

**A new weevil species *Larinus araxicola* sp. n.
(Coleoptera: Curculionidae: Lixinae)
from northeastern Turkey with biological notes**

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***Larinus araxicola* sp. n.
(Coleoptera: Curculionidae: Lixinae), новый вид жука-долгоносика
из северо-восточной Турции, с данными по биологии**

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Abstract. *Larinus araxicola* sp. n. is described from the Araks valley in northeastern Turkey. The new species belongs to the *L. centaurii* (Olivier) species-group. It is similar in the shape of body to *L. griseus* Gyllenhal but the rostrum resembles that of *L. filiformis* Petri, except that it is more constricted in female. *L. araxicola* differs from *L. griseus* in the straight rostrum, and from *L. filiformis*, in the shape of body and aedeagus. Host plant of the new species is *Centaurea polypodiifolia* Boiss. Adults feed on leaves and young buds, female lays eggs in flowerhead, larva grows solitarily and pupates in the flowerhead. One generation develops per year.

Key words. *Larinus araxicola* sp. n., Coleoptera, Curculionidae, Lixinae, new species, northeastern Turkey, host plant, biology.

Резюме. Описан *Larinus araxicola* sp. n. из долины Аракса в северо-восточной Турции. Новый вид относится к группе *L. centaurii* (Olivier) и по форме тела сходен с *L. griseus* Gyllenhal, но строением головотрубки напоминает *L. filiformis* Petri, отличаясь тем, что у самок нового вида она сильнее сужена в вершинной части. *L. araxicola* отличается от *L. griseus* прямой головотрубкой, а от *L. filiformis* – формой тела и эдегуса. Кормовое растение нового вида – *Centaurea polypodiifolia* Boiss. Жуки кормятся на листьях и молодых соцветиях, самка откладывает яйца в соцветия, личинки развиваются в корзинках поодиночке и окукливаются там же. Вид развивается в одном поколении в году.

Ключевые слова. *Larinus araxicola* sp. n., Coleoptera, Curculionidae, Lixinae, новый вид, северо-восточная Турция, кормовое растение, биология.

Introduction

Genus *Larinus* Dejean is the second largest in the subfamily Lixinae after *Lixus* Fabricius and comprises about 180 species, being represented by approximately 140 species in the Palaearctic (Csiki,

1934). It is species-richest in the Mediterranean, where about 100 of them occur; Ter-Minassian (1967) reported about 75 species as living in the former USSR.

Turkey appears to have the diversity of *Larinus* one of the widest in the entire Palaearctic Region. Over 50 species have been recorded only from eastern part of the country in the course of investigations conducted by me. In 2002, three specimens representing an undescribed *Larinus* species were collected on *Centaurea solstitialis* L. In the summer of 2003, it was found in the same location that the host plant of this new species is actually *Centaurea polypodiifolia* Boiss. A long series of specimens of the new species was collected from relatively small spot at the left bank of the Araks River valley. In this paper, the description of the new species is presented provided with drawings and data on its host plant and biology.

Specimens' depositaries are denoted by the following abbreviations: EMET – Entomology Museum, Erzurum, Turkey; LEMT – Lodos Entomology Museum, İzmir, Turkey; ZIN – Zoological Institute of the Russian Academy of Sciences, St. Petersburg; MNHN – Muséum National d'Histoire Naturelle, Paris; MfR – Museum für Tierkunde, Dresden; NHMD – Natural History Museum of Denmark, Copenhagen; MIZPAN – Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw; NRS – Naturhistoriska Riksmuseet, Stockholm; MCZR – Museo Civico di Zoologia, Rome; EC – Enzo Colonnelli collection, Rome.

