Discovery of two new weevil species of *Pholicodes* Schoenherr, 1826 (Coleoptera: Curculionidae: Entiminae) from eastern Turkey (#107309)

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Discovery of two new weevil species of *Pholicodes* Schoenherr, 1826 (Coleoptera: Curculionidae: Entiminae) from eastern Turkey

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Weevils are beetles belonging to the superfamily Curculionoidea, known for their elongated snouts commonly named as rostrum. This superfamily is the most species-rich group in Insecta as well as Animalia kingdom, all they are considered phytophagous. The broad nosed weevil genus of Pholicodes Schoenherr, 1826 is solely Palearctic distribution with forty species. In this study, two new species *Pholicodes artemisiae* sp. nov. and *Pholicodes hakkaricus* sp. nov. are described from eastern Turkey. Morphological taxonomic characters are digitally illustrated. The new species *Ph. artemisiae* sp. nov. is associated with *Artemisia* plant and *Ph. hakkaricus* sp. nov. collected on *Inula helenium* L. in the habitat mountain slopes.

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ABSTRACT

~~Weevils are beetles belonging to the superfamily Curculionoidea, known for their elongated snouts commonly named as rostrum. This superfamily is the most species-rich group in Insecta as well as Animalia kingdom, all they are considered phytophagous.~~ The broad nosed weevil genus of *Pholicodes* Schoenherr, 1826 is solely Palearctic distribution with forty species. In this study, two new species *Pholicodes artemisiae* sp. nov. and *Pholicodes hakkaricus* sp. nov. are described from eastern Turkey. Morphological taxonomic characters are digitally illustrated. The new species *Ph. artemisiae* sp. nov. is associated with *Artemisia* plant and *Ph. hakkaricus* sp. nov. collected on *Inula helenium* L. in the habitat mountain slopes.

Subjects: Biodiversity, Entomology, Insect, Beetle, Taxonomy
Key words: *Pholicodes*, new species, Curculionidae, Anatolia, Turkey

INTRODUCTION

The weevils Curculionoidea (Insecta: Coleoptera) are a hyper diverse superfamily in animal kingdom with about 62.000 described and named species in the World (*Oberprieler et al., 2007*), and the species-rich group of highly specialized phytophagous insects (*Korotyaev, 2000*). According to "Catalogue of Palaearctic Coleoptera" Volume 7 & 8; Curculionoidea I & II (*Löbl & Smetana, 2011, 2013*), total number of species and subspecies distributed in Turkey is 1726. Of these, 1643 species distributed Asian part of Turkey and 83 species in European part. Total number of endemic species is 378 and endemism rate is 21.9%.

The herbivore weevil subfamily Entiminae is the richest group in the world with about 14.000 known species and of these 3.500 species distributed in the Palearctic region (*Korotyaev et al., 2009*). The Palearctic genus *Pholicodes* Schoenherr, 1826 (Coleoptera: Curculionidae: Entiminae: Brachyderini) is represented 40 described species, eight species distributed in Turkey (*Alonso-Zarazaga et al., 2023; Davidian, 1992; Pelletier, 2003*).

During beetle diversity survey from most eastern Anatolia to western, 91 locations were investigated in 2023 and 2024. In two locations, two new species of *Pholicodes* were discovered, named and described in this present paper.

MATERIALS & METHODS

Research territory and field exploration: Field investigations were conducted from eastern to western Turkey between 2023-2024. ~~Samples~~, were collected using sweeping nets, Japan umbrella or by ~~hand~~, individual collecting. Locations were numbered as TR23-01 to TR24-48, geographical data recorded via GPS for each location.

Morphological study: Dry adult specimens were placed overnight into the lukewarm water; genitalia were dissected and placed overnight into 10% KOH to macerate soft tissues, and finally cleaned with distilled water and 70% ethanol. Genitalia were placed in glycerine and examined under the compound microscope and dissection microscope.

Digital photographing: The photographs of the habitus of adults and ~~immature stages~~ were taken using a Canon DSRL 6D camera connected with Leica Z16APO Macroscope, and processed using Canon EOS Utility software. For the photographing of genitalia structures, Zeiss Axio Imager A2 upright microscope with attached Canon DSRL 6D camera were used. Photographs were then assembled to plates by Adobe Photoshop CS 6.0.

Terminology. Morphological terminology follows that in *Van den Berg (1972)*, *Oberprieler et al., (2014)*, *Lyal (2024)*.

Collection depositories: Specimens are deposited in the Biodiversity Science Museum, Atatürk University, Erzurum, Turkey (ABBM) and Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (ZIN).

Abbreviations: A: antennomere, T: tarsomere, V: ventrite.
~~ABBM – Biodiversity Science Museum of Atatürk University (Erzurum, Turkey).~~
~~ZIN – Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia).~~

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RESULTS

Taxonomy

Genus *Pholicodes* Schoenherr, 1826

Type species *Pholicodes plebejus* Schoenherr, 1826

Diagnosis: The genus *Pholicodes* is characterized by the following ~~features:~~, rostrum more or less conical, rostral dorsum convex or flat, antennal pterygia narrow or moderately widened, usually visible in dorsal view, eyes moderately convex, apical declivity of elytra as a rule sloping downwards, femora unarmed, tarsal claws fused, integument of the body densely covered by small size scales and short hairs, inner side of hind tibiae of the male at apical part with long and dense hairs, aedeagus strongly dorso-ventrally arched, laterally to the ostium usually with rows of the short setae, ventral side of the lamella of spiculum ventrale with median longitudinal carina or carina absent (Schoenherr 1826; Davidian 1992; Pelletier 2003).

Subgenus *Pseudopholicodes* Davidian, 1992

Type species *Brachyderes albidus* Boheman, 1840

Subgenus includes three species (*Ph. albidus*, *Ph. vittatus* Schilsky, 1912 and *Ph. problematicus* Davidian, 1992) after *Davidian (1992)* and only one species after Catalogue of Palaearctic Coleoptera (*Alonso-Zarazaga et al., 2023*).

Diagnosis: The subgenus *Pseudopholicodes* is characterized by the following features: rostrum conical, rostral dorsum convex, antennal pterygia narrow, integument of the body densely covered by small size yellowish and brownish scales and short hairs, the inner side of hind tibiae of the male at apical 1/2 or 1/3 with long and dense hairs, aedeagus laterally to the ostium with rows of the short setae or without setae, ventral side of the lamella of spiculum ventrale without median longitudinal carina (*Davidian, 1992*).

***Pholicodes artemisiae* sp. nov.**

Type material: Turkey: Erzurum Prov., Pasinler district, 3-4 km N of Çiçekli Village, N39°54'20", E41°32'56", 2130 m, 17.8.2023, L. & N. Gültekin, 8♂, 7♀. Holotype (♂) and 12 paratype deposited in Biodiversity Science Museum of Atatürk University – ABBM (Erzurum, Turkey), two paratype in ZIN (St. Petersburg, Russia).

