

NOTOCORAX MINIMUS SP. NOV. FROM BURMA (COLEOPTERA: TENEBRIONIDAE: PLATYNOTINI)

DARIUSZ IWAN

Museum and Institute of Zoology, Polish Academy of Sciences, Wileza 64, 00-679 Warszawa, Poland; e-mail: darek@robal.miiiz.waw.pl

Abstract.— *Notocorax minimus* sp. nov. from Burma is described, illustrated and compared with their relatives.



Key words.— Coleoptera, Tenebrionidae, Platynotini, *Notocorax*, new species, Burma.

INTRODUCTION

The monotypic genus *Notocorax* was erected by Dejean (1834) for *Opatrum javanum* Wiedemann, 1819. My interpretation of the genus was presented in the revision of the Asian genera of the tribe Platynotini in 1997. *Notocorax* is close to the lineage "Platynotus" and the genus *Penthicoides* Fairmaire. It is characterized by specific connection of elytral striae (1-free, 2-9, 3-6, 4-5, 7-9; in *N. marzenae* Iwan and *N. minimus* sp. nov. – 1-9, 2-7, 3-6, 4-5, 8-free) and the presence of 3 large sclerites in the bursa copulatrix.

Further new species of this genus have recently been collected by J. Kaláb from Burma.

At present the genus *Notocorax* includes 6 species, which occur in S. China (Yunnan, Hainan), Burma, Laos, Vietnam, Thailand, Cambodia and Indonesia (Java, Bali, Lombok, Sumbawa, Sumba, Flores, Timor, Tanimbar, Borneo, Celebes, Buru) (Fig. 22).

MATERIAL AND METHODS

Means and ratios are based on all specimens listed under "Type" (measures of the genitalia – 2 specimens). Measurements were made as follows: width of lateral pronotal border – in the middle of lateral pronotal margin; width of anterior elytral margin – from humeral angle to scutellum; body length – from anterior margin of labrum to elytral apex; body width – maximum elytral width; pronotal length – in the middle of pronotum; length of pronotum between angles – pronotal length from tip of anterior to tip of posterior angle.

Types are preserved in Zoologisches Staatssammlung, München, Germany, in permanent loan to Prof. Hans J. Bremer.

Notocorax minimus sp. nov.

Name derivation. Latin adjective, *minimus*: small, refers to the small body size.

Locus typicus. Monywa (Burma).

Diagnosis. *N. minimus* is similar to *N. marzenae* and *N. rondoni* (Ardoin) in the shape of pronotum. This species is close to *N. marzenae* due to the unbordered elytral epipleuron and connection of the elytral rows.

