

A new species of the weevil genus *Mecysmoderes* from southern India (Coleoptera: Curculionidae)

B.A. Korotyaev

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Mecysmoderes (Coeliosomus) alexanderi sp. n. is described from southern India. The new species differs from other members of the subgenus *Coeliosomus* in the strongly widened apically tibiae with elongate apical combs composed of sparse stout spines, nearly straight rostrum, more strongly convex dorsally elytra with regularly granulate intervals, and in the presence of a sharp tooth on the inner surface of hind tibia one-third way from apex in male. The structure of the head, with a sharp although shallow depression separating the frons from vertex, is apparently unique in the genus.

B.A. Korotyaev, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia

Examination of the material collected by A.S. Konstantinov (the National Museum of Natural History, Washington, D.C., U.S.A., = USNM), K.D. Prathapan (Kerala Agricultural University, India), and S.V. Saluk (Minsk) in southern India has revealed a new species of the genus *Mecysmoderes* Schoenherr, 1837. The holotype of the new species is in the USNM; a paratype, in the Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (ZIN).

The length of pronotum was measured from its apical margin to the level of the base of the 1st stria of elytra; the lengths of the basal process of pronotum and the elytral suture are measured from the latter point to their apices. The genus *Mecysmoderes* is treated here in the broad sense, without promoting its subgenera to genera proposed and adopted by Colonnelli (2004).

***Mecysmoderes (Coeliosomus) alexanderi* sp. n.** (Figs 1, 2)

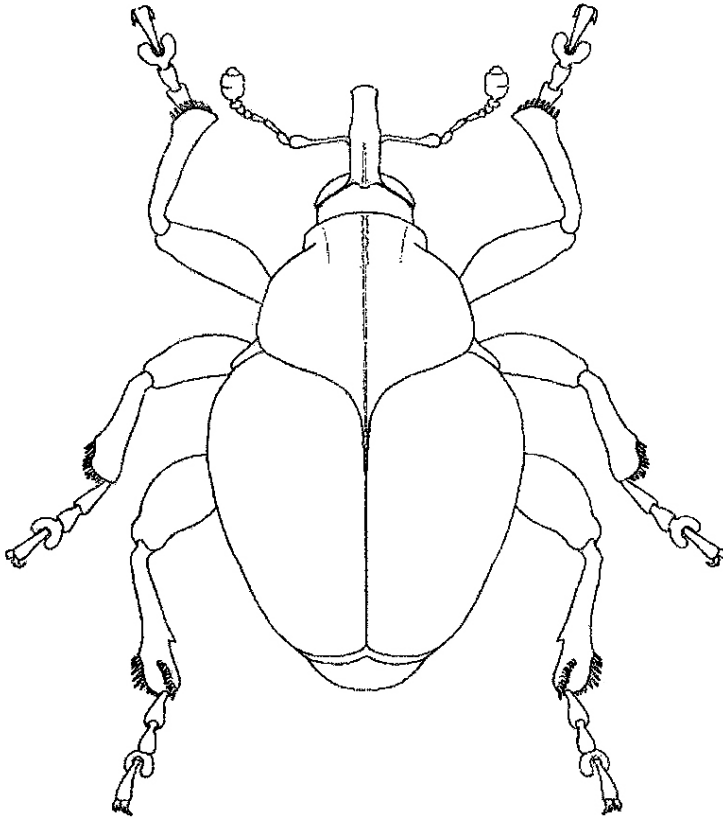
Holotype. ♂, **India, Karnataka**, Western Ghats, 1800 m, alpine meadow, 13°23'23"N, 75°43'09"E, 15.XI.2003 (A.S. Konstantinov, K.D. Prathapan & S. Saluk).

Paratype. ♀, as above.