***Larinus araxicola* Gültekin, sp. n. (Figs 1–4)**

Diagnosis. *Larinus araxicola* sp. n. is related to *L. centaurii* (Olivier, 1807), *L. griseus* Gyllenhal, 1836 and *L. orientalis* Capiomont, 1874; types of the two latter species have been examined by me. The new species differs from all the three allies in the straight rostrum with a different proportion of the female/male rostrum length (F/M): 1.08; 1.10; 1.12, and 1.25 in *L. centaurii*, *L. orientalis*, *L. griseus*, and *L. araxicola* sp. n. (Figs 5, 6), respectively. In the body shape, the new species is similar to *L. griseus*, but has rostrum very much like in *L. filiformis* Petri, except that it is more constricted laterally in female. *L. araxicola* sp. n. clearly differs from *L. filiformis* in the shape of aedeagus and body. According to the original description by Olivier (1807: 278), rostrum of *L. centaurii* is curved, and pronotum with short greyish median and two discal stripes. Capiomont (1874: 322) mentioned that, according to his examination of *L. centaurii* type which is housed in the Chevrolat collection, each elytron has greyish discal stripe. The new species has no discal stripes on elytra; whitish grey pubescence forms small patches scattered over the surface of elytra. Differences between *L. araxicola* (Fig. 1), *L. centaurii* (Fig. 2), *L. griseus* (Fig. 3) and *L. orientalis* (Fig. 4) in the structure of the aedeagus are presented in figure plate.

Description. Measurements. Body length 7.6–9.1 mm.

Coloration. Body black; apical margin of prothorax, antennal scape, proximal segments of funicle, denticles on inner margin of fore tibia and spines in apical combs of tibiae bright chestnut-brown.

Vestiture. Head with short bifid white scales on ventral surface and along latero-ventral eye margin, dorsal eye margin with long hair-like scales. Dorsal surface of rostrum in apical half clothed with similar but shorter scales. Whitish hair-like scales forming lateral stripe along sides of pronotum and condensed in diffuse stripes in apical third and in two small round discal spots (present in fresh material). Elytra with scattered dense whitish spots. Legs and funicle of antennae uniformly clothed with similar whitish scales, club with very short and dense greyish scales and sparsely scattered longer erect setae. Ocular lobes bearing long and dense dirty-white hair-like setae pointed toward eyes.

Male. Rostrum 5.50 times as long as wide at apex, 1.10 times as long as pronotum, cylindrical (Fig. 5), with apical part about as wide as base. Ventral margin of antennal scrobes not clearly visible dorsally. Surface of rostrum shiny, with uniform fine punctation; dorsum with very short and shallow oblong fovea at antennal insertion. Antennae inserted at 0.40 length of rostrum from apex. Scape 1.25 times as long as funicle, cylindrical, suddenly widened at apex. First segment of funicle 1.16 times as long as second, 2nd segment 1.45 times as long as 3rd, 4th and 5th segments of equal length and 1.20 times as wide as long, 6th and 7th segments distinctly transverse, gradually widening to apex. Club 1.90 times as long as wide, elongate-ovate with acuminate apex. Eyes flat, transverse, with dorsal part wider than ventral one. Frons with small, narrow, shallow fovea.

Pronotum 1.50 times as wide as long, roundly narrowing toward apex, weakly neck-shaped constricted near apex. Base moderately deeply bisinuate, scutellar area produced toward scutellum; lateral margin weakly emarginate near base. Ocular lobes not developed; apical margin of prothorax evenly curving ventrally, emarginate below ocular lobes area. Disc moderately convex, finely and sparsely punctate.

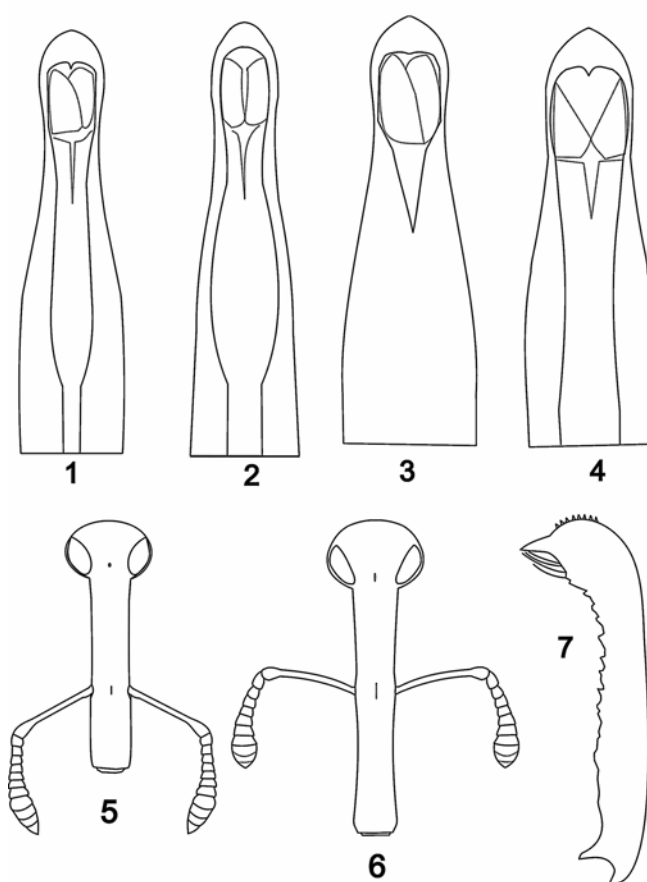
Elytra 1.37 times as long as wide, in widest point 1.20 times as wide as pronotum, gradually narrowing toward apex; sides weakly emarginate before, and ampliate in the middle. Intervals flat, about 5.5 times as wide as striae; striae narrow and shallow, formed from elongate-oval connected punctures.