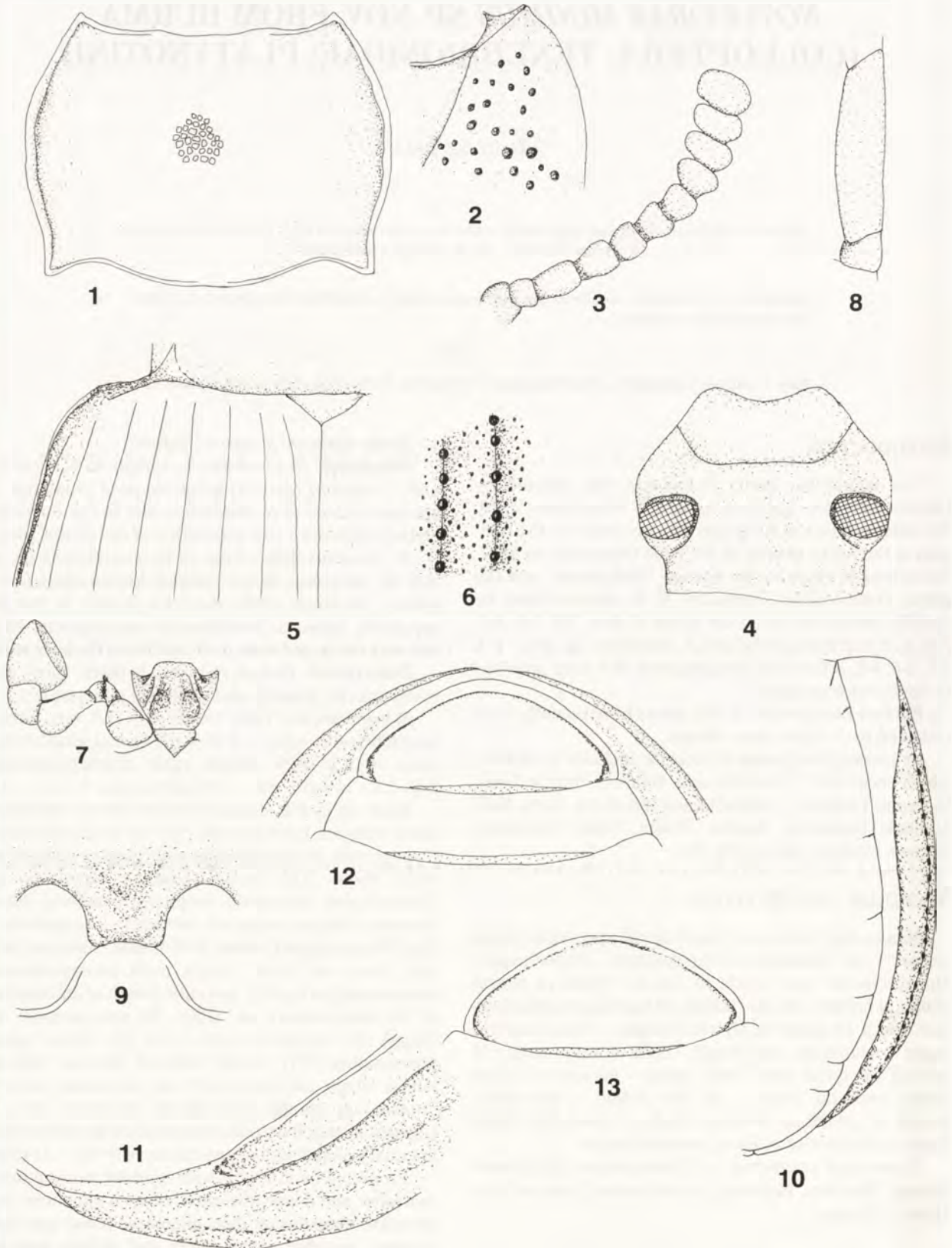
N. minimus differs from all its congeners in the body size (*N. minimus* is the smallest known species in the genus), the shape of the denticles present in the bursa copulatrix (close to *Penthicoides seriatoporus* Fairm.) and very dense and large puncturation of the body surface.

Description. Body dark brown to black, shiny; moderately convex, densely and distinctly punctate.