Etymology: The name “artemisiae” refers to food plant of the weevil.

Description, Male

Body elongated elliptical (Fig. 1), length 6.2–6.6 mm. Integument dark brown, antennae and tarsi pale chestnut brown. Surface of body covered densely with small suboval to subtrapeziodal brownish to whitish pale milky brown scales, which are micro-striated longitudinally. Dominating color brownish, paler scales condensed on interstriae 3, 5 reflecting interrupted stripes, more distinct and regular on 7-8. Antennae and inner surface of hind femora glabrous, scales smaller and sparser on tibia, rather narrow whitish scales sparsely present on apical part of scape and tarsomeres 1-2. Seta-like decumbent scales scattered among suboval scales. Epistomal margin, latero-ventral margin of mandible, funicle, tibia and tarsi with suberect hairs. These hairs stronger and longer on epistomal and mandibular margins, densely covered inner side of hind

tibia at the apical one third. The inner margin of the pro- and middle tibia with 1-2 sharp denticles among the seta-like hairs.

Head relatively short behind eyes, eyes elongated oval (Fig. 2B), moderately convex, expanding slightly outward of the head contour. Rostrum trapezoidal shape in frontal view (Fig. 2A), short and thick, 1.05-1.10× as wide as long at the base, apex 0.81-0.83× narrower than at base width. Interocular pit as a short longitudinal line. Epifrons convex at basal half, then going to be concave medially toward frons, frons depressed, epistomal margin upward V-shaped delineated with raised epistomal carina. Rostrum in lateral view, slightly curved, scrobe narrow, moderately deep in anterior half, superficial basally, slightly curved, reach to eyes, closed apically before apex. Scape long, 1.65× as long as rostrum, finely sinuate, gradually widening apically, distinctly widened toward apex. Funicle almost subequal length with scape, antennomeres filiform, sub-conically elongated, A1 thicker than A2, the latter 1.5× as long as A1, shortest antennamere A5 0.45x as long as A2. Antennal club fusiform, elongate, 3.0× as long as wide.

Pronotum sub-quadrate (Fig. 1), 1.04-1.14× as wide as long, expanding outwardly at apical one third, pronotal disc moderately convex, basal margin weakly rounded, anterior margin straight. Prosternum short, anterior margin slightly emarginate.

Elytra elongated elliptical (Fig. 1), 2.05-2.30× as long as wide, subparallel sided in basal half, slightly and roundly expanded at midpart, and gradually narrowed apically. Basal margin weakly emarginate; scutellum small, narrow trapezoidal. Elytra fused and wingless. 1st and 2nd striae not fused together at apex.

Legs moderately long, femora stout; tibiae subcylindrical; pro-tibiae distinctly (Fig. 3A) and middle tibia moderately incurved apically with mucro. Hind tibia (Fig. 3C) almost straight, its apical part on inner margin with long and dense hairs. Apical setal comb short, blackish, composed of spines, which are connected basally to each other. Tarsi moderately long, wide; T1 and T2 trapezoidal shape, T2 distinctly narrower and shorter than T1, T3 1.67-1.70× as wide as T2, T4 barely visible at the base of T5, T5 dorso-ventrally curved, gradually dilated apically, claws fine and short, fused basally, very slightly divergent at apex. Underside of tarsi covered with spongy pad.

Abdominal ventrites elongated trapezoidal (Fig. 4A), weakly concave medially on V1-V2, transversely on V3-V4, narrowed distinctly along the margins of V3-V4 posteriorly. V5 swollen, somewhat wide trapezoidal looks like U-shaped.

Male terminalia and genitalia: Tergite 8 subtrapezoidal (Fig. 5A), almost U-shaped, sub-erect hairs distributed on and margins at the basal two third. In frontal view, penis elongated, sub-parallel sided at basal two third, suddenly and distinctly enlarged at apical one third, ends trapezoidal shape with obtuse apex (Figs 5B-C). Lateral margins of the enlarged apical part with 5-6 erected short setae (Fig. 5B). In lateral view, penis strongly curved, gradually and slightly narrowed from midpart to apex (Fig. 5D). Apodeme of penis and tegmen thin, apodeme shorter than half length of penis. Tegmen widely ringed around penis basally. Spiculum gastrale thin (Fig 5E), elongate with sclerotized apical plate.

Female in dimorphism
Body elliptical (Fig. 6), slightly wider and short than male, the length 6.0–6.3 mm. Eyes and scrobe similar in male (Fig. 2D). Rostrum short and thick (Fig. 2B), 1.20-1.25× as wide as long at the base, at the base 1.04-1.09× wider as apex. Interocular pit slightly wider and deeper (Fig. 2B). Pronotum 1.14-1.20× as wide as long, elytra 1.70-1.75× as long as wide, moderately widened in the middle part. Protibia (Fig. 3B) and middle tibiae less incurved apically, mucro smaller on both tibia, hind tibia slightly curved. The inner margin of pro- and middle tibia with 3-4 sharp denticles among the seta-like hairs; inner side of hind tibiae without long and dense hairs (Fig. 3D). Abdominal ventrites (Fig. 4B) flattened medially on V1-V2, transversely on V3-V4, margins gradually narrowed posteriorly from middle part of V1 to the posterior corner of V5. V5 is narrow trapezoidal looks like V-shaped.

Female terminalia and genitalia: Tergite 8 narrow trapezoidal (Fig. 7A), V-shaped, dorso-medial part less sectorized, posterior corner finely and sparsely setose. Gonocoxites elongated (Fig. 7B), rectangular, apex with a series short relatively thick, erect seta-like hairs sorted around stylus. Stylus short (Fig. 7B), sub-cylindrical, apex with a group sub-erect long hair. Spiculum ventrale (Fig. 7C) consist of long apodeme and triangle lamella, which apical margin with setae. Spermatheca C-shaped (Fig. 7D), nodulus and collum swollen, cornu with obtuse apex.

Habitat and plant association: Specimens were collected under *Artemisia* plant on the mountain hill with rocky-stony soil and this open area mainly dominating *Artemisia* plant (Figs 8A-B). It was observed that adults were feeding with the leaves of this plant, running fast when trying to catch.