Legs. Femora distinctly swollen in middle part, fore femur 1.25 times as wide as middle femur, 1.50 times as wide as rostrum at apex. Tibiae medium-long; fore tibia incurved, middle and hind tibiae straight. Inner margin of fore tibia deeply emarginate and bearing several small denticles, those closest to uncus concealed by tuft of setae (Fig. 7). Fore and middle tibiae with unci of subequal lengths; uncus on hind tibia somewhat shorter and smaller than that on middle tibia. Apical comb of fore tibia hanging over base of uncus, with short spines not connate basally. Spines in apical comb of middle and hind tibiae twice as long and dense as those on fore tibia, some of them connate. First tarsal segment triangular, longer than wide; 2nd segment moderately transverse, somewhat widening apically; lobes of 3rd segment 1.62 times as wide as 2nd segment in widest part. Claw-segment moderately widening apically, 0.68 times as long as 1st–3rd segments combined, extending from lobes of 3rd segment by about 2/3 of own length. Claws connate, weakly diverging, with parallel outer margins.

Aedeagus in dorsal view narrowing from base to apex, then suddenly and strongly neck-shaped constricted before apical third and roundly widened at apex (Fig. 1).

Female. Rostrum 1.51 times as long as pronotum, cylindrical, weakly and gradually narrowing from base to antennal insertion, weakly widened in this part; then constricted toward apex and again widened at apex (Fig. 6). Antennal scrobes not visible dorsally, antennae inserted in the middle of rostrum; frontal fovea wider and shallower than in male. Pronotum 1.61 times as wide as long. Elytra 1.29 times as long as wide.

Material. **Holotype:** ♂, Turkey, Erzurum Prov., Araks valley, 10 km W of Horasan, 1650 m, 12 VI 2003 (L. Gültekin). **Paratypes.** 15 ♂, 18 ♀, as holotype; 17 ♂, 15 ♀, as above but B.A. Korotyaev; 2 ♂, 1 ♀, same data as holotype but 11 VI 2002 (L. Gültekin). Holotype and 26 paratypes are deposited in the EMET, 26 paratypes in ZIN, 2 paratypes in each of the following institutions: LEMT, MNHN, MfR, NHMD, MIZPAN, NRS, MCZR, and EC.



Figs 1–7. *Larinus* spp., aedeagus (1–4), rostrum of male (5) and female (6), and fore tibia of male (7). 1, 5–7 – *L. araxicola* sp. n. (1, 5, 7 – holotype); 2 – *L. centaurii* (Ol.) (Adıyaman); 3 – *L. grisescens* Gyll. (Elazığ; compared with type); 4 – *L. orientalis* Cap. (Puglie; compared with type).

Biological notes. Adults of *L. araxicola* are found on *Centaurea polypodiifolia* Boiss. (Asteraceae) second week of June. Usually, 2–3 pairs are present on a plant, concentrating and feeding on young around the inflorescences and making round or semi-round holes. In this period mating takes females open oviposition hole in young capitulae solitarily. Eggs are inserted by very long female mostly in the receptacle tissue, but sometimes also in the flower organs. Oviposition mark is not distinguished from outside. The larva grows in flowerhead solitarily eating flowers. In the beginning of August, most of larvae reach the mature stage and pupate in the flowerheads. In the first week of September, new generation adults already emerged from flowerheads in which no specimens could be found. *L. araxicola* produces one generation per year.

Acknowledgements

References

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