

A peculiar new species of *Anomotarus* (*Nototarus*) from New Guinea (Coleoptera, Carabidae, Lebiinae)

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A peculiar new species of *Anomotarus* (*Nototarus*) from New Guinea (Coleoptera, Carabidae, Lebiinae). - *Anomotarus* (*Nototarus*) *pilosus* sp. n. from Papua New Guinea is described. The species differs from all known Australian and New Guinean *Nototarus* by the conspicuous, erect pilosity of the dorsal surface, the multiplication of the anterior lateral pronotal setae, and the absence of any microreticulation on head, pronotum, and elytra.

Key-words: Coleoptera - Carabidae - Lebiinae - Genus *Anomotarus*, subgenus *Nototarus* - New species - New Guinea.

INTRODUCTION

While studying the numerous carabid material (ca. 3,000 specimens) collected by W. Ullrich in Papua New Guinea during 1979 and 1980 and stored in the Muséum d'histoire naturelle, Genève (MHNG), I discovered a single specimen of a peculiar new species that belongs to the subgenus *Nototarus* Chaudoir of the genus *Anomotarus* Chaudoir. The new species differs from all known species of that subgenus and also from those undescribed Australian species known to me by the peculiar erect pilosity of the surface, the multiplication of the anterior lateral pronotal setae, and the absence of any microreticulation on the upper surface. Due to its peculiar habitus the species is described, although a single specimen is only available.

Nototarus is an Australian subgenus of the more widely ranging Australian–Oriental genus *Anomotarus* Chaudoir combining characteristic, stout-built, flightless lebiine Carabidae of which thus far a single species was known outside from Australia proper, namely *Nototarus papua* Darlington from eastern Papua New Guinea.

Certainly the species of *Nototarus* are closely related to those of the Australian–Oriental subgenus *Anomotarus* Chaudoir s. str., but I am not sure, whether the current status of *Nototarus* as a subgenus of *Anomotarus* (BALL & HILCHIE 1983, MOORE *et al.* 1987) is justified. Perhaps a revision of both subgenera will clarify the taxonomic situation.

MEASUREMENTS

Measurements were made under a stereo microscope using an ocular micrometer. Length has been measured from tip of labrum to apex of elytra, hence, measurements may slightly differ from those of DARLINGTON (1968).

Anomotarus (*Nototarus* Chaudoir)

Nototarus CHAUDOIR, 1875: 19; DARLINGTON 1968: 185; BALL & HILCHIE 1983: 192; MOORE *et al.* 1987: 306.

Type species: *Nototarus australis* Chaudoir, 1875

KEY TO *Nototarus* spp. OCCURRING IN NEW GUINEA

- 1 Smaller species, length < 5.5 mm; surface without pilosity; only a single anterior lateral pronotal seta present *papua* Darlington
- Larger species, length > 6.5 mm; surface with distinct erect pilosity; 3 anterior lateral pronotal setae present *pilosus* sp. n.

Nototarus pilosus sp. n.

(Figs 1, 2)

Type material: Holotype ♂, Papua New Guinea: PNG/EHProv., surroundings of Kainantu Onerunka 24-IX-79, W.G. Ullrich (MHNG).

Diagnosis: Easily recognized and distinguished from all known species and from those undescribed species known to me by the not microreticulate, though pilose surface and the multiplication of the anterior lateral seta of the pronotum.

Description: Measurements: Length: 6.8 mm, width: 2.8 mm. Ratios: width pronotum/head: 1.21; width/length of pronotum: 1.18; width base/apex of pronotum: 0.95; length/width of elytra: 1.34; width elytra/pronotum: 1.44.

Colour: Upper and lower surfaces glossy black. Margins of labrum, palpi, antennae, and tibiae and tarsi dark reddish, femora blackish.