Differential diagnosis: The new species belongs to the subgenus *Pseudopholicodes* in structure of rostrum and lamella of spiculum ventrale without distinct carina. It is closely related to *Ph. vittatus* in the following features: apical part of antennal scape and 1-2 tarsomeres with narrow whitish scales; fore-tibia of the male moderately emarginated at inner side; aedeagus with short setae in preapical part. From *Ph. vittatus* and *Ph. problematicus* differs in symmetrical apical half of aedeagus. The new species is similar to *Ph. problematicus* in separate 1st and 2nd elytral striae at apex (anterior tibiae of the male of the latter are rather strongly emarginate at the inner side). Aedeagus of the *Ph. albidus* and *Ph. problematicus* in the preapical part without setae. According description of the *Ph. florae* Pelletier, 2003 it is easily differing from *Ph. artemisiae* sp. nov. in wider body and structure of aedeagus.

***Pholicodes hakkaricus* sp. nov.**

Type material: Holotype (♀), Turkey: Hakkâri Prov., 32.2 km NE of Hakkâri, Zap River Valley, N37˚40'58.6", E44˚04'47.1", 1709 m, 25.5.2024, 1♀, M. S. Taylan leg. Holotype deposited in Biodiversity Science Museum of Atatürk University – ABBM (Erzurum, Turkey).

Etymology: The name “hakkaricus” refers to type locality of the province Hakkâri.

Description, Holotype, Female
Body oblong ovate (Fig. 9), length 8.0 mm. Integument black, antenna and tarsi blackish to dark chestnut brown. Integument of the body with subtrapezoidal scales, micro-striated longitudinally,

pale milky brownish to creamy whitish. Among these scales, with stick form decumbent setae distributed densely. Inner surface of ~~hind and middle~~ femora glabrous. Scales become smaller and sparser on femur and tibia, rather narrow whitish scales sparsely present on apical part of scape, surface of scrobe and tarsomeres 1-2. Seta-like suberect hairs present on lateral side of epistomal margin, latero-ventral margin of mandible, funicle, tibia and tarsi. These seta-like hairs somewhat longer on mandibulae, middle and hind tibia. Inner margin of pro-tibia with 7-8 sharp denticulate spins, middle- with 4-5 similar spins and hind tibia with 5-6 respectively. Apical setal comb tibia densely sorted, partly connate basally.

Head very shortly visible behind eyes; eyes subconical (Fig. 10A), strongly convex, widest behind of middle, distinctly protrude out of the head contour, head across eyes almost as wide as anterior margin of pronotum. Basal half of rostrum in dorsal view (Fig. 10A) sub-trapezoidal, somewhat compressed laterally on the level of posterior margin of scrobe; sub-quadrate at apical half. Rostrum short and thick, 1.05× as wide as long, at apex 0.95× as wide as basal width. Epifrons canaliculated longitudinally (Fig. 10A), narrow and superficial at medial part, frons depressed, epistomal margin upward V-shaped, feebly carinated. Rostrum in lateral view, slightly curved, scrobe deep, gradually and strongly widened basally, at the base 3.50× as wide as apical part, curved with distinctly arched ventral margin downward, neither reached eyes nor close to eyes, closed anteriorly before apex. Scape long, 1.10× as long as rostrum, almost straight, gradually widening apically. Antenna long (Fig. 10B), funicle slightly shorter than scape, antennomeres filiform, subconically elongated, A1 thicker than A2, the latter one 1.10× as long as A1, shortest antennamere A5 0.38x as long as A2. Antennal club fusiform, elongate, 3.0× as long as wide.

Pronotum sub-quadrate (Fig. 9), 1.35× as wide as long, distinctly expanding outwardly at middle part, pronotal disc moderately convex, basal margin almost straight, anterior margin straight. Prosternum short, anterior margin slightly emarginate.

Elytra oblong ovate (Fig. 9) in dorsal view, strongly convex in lateral view (Fig. 11A), 1.45× as long as wide, subparallel sided in basal half, slightly and gradually expanded around midpart, then gradually and roundly narrowed posteriorly. Basal margin weakly emarginate; scutellum small, narrow trapezoidal. Interstria 1, narrower than 2, the latter subequal width with 3-5, interstria 6 longitudinally and deeply depressed making straight canal (Figs 11A-B) starting behind humeri and to reach apical declivity. These two-straight canaliculated interstria distinctly visible in dorsal or lateral view (Figs 11A-B).

Legs moderately long, femora stout; tibiae subcylindrical; protibia (Fig. 12A) and middle tibia almost straight, very slightly incurved apically, ~~hind tibia~~ curved inward and dorso-ventrally (Fig. 12B); protibia with small mucro, middle tibia with rather fine respectively. Tarsi moderately long, wide; T1 and T2 trapezoidal, T2 narrower and shorter than T1, T3 1.55× as wide as T2, T4 feebly distinguishable at the base of T5, T5 curved dorso-ventrally, gradually dilated posteriorly, claws small, fused basally, weakly divergent apically. Underside of tarsi with spongy pad.

Abdominal ventrites trapezoidal, V2 depressed medially, V3-V4 weakly concave transversely; V5 trapezoidal V-shaped.

Female terminalia and genitalia: Tergite 8 subtrapezoidal (Fig. 13A), dorso-medial part less sclerotized, posterior margin setose. Gonocoxites elongated rectangular, in preapical part with abundant short and thick, erect setae (Fig. 13B). Stylus transverse, situated at apex. Spiculum ventrale (Fig. 13C) consist of long apodeme and subtriangle lamella rounded laterally, posterior margin densely setose. Spermatheca (Fig. 13D) C-shaped: cornu sickle-shaped, ramus very large, longer than collum. Structure of spermatheca of new species very similar with *Strophomorphus iranensis* Pelletier, 1999.

Habitat and plant association: The dominant plant is *Inula helenium* L. in type locality where western slope of Zap River Valley with a small creak on mountain slope (Figs 14A-B).

Differential diagnosis: The new species is closely related to *Ph. fausti* (Reitter, 1890) with resemblance of body shape, rostrum and eyes. Easily differs from *Ph. fausti* in structure of elytra with two straight lateral hollows along of interstriae 6th and by ~~hind tibiae~~ which are curved dorso-ventrally.

Taxonomic notes: *Pholicodes fausti* was described from Erzurum Province. Two known synonyms of *Ph. fausti*: *Ph. oculatus* Schilsky, 1912 and *Ph. karacaensis* (Hoffmann, 1956). The first one was described from "Syrien" (*Schilsky, 1912*) and the second one from "Montagnes de Karaca" [Şanlıurfa Prov.] (*Hoffmann, 1954*). Taxonomic position of this species is unclear, because in body structure and shape of the eyes similar to the genus *Strophomorphus* Seidlitz, 1867, but in structure of aedeagus it is closer to genus *Pholicodes* (*Pelletier, 1999*).

DISCUSSION

Eastern Turkey has a mountainous region, homeland to sources of big rivers such as Euphrates, Tigris and Aras, the highest mountain Ağrı (Ararat) and large lake Van. The region has high biodiversity harboring biogeographically Anatolian, Iran-Turan, Caucasian and Mesopotamian elements with high endemism rate plants and insect species. Although this richness, it is not well enough investigated yet and under anthropogenic pressure in several aspect.