Description. **Male** (Fig. 1). Rostrum 0.82 times as long as pronotum, straight, barely narrowing from eyes to antennal insertion, smoothly narrowed in front of antennal insertion and subparallel-sided toward apex, slightly flattened dorso-ventrally. Dorsal surface of rostrum in basal part somewhat flattened, with shining, linear, low median carina accompanied by fine elongate punctures and two finer, wrinkle-shaped carinae running somewhat

obliquely posteriad from near middle of rostrum to its base. Apical part of rostral dorsum more regularly convex in cross-section, shining, with sparse small elongate punctures thinning toward apex. Frons as wide as rostrum at base, leveling with the latter, slightly convex in anterior part and separated from vertex by narrow depression along sharp, noticeably raised posterior eye margins, which is prolonged across frons. Median rostral carina ends in minute swelling on posterior margin of frons. Eyes large, rounded, moderately convex. Vertex weakly convex, densely and somewhat rugosely punctate, with fine median carina along its entire length. Punctures separated by narrow wrinkle-shaped intervals, bottom of punctures matt, coarsely shagreened. Antennae inserted in the middle of rostrum, short. Scape slender, parallel-sided in basal 2/3, then abruptly, rather strongly roundly swollen in apical third. Second segment of funicle about 1.5 times as long as 1st and 3rd segments, 4th segment about as long as wide, 5th and 6th segments noticeably transverse. Club short, slightly longer than wide, with blunted base and widely rounded apex. Pubescence on funicle and basal segment of club fine, moderately long.

Pronotum 1.09 times as wide as long, with base deeply protruding posteriorly and basal process comprising 0.31 length of elytral suture. Sides weakly rounded, arcuately converging to sharp, rather short apical constriction. Apical margin not raised, evenly and weakly arcuately produced anteriorly between short, fine lateral carinae. Disc very weakly convex in cross-section and almost flat longitudinally, separated by shallow



Figs 1. *Mecysmoderes alexanderi* sp. n., male holotype, general view.

depression from elytra. Median carina fine, entire, although weakened in middle of disc. Lateral carinae weak, ca. 1/5 length of pronotum, subparallel, not quite reaching apical margin of pronotum and gradually turning into shining intervals between pronotal punctures. The latter simple, not mesh-like, medium-sized, rather deep, mostly elongate and arranged in irregular striae. Intervals between punctures shining, narrower than punctures in middle of disc, and matt, wrinkle-shaped at sides where punctures are larger.

Elytra as wide as long, cordate, strongly and evenly narrowing behind rounded humeri, rather narrowly separately rounded at apices. Disc moderately and almost evenly convex except for moderately depressed part along basal process of pronotum. Striae rather narrow but deep, with remote deep punctures. Intervals 2-2.5 times as wide as striae, convex, with smoothed margins, each with row of regularly spaced transverse shining granules with ridged apex across its entire width.

Legs stout, each femur with minute (fore femur) to medium-sized (hind femur) tooth. Hind femur rather strongly widened in apical part, with strongly arcuate dorsal margin, 1.33 times

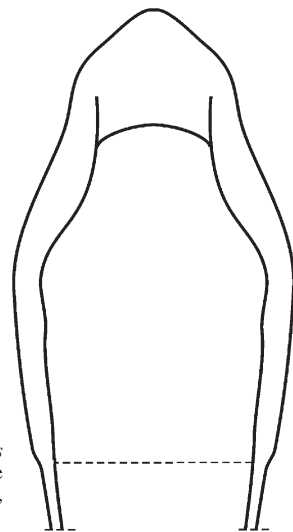
as wide as middle femur. Tibiae moderately to rather strongly widened in apical third, with long apical combs bearing long stout spines. Fore tibia moderately incurved and rather strongly widened in apical third, with weakly convex apical comb bearing nine knife-shaped spines separated by own width. Mucro on fore tibia short, rounded, about as long as wide. Middle tibia almost straight except for very short incurved apical part, moderately and evenly widening toward the angularly protruding end of shallowly emarginate apical comb occupying ca. 0.4 its length and bearing 11 large spines. Mucro on middle tibia stout, obtuse. Hind tibia moderately and evenly widening and weakly outcurved apically, with almost straight apical comb comprising about 1/5 length of tibia and bearing seven spines on lateral part of comb angularly separated from its apical part. Spines somewhat finer than those on middle tibia. Mucro on hind tibia absent but inner face of tibia with medium-sized denticle 1/3 way from tibial apex, concave distal to denticle and densely covered with subrecumbent narrow scales similar to rest pubescence of apical part of tibia, but hair-like scales along posterior face of tibia closest to

denticle longer and more strongly raised. Tarsi rather short; 1st segment about 2.5, 2nd segment more than 1.5 times as long as wide, 3rd segment somewhat shorter than, and almost twice as wide as 2nd, claw-segment strongly widened apically, by 3/5 of its length protruding from lobes of 3rd segment. Claws large, with long, free appendages reaching 2/3 length of claws.