Head: Large and wide, neck short and very wide. Eyes small, though far more convex than in other species, distinctly protruding from head. Orbits as long as eyes, gently convex. Labrum large, anteriorly slightly concave. Mandibles comparatively elongate, evenly curved, apex very acute. Labial palpi widened, but less markedly securiform than in most other species of the subgenus. Mentum without distinct tooth. Antenna short and stout, just surpassing apex of pronotum, subapical antennomeres ovalish, c.1.2 x as long as wide. Frons near eyes with about 5 strong, markedly irregular ridges that reach to middle of eye, median part of frons narrowly smooth. Clypeus, frons, and neck with very coarse, sparse, somewhat confluent punctures and with rather sparse, erect pilosity. Labrum with distinct isodiametric microreticulation, rest of head without microreticulation, highly glossy.

Pronotum: Short and wide, with comparatively wide base, considerably wider than head. Disk fairly convex. Apex moderately excised, apical angles slightly

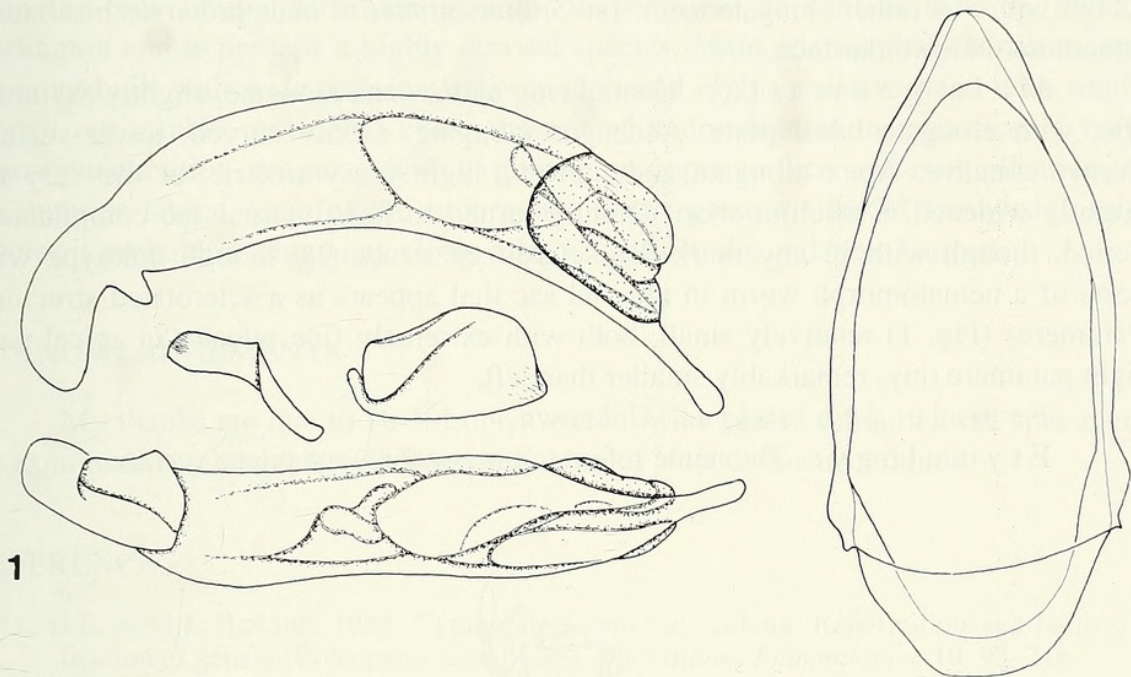


FIG. 1

Nototarus pilosus sp. n. Male genitalia. Genital ring, aedeagus, and parameres. Length of aedeagus: 1.85 mm.

protruding, though rounded off. Lateral border anteriorly strongly curved, deeply excised in front of basal angles, these acute, laterally distinctly protruding. Lateral parts of base very oblique. Apex unbordered, lateral channel narrow, lateral margin not explanate, base bordered. Median line deep, touching apex, but ending shortly in front of base. Disk regularly convex, without distinct basal grooves. Posterior lateral seta at basal angle, three anterior lateral setae present in anterior half. Surface without any microreticulation, but with double. coarse and very fine puncturation, highly glossy, with erect pilosity, lateral margin with a fringe of elongate pilosity.