The weevil diversity investigations are ongoing our study topic from 25 years in this territory and a series of new species (approximately 50) recently described jointly (*Korotyaev & Gültekin, 1999, 2001, 2003a,b, 2020; Korotyaev et al., 2002, 2015, 2017, 2020; Dorofeyev et al., 2004; Gültekin, 2005, 2006a, 2006b, 2008, 2013, 2022; Gültekin & Colonnelli, 2006; Davidian & Gültekin, 2006, 2007, 2015a, 2015b, 2016, 2022; Gültekin et al., 2021; Gültekin & Korotyaev, 2011, 2012; Davidian et al., 2017*). These are evident reflecting richness of group and not yet well surveyed. Many of described new species are broad nosed weevil "Entiminae" group, similarly new finding *Pholicodes* species.

According to biogeographical data on *Pholicodes* (*Alonso-Zarazaga et. al., 2023*), Transcaucasia is one of the richest diversity centers of the genus with 26 described species among total 40 species. The second rich territory is Anatolia with eight species, five of them endemic. Six species are distributed in Mesopotamia, two species Turkistan, one species Crete and one species Saudi Arabia.

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ADDITIONAL INFORMATION AND DECLARATION

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Competing Interests

The authors declare there are no competing interests.

Author Contributions

Field trips, morphological studies and drafting text of manuscript were conducted jointly by two authors. Digital photographs of taxonomic characters of new species were prepared by Neslihan Gültekin.

New Species Registration

The following information was supplied regarding the registration of a newly described species:
The LSID for new taxa *Pholicodes artemisiae* sp. nov. is: urn:lsid:zoobank.org:act:8D82678F-2790-4C6A-A2A8-9DC1FFAEE461

The LSID for new taxa *Pholicodes hakkaricus* sp. nov. is: urn:lsid:zoobank.org:act:EB5F9E16-FF18-4DB2-8232-3EA82E347BDA

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Figure Captions

Figure 1. Male habitus of *Pholicodes artemisiae* sp. nov., holotype.

Figure 2. Rostrum of *Pholicodes artemisiae* sp. nov. (A) male, frontal view; (B) ~~female,~~ lateral view; (C) female, frontal view; (D) female, lateral view.

Figure 3. Tibia of *Pholicodes artemisiae* sp. nov. (A) protibia of male; (B) protibia of female; (C) ~~hind~~ tibia of male; (D) ~~hind tibia~~ of female.

Figure 4. Abdominal ventrite of *Pholicodes artemisiae* sp. nov. (A) male; (B) female.

Figure 5. Male terminalia and genitalia of *Pholicodes artemisiae* sp. nov. (A) tergite 8; (B) frontal view of penis at apical part; (C) frontal view of penis; (D) lateral view of aedeagus; (E) spiculum gastrale.

Figure 6. Female habitus of *Pholicodes artemisiae* sp. nov., paratype.

Figure 7. Female terminalia and genitalia of *Pholicodes artemisiae* sp. nov. (A) tergite 8; (B) gonocoxites; (C) spiculum ventrale; (D) spermatheca.

Figure 8. Habitat and plant association of *Pholicodes artemisiae* sp. nov. (A) *Artemisia* sp.; (B) collecting weevil by N. Gültekin.

Figure 9. Female habitus of *Pholicodes hakkaricus* sp. nov., holotype, dorsal view.

Figure 10. Rostrum and antenna of *Pholicodes hakkaricus* sp. nov. (A) rostrum, frontal view; (B) antenna.

Figure 11. Elytra of *Pholicodes hakkaricus* sp. nov. (A) dorsal view; (B) lateral view.

Figure 12. Tibia of *Pholicodes hakkaricus* sp. nov. (A) protibial; (B) hind tibia.

Figure 13. Female terminalia and genitalia of *Pholicodes hakkaricus* sp. nov. (A) tergite 8; (B) gonocoxites; (C) spiculum ventrale; (D) spermatheca.

Figure 14. Habitat and plant association of *Pholicodes hakkaricus* sp. nov. (A) *Inula helenium* L., dominating plant at type locality; (B) collecting weevil by M. S. Taylan.

Figure 1

Figure 1.

Male habitus of *Pholicodes artemisiae* sp. nov., holotype.

Figure 2

Figure 2.

Rostrum of *Pholicodes artemisiae* sp. nov. (A) male, frontal view; (B) female, lateral view; (C) female, frontal view; (D) female, lateral view.

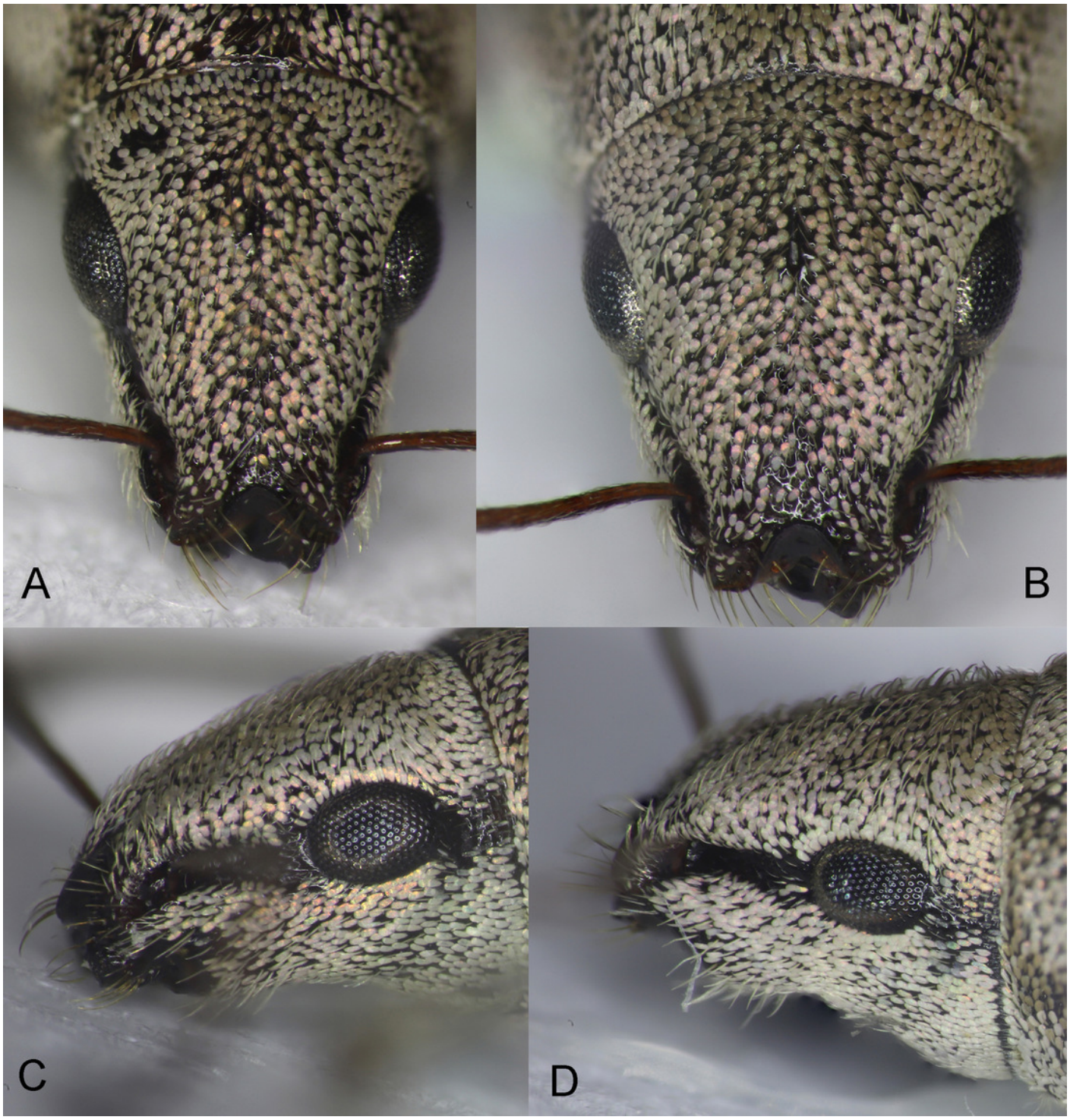
A
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Figure 3

