Pseudonotocorax cornelli sp. nov. from India and notes on the Asian Platynotini (Coleoptera: Tenebrionidae)

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Abstract. Pseudonotocorax cornelli sp. nov. is described from India. The following synonym is proposed: Eurynotus laminicollis Fairmaire, 1894 (=Indeucolus costatus Kaszab, 1975).

Key words: entomology, taxonomy, new species, female genitalia, Coleoptera, Tenebrionidae, Platynotini, Asia.

In his 1997 revision Iwan distinguished the genus Pseudonotocorax with a newly described species P. mroczkowskii, based on the structure of prosternal process, elytral epipleuron and aedeagus. P. cornelli sp. nov. is the second known species of the genus Pseudonotocorax Iwan.

Pseudonotocorax cornelli sp. nov.
(figs 1-19, 22)

Name derivation
The species is named in honour of J. Cornell, collector of the type specimens.

Terra typica
Maharashtra (India).
**DIAGNOSIS**

*P. cornelli* is close to *mroczkowskii* due to the structure of the prosternal process (strongly convex with narrow bordering disappearing at apex), male fore tibia and tarsus (strongly widened), connection of elytral striae (1-free, 2-9, 3-8, 4-7, 5-6), elytral epipleuron (with “tongue” disappearing just before apex), last abdominal ventrite (without bordering) and aedeagus structure (apical part parallelsided).

The species differ in the pronotum shape (sides narrowing towards apex in *cornelli*; rounded in *mroczkowskii*), elytral punctuation in striae (regular, with very small and rounded punctures in *cornelli*; irregular, punctures elongated and diffused in *mroczkowskii*) and in male characters - structure of fore tibia (with denticle in *cornelli*, widened in *mroczkowskii*), mid tibia (with sharp denticle in *cornelli*, obtuse in *mroczkowskii*), hind tibia (with a large, preapical denticle in *cornelli*, simple in *mroczkowskii*) and mid femur (simple in *cornelli*; with small denticle on the inner side in *mroczkowskii*).

**DESCRIPTION**

Body oval, in posterior part of elytra distinctly convex, upperside mat, underside with a greasy sheen. Male (holotype): length 15.3 mm, pronotum length/breadth ratio ca. 0.59, elytra length/breadth ratio ca. 1.34, length ratio...
pronotum/elytra ca. 0.34, breadth ratio pronotum/elytra ca. 0.78; female (paratype): length 17.5 mm, pl/pb ca. 0.60, el/eb ca. 1.30, pl/el ca. 0.37, pb/eb ca. 0.80. Head widest at temple level; eye poorly narrowed laterally (between tempus and gena 5 facets). Head and pronotum punctuation fairly dense, distance between punctures ca. 1.0-2.0 puncture diameter. Antennal segment 3 ca. 3.0-3.4 x as long as segment 2. Mentum as in fig. 5. Pronotum (fig. 1) widest at base; sides narrowed towards apex, without emargination anterior to posterior angles (as in the genus Adamus); posterior angles sharp; lateral border very narrow (ca. 0.22-0.28 x width of antennal segment 3); bordering of anterior margin widely interrupted in middle; base entirely bordered, strongly bisinuately emarginate. Scutellum glossy, strongly punctate, relatively large (distance between humeral angle and scutellum ca. 3.5 x scutellum width). Anterior part of elytron as in fig. 4. Humeral angles rounded; punctuation in striae regular, punctures very small; intervals very poorly convex, punctuation barely visible; connection of elytral striae as follows: 1-free, 2-9, 3-8, 4-7, 5-6, epipleuron strongly narrowed (fig. 3), its bordering („tongue“) disappearing just before apex (fig. 7); elytra strongly tucked in - interval IX and parts of VIII and VII visible from the underside. Prosterum practically smooth; prosternal process strongly convex; bordering narrow, disappearing at apex (fig. 2). Last abdominal ventrite unbordered; only

10-17. Pseudonotocorax cornelli: 10 – dorsal and 11 – ventral view of male fore tibia; 12 – dorsal and 13 – ventral view of male mid tibia; 14 – ventral and 15 – dorsal view of male hind tibia; 16 – mid and 17 – hind male tarsi, dorsal view
delicate prints at base visible (fig. 6). Male legs: fore tarsi strongly widened (on underside short, dense hairs, without glabrous gutters) (figs 8, 9), mid and hind tarsi narrow (figs 16, 17), median glabrous gutters on each segment, fore tibia moderately widened, with a wide longitudinal ridge and obtuse denticle on inner margin (figs 10, 11); on mid tibia a sharp preapical denticle (figs 12, 13), hind tibia apically widened (figs 14, 15), mid femur simple. Aedeagus as in fig. 19, apical part narrowed, but sides parallel, length ratio apical part/basal part of aedeagal tegmen = 1.0/4.1; ovipositor (fig. 18): length ratio paraproct/coxites1 = 4.3, coxites1 breadth/length ratio = 1.5, length ratios coxites1/coxites2/coxites3/coxites4/coxites4-coxites3 = 1.0/0.9/1.7/1.3/0.7.

DISTRIBUTION (fig. 22)
India.

TYPES
Holotype, male, JFC: “Maharashtra, Bangalore, UM, 3 July 92, J Cornell”. Paratype, female, JFC: “Maharashtra, Aurangabad, 9 July 92, J Cornell, under stones”.

**Eucolus laminicollis** (Fairmaire, 1894) comb. nov.

*Eurynotus laminicollis* Fairmaire, 1894: 322.
*Indeucolus costatus* Kaszab, 1975: 282 syn. nov.
The results of the present supplementary studies on the female genitalia (the presence of the “lock” mechanism in the bursa copulatrix) of this species confirm Iwan’s (1997) interpretation of the genus *Eucolus*.

**Types**

*Eurynotus laminicollis* FAIRMAIRE, 1894: Holotype, male, MNHN: “*Eurynotus laminicollis* FAIRM., Abyssinia; Abyssinia; Type; Muséum Paris, 1906, coll. L. FAIRMAIRE”. Examined.


22. Distribution of *Pseudonotocorax cornelli* (solid circle) and *P. mroczkowskii* (open circle)
**Rugoplatynotus Kaszab**
(figs 20, 21)


Type species, by monotypy: *Pseudoblaps Andrewesi* Fairmaire, 1896.

Kaszab (1975) distinguished the genus *Rugoplatynotus*, with a single species *P. andrewesi* (Fairmaire). This genus is defined by the following characters: complete absence of pronotal bordering and the presence of shiny tubercles covering pronotum and elytra.

The male mid femur with the denticle and the absence of „tongue” in the apical part of elytral epipleuron place *Rugoplatynotus* close to the „Menearchus” lineage, while the structure of the aedeagus (strongly tapered apical part) and the distribution place it near the „Platynotus” lineage (Iwan, 1997).

The present interpretation of *Rugoplatynotus* on the basis of characters of female genitalia (large sclerites in the bursa copulatrix), the presence of the same structure of the aedeagus, specific connection of elytral striae (1-free, 2-9, 3-6, 4-5, 7-8) indicates close affinity with the genus *Notocorax*.

**ABBREVIATIONS**

HNHM - Hungarian Natural History Museum, Budapest, Hungary (O. Merkl);
JFC - Julio Ferrer Collection, Stockholm, Sweden;

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**REFERENCES**