Elytra: Short and wide, upper surface rather convex, posteriorly considerably widened, but shoulders comparatively wide. Widest diameter in apical third. Shoulders projecting, though widely rounded off. Lateral border evenly convex, apex rather deeply sinuate, each elytron widely rounded at sutural angle. Striae deep, slightly punctulate. intervals rather convex, each interval with two irregular rows of very coarse punctures. Marginal setae elongate, raising from remarkably large umbilicate pores. No setiferous punctures visible on 3rd interval. Surface without microreticulation, highly glossy, with moderately dense, erect pilosity.

Lower surface: Without microreticulation, glossy, with rather sparse, erect pilosity. Metepisternum about quadrate. Abdominal sternites apparently without special tactile setae, terminal sternite in male near apical margin with one seta on either side.

Legs: Rather stout, surface of femora and tibiae fairly densely pilose. Claws with 3–4 rather elongate teeth. 1st–3rd tarsomeres of male protarsus biserially squamose on lower surface.

Male genitalia: Genital ring narrow and elongate, slightly asymmetric, with elongate basal plate. Aedeagus elongate, evenly curved, lower surface evenly concave. Apex elongate and narrow, slightly asymmetric, at the very tip slightly widened. Orificium short, slightly turned to left. Internal sac complicately coiled, though without any markedly sclerotized structures, though holotype with parts of a nematomorph worm in internal sac that appears as a sclerotized structure. Parameres (Fig. 1) relatively small, both with extremely fine pilosity in apical part, right paramere tiny, remarkably smaller than left.

Female genitalia: Unknown.

Etymology: The name refers to the conspicuous pilose surface.

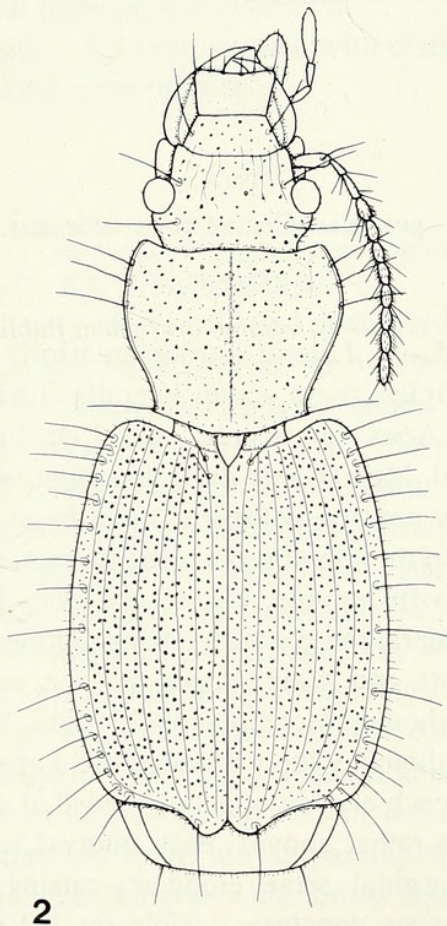


FIG. 2

Nototarus pilosus sp. n. Holotype. Length: 6.8 mm.

R e m a r k s : This is a very peculiar species that differs in many respects from the bulk of the Australian species of *Nototarus* as well as from *N. papua* Darlington and is perhaps a highly derived species. Main apomorphic characters are the stout built with wide and convex pronotum and elytra, massive head with small though remarkably protruding eyes, absence of microreticulation, presence of very coarse puncturation, presence of erect pilosity on upper surface, and multiplication of the anterior lateral setae of the pronotum. At the present state of knowledge this species is probably without any closer relative in Australia and New Guinea.

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