Figure 3.

Tibia of *Pholicodes artemisiae* sp. nov. (A) protibia of male; (B) protibia of female; (C) hind tibia of male; (D) hind tibia of female.

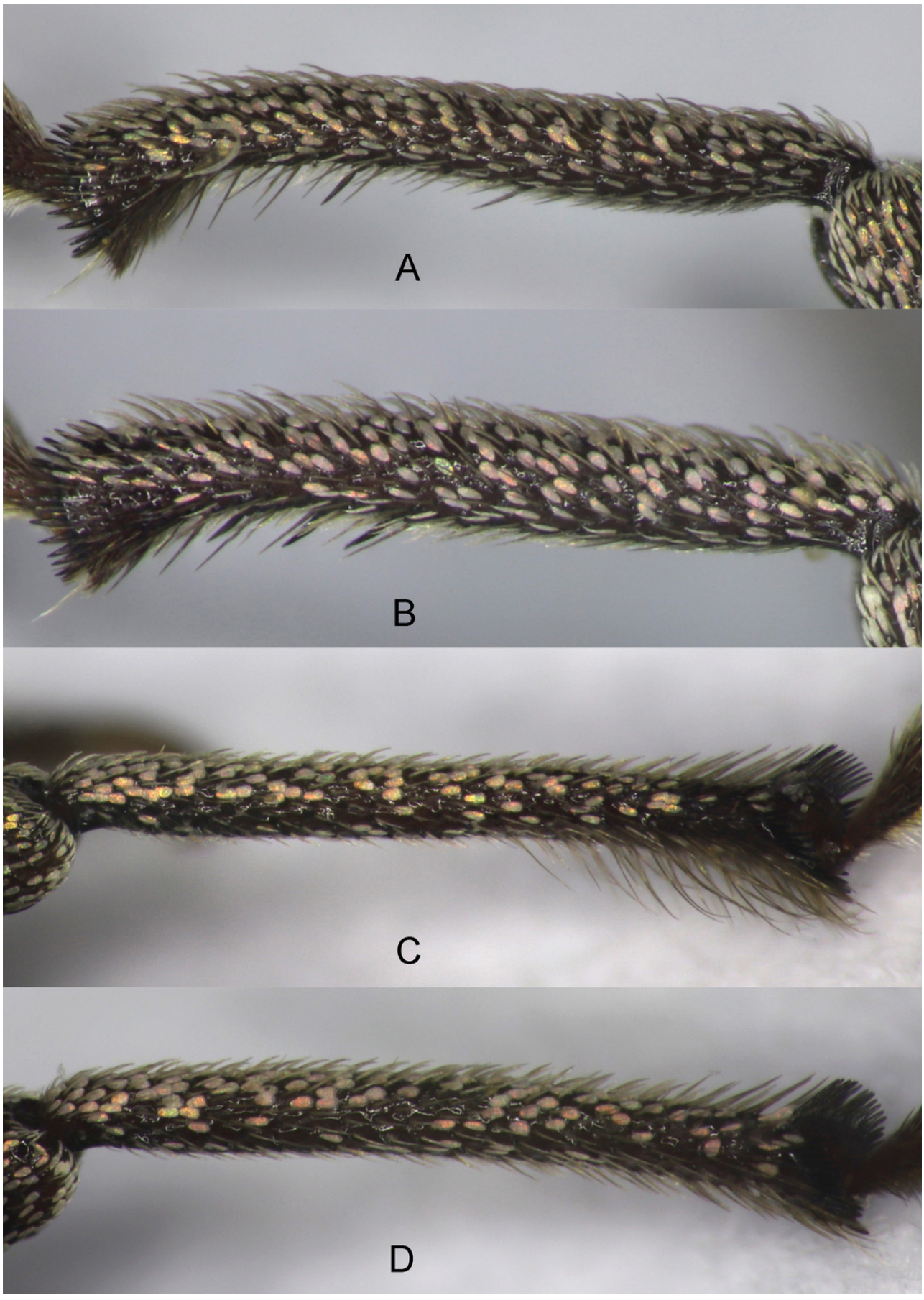
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Figure 4

Figure 4.

Abdominal ventrite of *Pholicodes artemisiae* sp. nov. (A) male; (B) female.