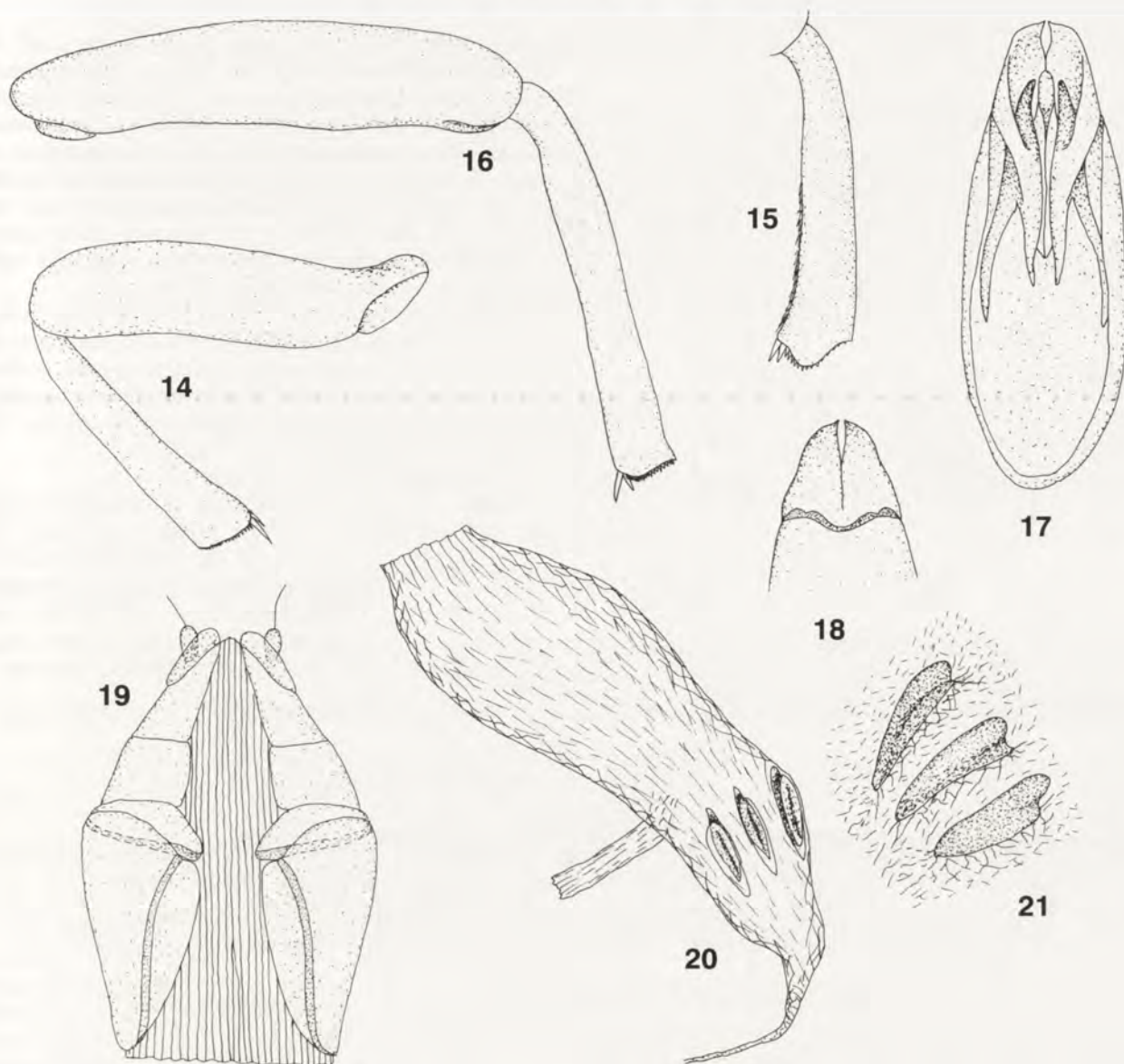
Measurements. Body length 9.0–11.0 mm, pronotal length/breadth ratio = 0.66–0.67, elytral length/breadth ratio = 1.27–1.29, length ratio elytra/pronotum = 2.33–2.39, breadth ratio elytra/pronotum = 1.21–1.24

Head as in Fig. 4, puncturation dense, distinct, distance between punctures ca. 0.5–1.0 puncture diameter. Clypeus with shallow median emargination (depth/width ratio about 5.5). Genal canthus equal to eyes. Circumocular depression deep; eye narrowed laterally (between tempus and genal canthus 4–5 ommatidia visible). Fronto-clypeal suture well visible. Antenna moderately long and wide (length ratio antenna/pronotum between angles ca. 0.94 and ratio length of antenna/width of 3rd antennomere ca. 9.20), 3rd antennomere short (length ratio of antennomere 3/2 ca. 2.1), distal segments (antennomere 7–11) evenly widened. Mentum with short lateral wings, mid part short and narrowing anteriorly. Submentum triangle with slightly elongated base. Last segment of maxillary palp moderately wide (ratio width of maxillary palp/length of antennomere 3rd ca. 1.4) (Fig. 7).

Pronotum as in Fig. 1, with rounded sides; puncturation large and dense (distance between punctures ca. 0.5 puncture diameter on disc, punctures fused near lateral margin). Anterior angles sharp and slightly protruding anteriorly (length ratio pronotum/anterior pronotal angles ca. 10.0). Posterior angles distinct and not reaching the level of the middle of the base. Pronotal base



Figures 1–13. *Notocorax minimus* sp. nov. (1) pronotum; (2) anterior part of pronotal hipomeron; (3) antenna; (4) head; (5) anterior part of elytron; (6) part of striae and intervals with puncturation; (7) submentum, mentum and maxillary palp; (8) metepisternum; (9) meso- and metasternal processes; (10) elytral epipleuron; (11) apical part of elytral epipleuron; (12) ventral view of apical part of abdomen and elytra; (13) last abdominal ventrite.



Figures 14–21. *Notocorax minimus* sp. nov. (14) fore tibia and femur; (15) mid tibia; (16) hind tibia and femur; (17) ventral and (18) dorsal view of aedeagus; (19) ovipositor; (20) internal female genitalia; (21) sclerites in bursa copulatrix.

doubly sinuately emarginate. Border of the anterior and posterior (base) margin interrupted in the middle, lateral border narrow and even width along its whole length anterior to posterior angles. Pronotal hipomeron evenly convex, with sparse and very large punctures (Fig. 2).

