasatkin, 2015 by body shape, thinner antennae, legs and antennal coloration etc. *Ph.* (*P.*) *schuberti* (Fuchs, 1965) differs from the new species chiefly by coloration and pubescence of body, equal color of elytral stripes etc.

Biology. Adults of the new species were collected on the host plant *Cerinthe minor* ssp. *auriculata* (Boraginaceae) (Fig. 2).

Known host plants of the members of *Phytoecia* (*Paracoptosia*) Danilevsky are the members of plant family Boraginaceae. These are presented below:

- Alkanna graeca (Boraginaceae) for Ph. (P.) albovittigera Heyden, 1863
- Cynoglossum foliosum, Anchusa italica, Rindera lanata (Boraginaceae) for Ph. (P.) bithynensis Ganglbauer, 1884
- Brunnera orientalis (Boraginaceae) for Ph. (P.) brunnerae (Sama, 2000)



- Cynoglossum sp., Solenanthus stamineus, Anchusa italica, Echium sp., Rindera lanata (Boraginaceae) for Ph. (P.) compacta (Ménétries, 1832)
- Anchusa barrelieri, Anchusa italica, Anchusa strigosa, Echium glomeratum (Boraginaceae) for Ph. (P.) ganglbaueri (Pic, 1936)
- *Moltkia* sp., and probably *Echium*, *Onosma* (Boraginaceae) for *Ph*. (*P*.) *urartica* Kasatkin, 2015

Host plants of *Ph.* (*P.*) *demelti* (Breuning, 1973), *Ph.* (*P.*) *gianassoi* (Sama, 2007), *Ph.* (*P.*) *minuta* Pic, 1891, *Ph.* (*P.*) *schuberti* (Fuchs, 1965) and *Ph.* (*P.*) *tauricola* (Breuning, 1943) are unknown now.

Ph. (P.) schuleae	Ph. (P.) brunnerae	Ph. (P.) urartica	Ph. (P.) schuberti
sp. nov.			
Antennae completely red-brown, at least 3 rd and 4 th antennomers with more or less dark rings anically	1 st and 2 nd antennomers entirely black; other antennomers reddish in the large part, with black rings in the anical part	Antennae red-brown, 1 st antennomer entirely black; antennomers 4–9 with dirty-white hairs ring on the bases	Antennae completely reddish
Antennae relatively thick	Antennae relatively thin	Antennae thick	Antennae relatively thick
In legs, apical parts of femora, tibiae and tarsi almost entirely red- brown, the basal 2/3 or 3/4 of femora darkened	Legs black, except for reddish bases of the tibiae (larger in the middle and hind tibiae) and the claws of the tarsi	Legs black with red- brown tibiae and partly tarsomers	Legs entirely reddish or apical parts of femora, tibiae and tarsi almost entirely reddish, the basal parts of femora darkened
Elytral stripes unequal in color	Elytral stripes equal in color	Elytral stripes unequal in color	Elytral stripes equal in color
Internal dorsal stripes (presutural stripes) on elytra almost complete with light brown pubescence, so presutural stripes relatively more indistinct	Internal dorsal stripes (presutural stripes) on elytra almost complete with whitish pubescence, so presutural stripes relatively more distinct	Internal dorsal stripes (presutural stripes) on elytra almost complete with light brown pubescence, so presutural stripes relatively more indistinct	Internal dorsal stripes (presutural stripes) on elytra absent or if present not complete with whitish pubescence, so presutural stripes indistinct or absent
Elytra completely (except for stripes) cover with dense, distinct, dark brown ground pubescence (except for long erect or semierect hairs)	Elytra completely (except for whitish stripes) cover with dense, distinct, black recumbent ground pubescence (except for long erect or semierect hairs)	Elytra completely (except for stripes) cover with dense, distinct, dark brown ground pubescence (except for long erect or semierect hairs)	Ground pubescence on elytra absent or indistinct, relatively short and black colored (except for whitish stripes and long erect or semierect hairs)
Apical part of elytra also completely (except for stripes) cover with dense, distinct, dark brown ground pubescence (except for long erect or semierect hairs)	Apical part of elytra also completely (except for whitish stripes) cover with dense, distinct, black ground pubescence (except for long erect or semierect hairs)	Apical part of elytra also completely (except for stripes) cover with dense, distinct, dark brown ground pubescence (except for long erect or semierect hairs)	Apical part of elytra more or less without ground pubescence (except for long erect or semierect hairs) and so more or less reddish colored
Elytra not parallel, tapering towards to apex	Elytra not parallel, tapering towards to apex	Elytra almost parallel	Elytra almost parallel
Relatively narrower pronotal stripes of cream-colored or whitish pubescence	Relatively larger pronotal stripes of whitish pubescence	Relatively narrower pronotal stripes of whitish pubescence	Relatively narrower pronotal stripes of whitish pubescence
Ground color of upper side dark brown	Ground color of upper side blackish-brown or black	Ground color of upper side dark brown	Ground color of upper side black except for more or less reddish apical part of elytra
Relatively smaller body length (9 mm)	Relatively longer body length (11 mm) (average 8-12 mm)	Longer body length (10.5-11 mm)	Smaller body length (7-8 mm)



Distribution. The new species is known only from South part of Central Anatolian region of Turkey.

Etymology. The name of the new species is dedicated to Şule Koçak (Turkey) who is second author's wife.



Figure 1. Ph. (Paracoptosia) schuleae sp. nov., holotype female, Karaman prov., Turkey.





Figure 2. An adult on the host plant Cerinthe minor ssp. auriculata (Boraginaceae).



Figure 3. **A.** *Phytoecia* (*Paracoptosia*) *schuleae* sp. nov., female holotype from Karaman prov. (Turkey), **B.** *Phytoecia* (*Paracoptosia*) *brunnerae* (Sama, 2000), female paratype from Syria [taken from Kasatkin, 2015], **C.** *Phytoecia* (*Paracoptosia*) *urartica* Kasatkin, 2015, female holotype from Muş prov. (Turkey) [taken from Kasatkin, 2015], **D.** *Phytoecia* (*Paracoptosia*) *schuberti* (Fuchs, 1965), male from Adana prov. (photo provided by M. L. Danilevsky).



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Figure 4. Phytoecia (Paracoptosia) schuberti (Fuchs, 1965), 1. female from Yarpuz (Antalya prov., Akseki), 2. Female from Buğlan pass (Muş prov.), 3. Female from Adana prov., 4. Female from Mersin (=Icel) prov. (photos provided by M. L. Danilevsky).



Figure 5. Karaman province and its districts (from https://www.lafsozluk.com/2009/03/ karaman-ilinin-ilceleri-ve-nufus-savilari.html).

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