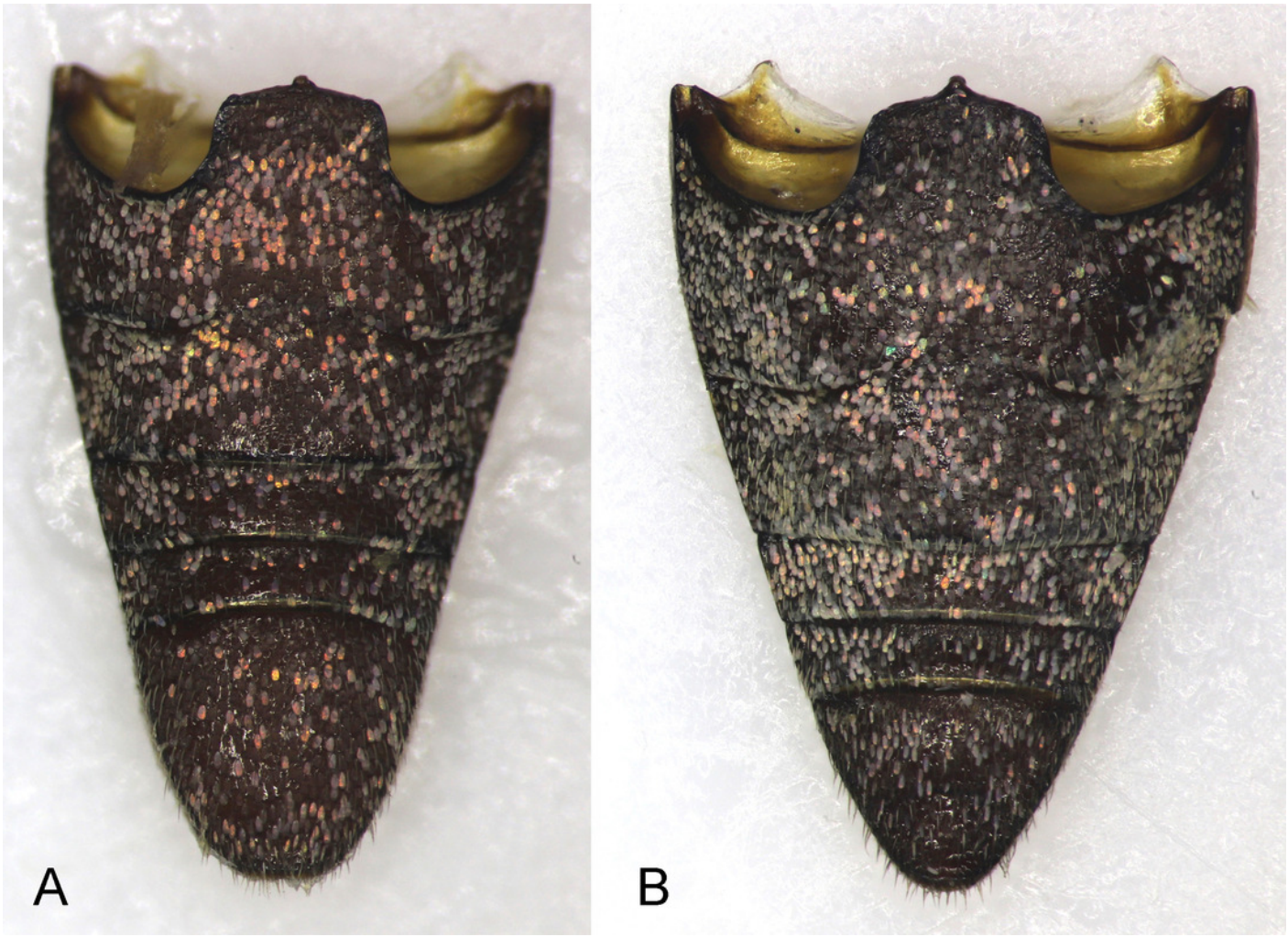

Figure 5

Figure 5.

Male terminalia and genitalia of *Pholicodes artemisiae* sp. nov. (A) tergite 8; (B) frontal view of penis at apical part; (C) frontal view of penis; (D) lateral view of aedeagus; (E) spiculum gastrale.


A
B
C
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E

Figure 6

Figure 6.

Female habitus of *Pholicodes artemisiae* sp. nov., paratype.

Figure 7

Figure 7.

Female terminalia and genitalia of *Pholicodes artemisiae* sp. nov. (A) tergite 8; (B) gonocoxites; (C) spiculum ventrale; (D) spermatheca.

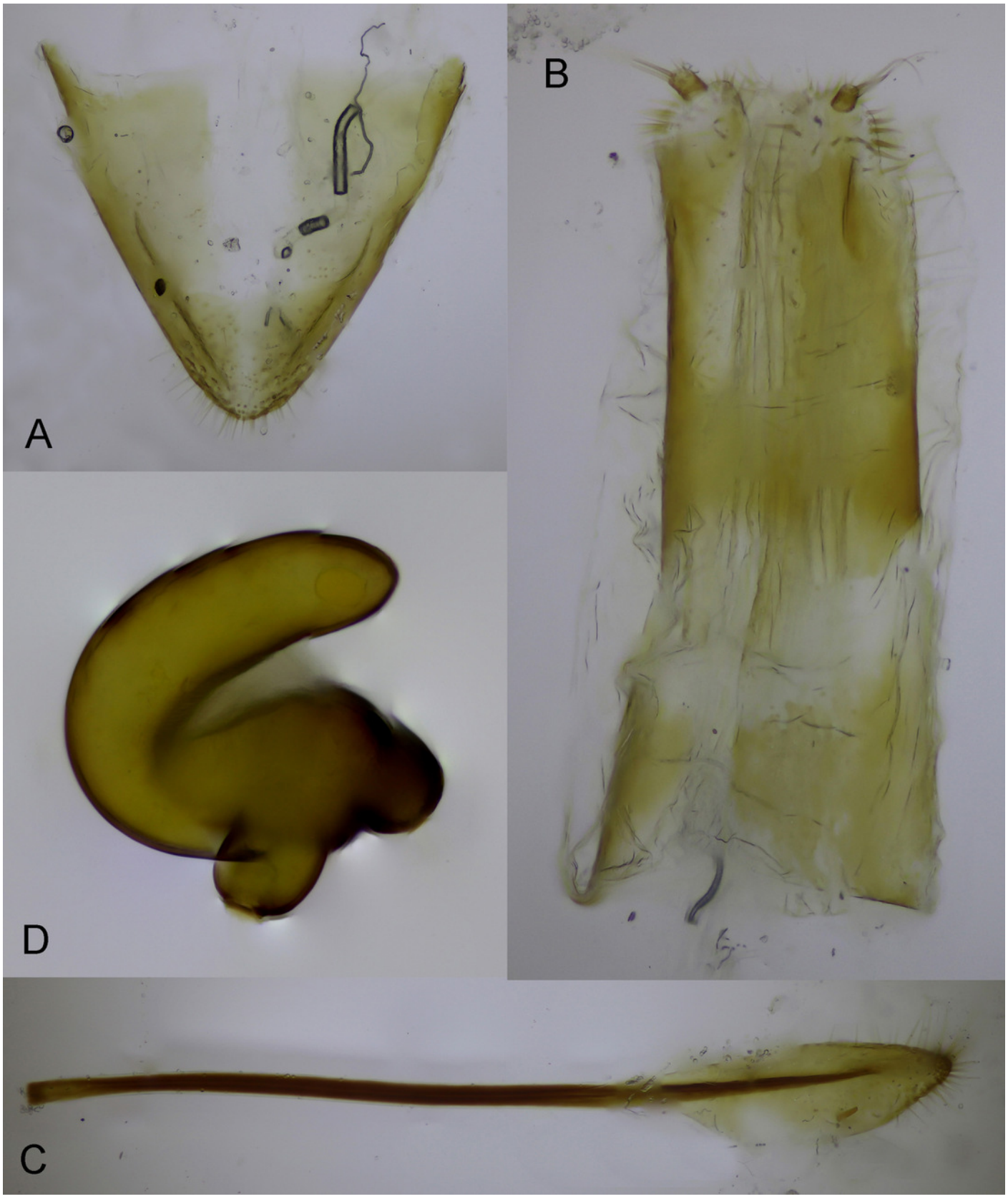
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Figure 8

Figure 8.