Scutellum wide at base (width ratio anterior margin of elytra/scutellum at base = 3.0–3.2) and depressed below the plane of the elytra.

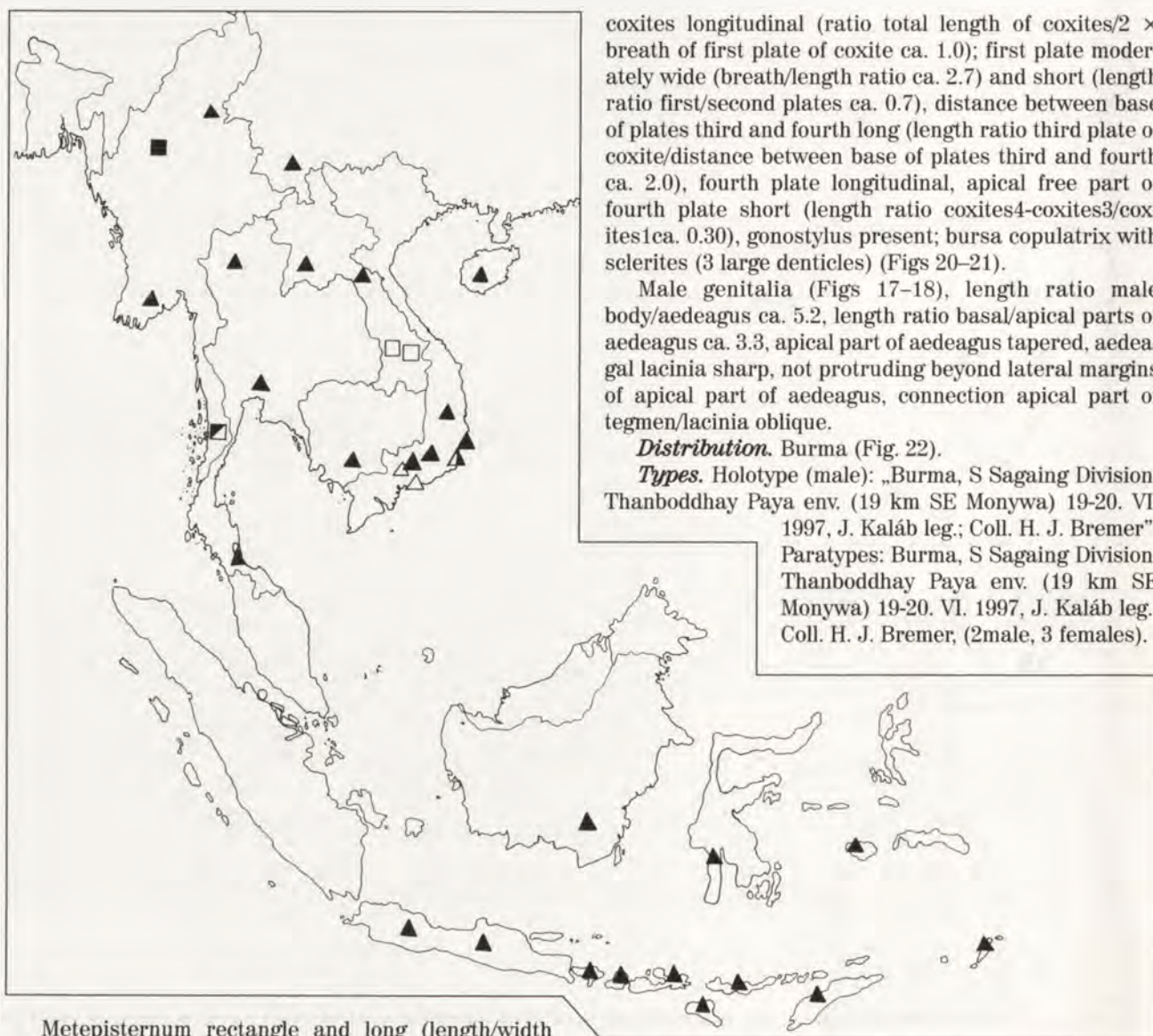
Elytra composed of 9 rows connected at apex as follows: 1–9, 2–7, 3–6, 4–5, 8–free, at base free; striae punctate-sulcate, with deep and round punctures (Fig. 6). Sides rounded, distinctly tucked in posteriorly (interval IX and part of VIII visible from the underside). Intervals with large and dense puncturation, distance between punctures ca. 1–3 puncture diameter; anterior margin bisinuate and unborded (Fig. 5), upper edge convex medianly