Meso- and metasterna without excavation for rostrum, mesosternum behind middle coxae and two basal ventrites of abdomen with common deep wide-oval depression across their median half; sides of depression well-outlined but not ridged. Third and fourth ventrites shallowly depressed in middle part; anal ventrite with deep weakly transverse depression in median third along its entire length, sides of depression more strongly raised toward apex of ventrite but forming no sharp ridges or tooth-like projections. Bottom of depression on anal ventrite densely punctate and clothed with narrower, longer and more strongly raised white scales than those on sides of ventrite, scales on sides of depression longest and forming rounded-triangular prominences in posterior view separated by obtuse-angular emargination. Posterior edge of anal ventrite in middle third with narrow shining margin. Pygidium weakly transverse, weakly convex except for somewhat depressed medio-posterior part, weakly shining, somewhat rugosely punctate.

Aedeagus (Fig. 2) rather strongly curved dorso-ventrally somewhat distal to middle, roundly ampliate in middle part, somewhat constricted before the narrowed apical part, very narrowly rounded at apex, with narrow heavily sclerotized lateral areas and membranous dorsal side.

Body chestnut-brown with darker head (except apex of rostrum), prothorax, and underside; antennae slightly paler than rest parts. Vestiture of dorsal surface sparse and rather fine, not concealing integument. Basal part of rostrum and frons with moderately dense subrecumbent, long, narrow, white scales; vertex with white hairs concentrated mostly along anterior margin. Pronotum with moderately dense transversely oriented light recumbent hair-like scales forming no pattern. Sutural spot on elytra about twice as long as wide, weakly rounded at sides, dull dark brown in middle half and white at extremities, ending somewhat behind apex of basal process of pronotum. Elytra with sparse linear white scales behind sutural spot along inner margin of sutural interval, with not very conspicuous subrecumbent long brown scales truncate apically on granules on intervals, and with setiform subrecumbent scales in stria punctures. Underside with dense white scaling leaving bare convex areas above fore coxal cavities and thinned above middle coxal cavities, on ventral half of mesepimera and anterior part



Figs 2. *Mecysmoderes alexanderi* sp. n., male holotype, aedeagus, dorsal view.

of metepisterna. Depression on metasternum lacking scales except few ones along midline (probably abraded); 1st and 2nd ventrites with scales in depression as dense as elsewhere but somewhat more strongly raised. Pygidium moderately densely clothed with yellow subrecumbent hairs, with white long scales along ventral margin. Legs uniformly covered with narrow recumbent yellowish scales.

Female (apex of rostrum wanting). Similar to male except as following. Rostrum with median carina not reaching antennal insertion, gradually smoothening slightly basal to it; punctures along carina finer, lateral carinae obsolete. Apical part of rostrum almost impunctate. All tibiae non-mucronate, fore and middle tibiae straight, hind one somewhat outcurved apically. Middle tibia with apical comb occupying about half its outer face and ending in large angular prominence near middle of tibia. Metasternum not depressed, weakly convex longitudinally and rather steeply sloping to venter, the latter also lacking depressions at base and on anal ventrite. Pygidium weakly transverse, weakly convex in cross-section and almost flat longitudinally.

Body length 2.63–2.81 mm.

Comparison. The new species differs from other members of the subgenus *Coeliosomus* Motschulsky in the strongly widened apically tibiae with elongate apical combs composed of sparse stout spines, nearly straight rostrum, more strongly convex dorsally elytra with regularly granulate intervals, and in the presence of a sharp tooth on the inner surface of hind tibia one-third way from apex in male. The structure of the head, with a sharp although shallow depression separating the frons from vertex, is apparently unique in the genus.

Etymology. The species is named after Dr. Alexander S. Konstantinov (USNM).

Acknowledgements

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