Habitat and plant association of *Pholicodes artemisiae* sp. nov. (A) *Artemisia* sp.; (B) collecting weevil by N. Gültekin.


A
B

Figure 9

Figure 9.

Female habitus of *Pholicodes hakkaricus* sp. nov., holotype, dorsal view.

Figure 10

Figure 10.

Rostrum and antenna of *Pholicodes hakkaricus* sp. nov. (A) rostrum, frontal view; (B) antenna.

Figure 11

Figure 11.

Elytra of *Pholicodes hakkaricus* sp. nov. (A) dorsal view; (B) lateral view.


A
B

Figure 12

Figure 12.

Tibia of *Pholicodes hakkaricus* sp. nov. (A) protibial; (B) hind tibia.

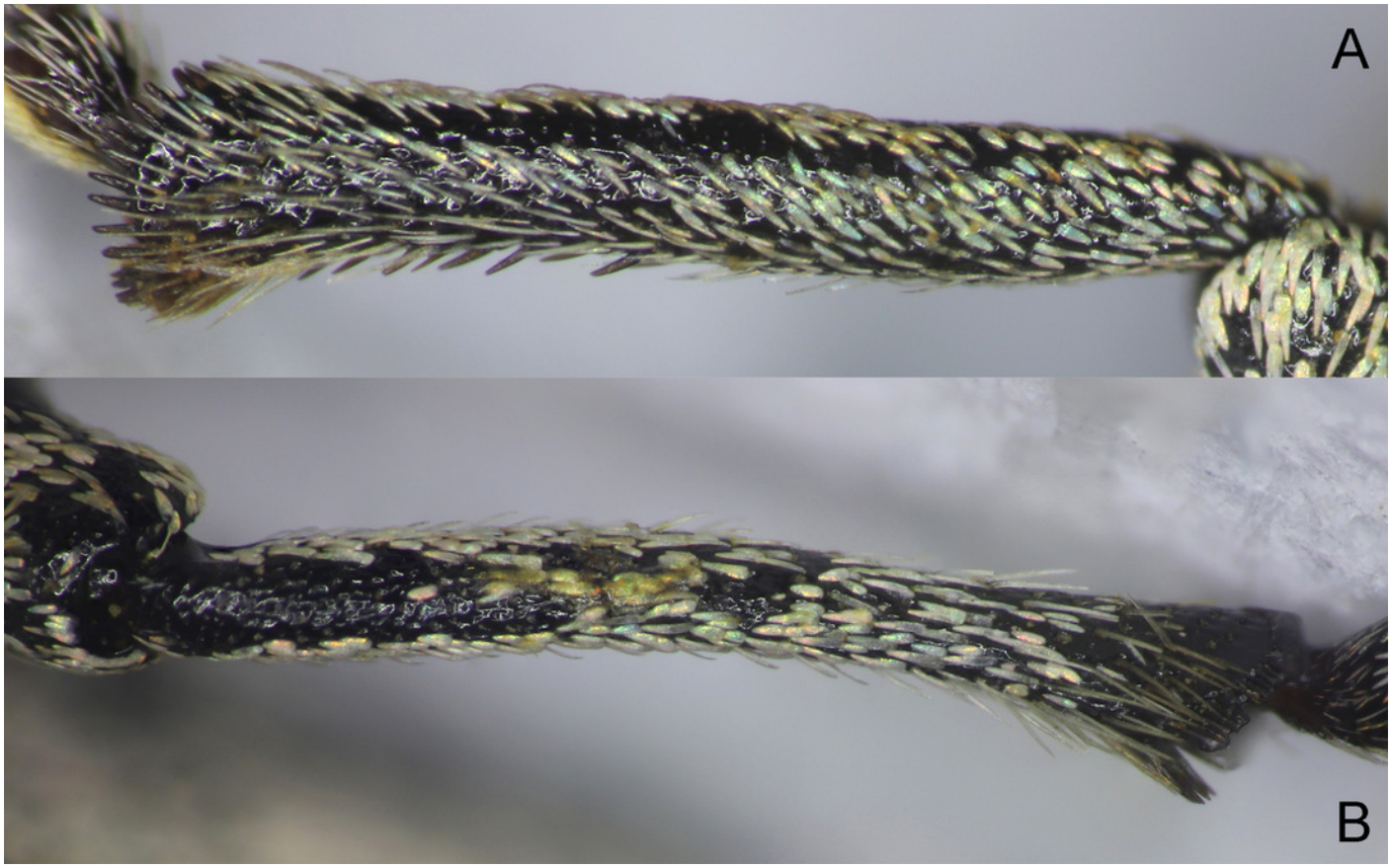

Figure 13

Figure 13.

Female terminalia and genitalia of *Pholicodes hakkaricus* sp. nov. (A) tergite 8; (B) gonocoxites; (C) spiculum ventrale; (D) spermatheca.