(disappeared just before humeri), laterad of scutellum not depressed; elytral humeri rounded and not protruding outwards, situated at the level of scutellum. Epipleuron flat and evenly narrowing towards apex, outer margin oblique, with distinct puncturation (Fig. 10); epipleuron at apex flat, inner margin unborded.

Prosternum evenly convex, border of anterior margin narrow. Prosternal process protruding towards mesosternum, its border narrow and entire at apex; puncturation dense and large, punctures often fused. Wings entirely reduced.

Meso- and metasternal processes as in Fig. 9.

Metasternum between the insertions of mid and hind coxae moderately short; length ratio metasternum between the insertions of mid and hind coxae/cavity of hind coxa = 1.8–1.9.



coxites longitudinal (ratio total length of coxites/2 × breadth of first plate of coxite ca. 1.0); first plate moderately wide (breadth/length ratio ca. 2.7) and short (length ratio first/second plates ca. 0.7), distance between base of plates third and fourth long (length ratio third plate of coxite/distance between base of plates third and fourth ca. 2.0), fourth plate longitudinal, apical free part of fourth plate short (length ratio coxites4-coxites3/coxites1 ca. 0.30), gonostylus present; bursa copulatrix with sclerites (3 large denticles) (Figs 20–21).

Male genitalia (Figs 17–18), length ratio male body/aedeagus ca. 5.2, length ratio basal/apical parts of aedeagus ca. 3.3, apical part of aedeagus tapered, aedeagal lacinia sharp, not protruding beyond lateral margins of apical part of aedeagus, connection apical part of tegmen/lacinia oblique.

Distribution. Burma (Fig. 22).

Types. Holotype (male): „Burma, S Sagaing Division, Thanboddhay Paya env. (19 km SE Monywa) 19–20. VI. 1997, J. Kaláb leg.; Coll. H. J. Bremer”. Paratypes: Burma, S Sagaing Division, Thanboddhay Paya env. (19 km SE Monywa) 19–20. VI. 1997, J. Kaláb leg.; Coll. H. J. Bremer, (2male, 3 females).

Metepisternum rectangle and long (length/width ratio = 3.6–3.8) (Fig. 8).

Legs. Male fore tarsi narrow; hind tarsi long (length ratio hind tarsomere 1/2 ca. 2.2); fore tibia in both sexes slender (length/width ratio ca. 4.5), outer apical denticle of fore tibia straight, outer margin of fore tibia simple (Fig. 14); outer margin of mid tibia simple, male mid tibia as in Fig. 15, hind tibia as in Fig. 16, inner spur moderately long (length ratio posterior margin of hind tibia/inner spur of hind tibia ca. 2.1).

Abdominal ventrites with dense and large puncturation. Bordering of the last abdominal ventrite entire (sometimes disappered) (Figs 12–13). Process of I abdominal ventrite narrow (width ratio process of I abdominal ventrite/process of metasternum = 1.4–1.6).

Female genitalia, ovipositor as in Fig. 19, length ratio female body/ovipositor ca. 7.0; paraproct even to coxites;

Figure 22. Distribution of *Notocorax javanus* (Wiedemann) (solid triangle), *N. phanrangiensis* Iwan (open triangle), *N. brancuccii* Iwan (solid/open triangle), *N. rondoni* (Ardoin) (open square), *N. marzenae* (Iwan) (solid/open square) and *N. minimus* sp. nov. (solid square).

ACKNOWLEDGEMENTS

I am grateful to Professor Hans Bremer for the loan of specimens used in this study.

REFERENCES

- Dejean, M. 1834. Catalogue des Coléoptères de la collection de M. Le Comte Dejean. Hétéromères. Paris, 3, (1833), pp. 177–230.
Iwan, D. 1997. Revision of the Asian genera of the tribe Platynotini Platynotina (Coleoptera: Tenebrionidae: Platynotini). *Annales Zoologici*, 47(1–2): 243–272.