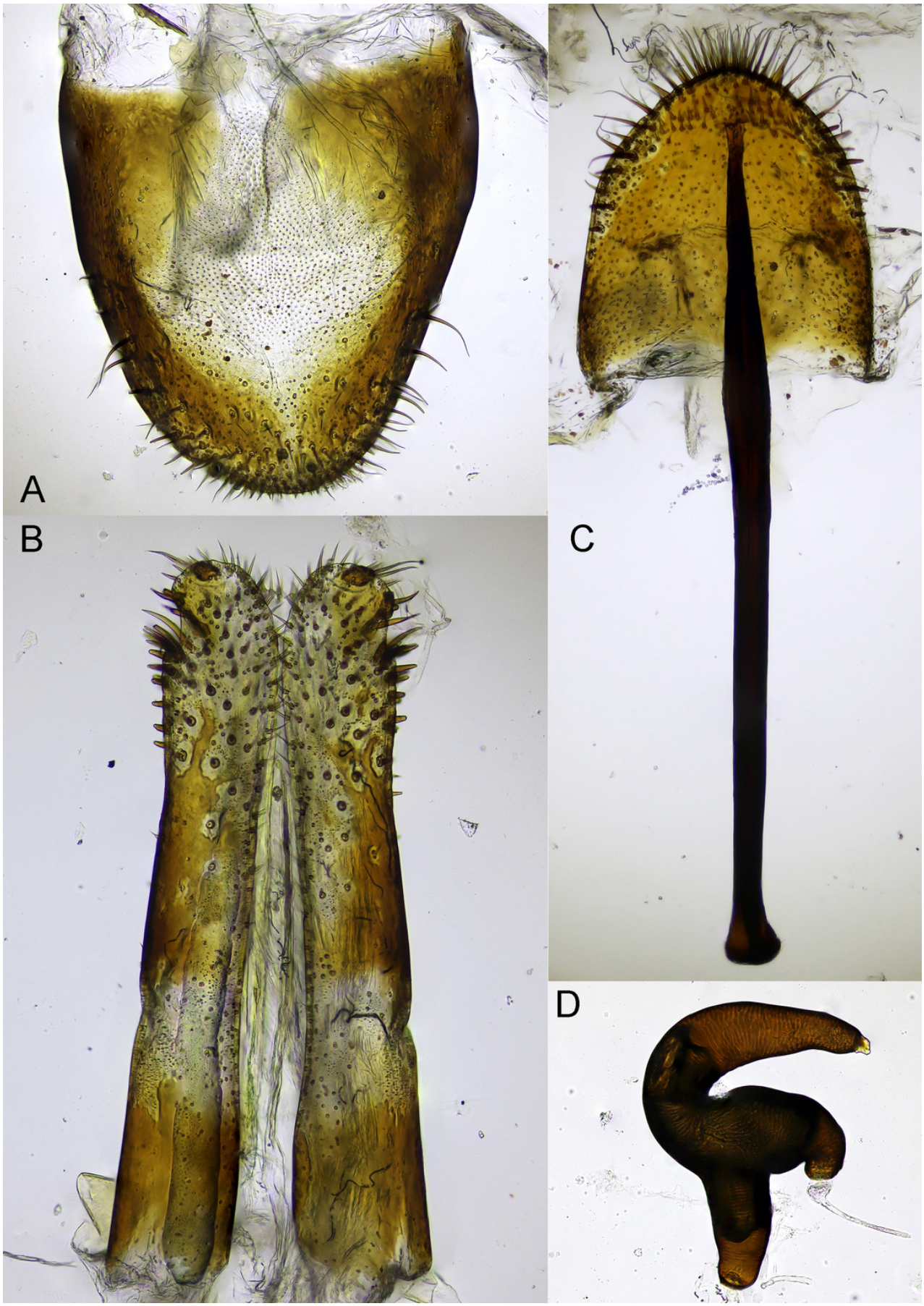
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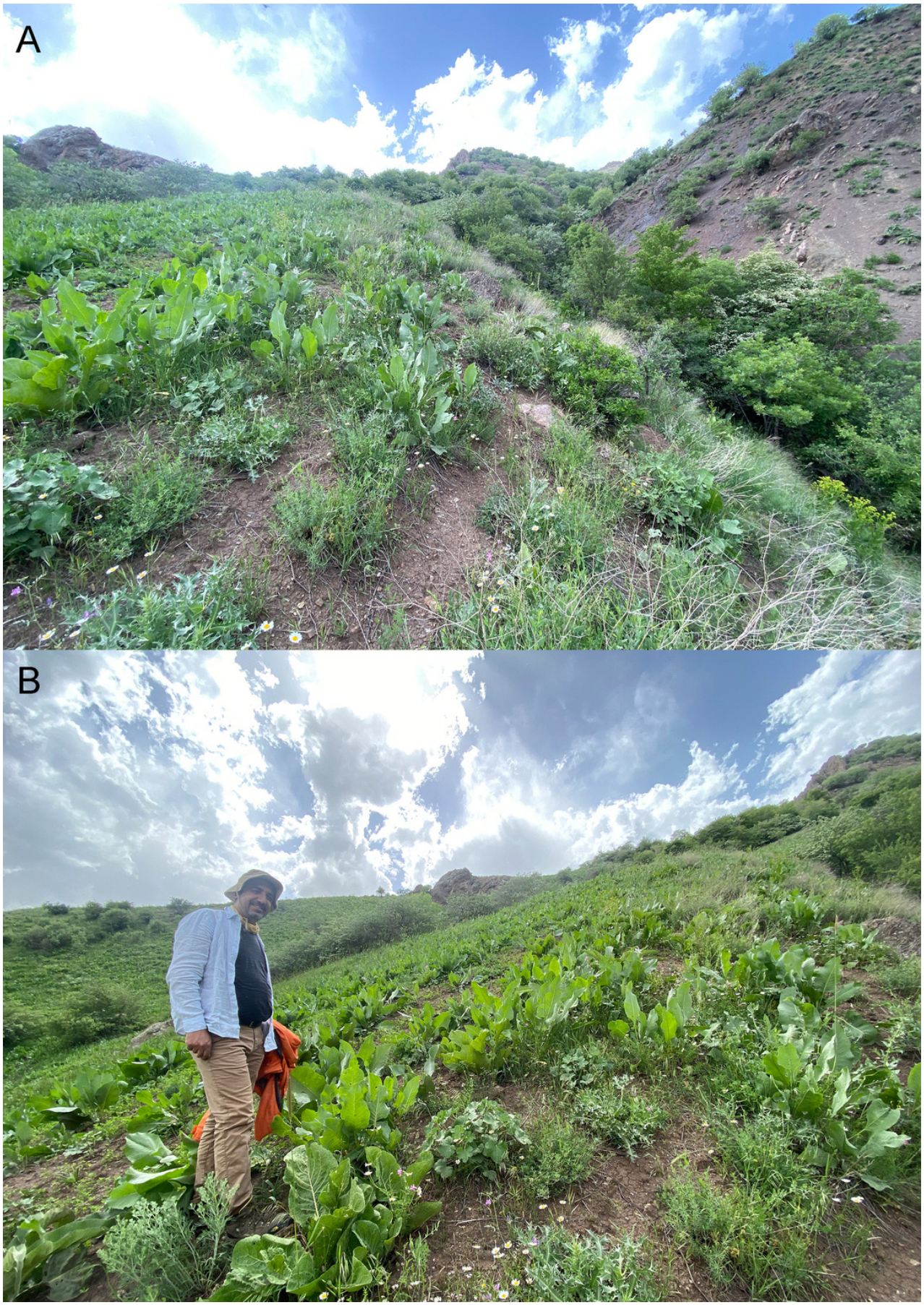
Figure 14

Figure 14.

Habitat and plant association of *Pholicodes hakkaricus* sp. nov. (A) *Inula helenium* L., dominating plant at type locality; (B) collecting weevil by M. S. Taylan.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