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Short scientific note

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New data on the Australasian Xantholinini. 12. New species from New Caledonia (Coleoptera: Staphylinidae)

[289th contribution to the knowledge of the Staphylinidae]

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Abstract

In this short contribution some specimens from New Caledonia, collected by Dr. Geoff Monteith of the Queensland Museum of Brisbane, are studied and four new species are described and illustrated (*Pachycorynus monteithi* **sp. n**., *P. flavus* **sp. n**., *P. insularis* **sp. n**., and *Zeteotomus insularis* **sp. n**.). The known New Caledonian Xantholinini are now represented by 17 species.

Key words: Coleoptera, Staphylinidae, Xantholinini, Pachycorynus, Zeteotomus, new species, New Caledonia.

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Introduction

Currently the known species of Xantholinini from New Caledonia are 13 (Bordoni 2013, 2014, 2017), belonging to 7 genera [Adamanthea koghiana Bordoni, 2013, Pachycorynus caledonicus Fauvel, 1878, P. noumeanus Bordoni, 2013, Neoxantholinus caledonicus Bordoni, 2013, N. melanesianus Bordoni, 2013, N. giachinoi Bordoni, 2013, Zeteotomus pulchellus (Perroud & Montrouzier, 1864), Z. variegatus (Fauvel, 1874), Z. lambkinae Bordoni, 2014, Z. caledonicus Bordoni, 2017, Thyreocephalus taitiensis (Boheman, 1858), Walesia canalensis (Fauvel, 1839), and Phacophallus japonicus (Cameron, 1933)].

Some of these species are apparently endemic to this island (Adamanthea koghiana, Pachycorynus noumeaunus, Neoxantholinus caledonicus, N. melanesianus, N. giachinoi, Zeteotomus pulchellus, Z. lambkinae, Z. caledonicus, and Z. variegatus).

Thank to the useful collaboration of Dr. Geoff Monteith (Queensland Museum, Brisbane) I was able to study some specimens recently collected in New Caledonia, increasing the knowledge of the tribe from this island, whose known fauna now consists of 17 taxa, mainly related to the bark of trees.

All the specimens cited in these pages are preserved in the Queensland Museum (QM), apart from the holotypes that are preserved in the Muséum Nationale d'Histoire Naturelle of Paris (MHNP). Few specimens are in my private collection (cB). **Taxonomy** (in systematic order)

Pachycorynus monteithi sp. n.

Examined material. Holotype \mathcal{J} : New Caledonia: R. Dothio, 8 km WNW Thio, 21.35S, 166.09E, G. Monteith lgt, 24.XI.2003-28.I.2004, FIT (MHNP); paratypes: same data, 1 \mathcal{Q} (QM); Pic d'u Grand Kaori, 250 m, 22.17S, 166.54E, G. Monteith lgt, 21.XI.2003-27.I.2004, FIT, 1 \mathcal{Q} (QM); Col d'Amieu, W slope, 470 m, 21.37S, 165.49E, G. Monteith lgt, 25.XI.2003-27.I.2004, 1 \mathcal{Q} (QM); Koumac Caves, 50 m, 20.37S, 164.20E, G. Monteith lgt, 2.XII.2003-1.I.2004, 1 \mathcal{Q} (CB).

Diagnosis. A species unusually unicolored, entirely yellowish, related to the Polynesian species of the genus and in particular to *P. melansianus* Bordoni, 2013 from the Fiji Islands for external characters. Body large, the biggest in the Pacific area and in Australia (Bordoni 2005). Aedeagus of very peculiar shape, with long, voluminous basal bulb, thin and short parameres, evident distal sclerite, and apparently not visible inner sac.

Description. Length of body 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Entirely yellowish. Head sub-quadrangular, with moderately rounded sides, widely rounded posterior angles. Eyes medium-sized and protruding. Surface of head with transverse micro-striation and deep, evident, dense punctation. Pronotum di-

lated forward, small, shorter and narrower than head, with oblique anterior margins, sub-rectilinear sides, widely rounded anterior angles. Surface with traces of transverse micro-striation and punctation similar to those of the head, apart from a narrow median stripe. Elytra sub-rectangular, longer and wider than pronotum, with sub-rectilinear and sub-parallel sides, and very marked, prominent humeral angles. Surface with very fine, very dense punctation, arranged in numerous, closed series. Abdomen with traces of transverse micro-striation and fine punctation, arranged in some series on each segment.

Tergite and sternite of the male genital segment as in Figs 1-2. Aedeagus (Figs 3-4) 1 mm long, ovoid elon-gate, with peculiar distal portion; parameres very narrow, arched.

Etymology. Patronymic. The species is dedicated to Dr. Geoff Monteith of the Queensland Museum that collected almost all the studied specimens sent to me in study.

Distribution. This species is known only from New Caledonia.



Figs 1-7 – **1**, Tergite; **2**, sternite of the male genital segment, **3**, aedeagus in dorsal view, **4**, ditto, in lateral view (parameres omitted) of *Pachycorynus monteithi* sp. n. ; **5**, tergite, **6**, sternite of the male genital segment, **7**, aedeagus of *Pachycorynus flavus* sp. n. (scale bar: 0.1 mm).

Remarks. *Pachycorynus monteithi* sp. n., totally yellowish, is the larger species between the *Pachycorynus* Motschulsky, 1858 of New Caledonia. The aedeagus is peculiar, very different from all the known species of this genus.

Pachycorynus flavus sp. n.

Examined material. Holotype \mathcal{J} : New Caledonia: Col d'Amieu, W slope, 470 m, 21.37S, 165.44E, G. Menteith lgt, 25.XI.2003-27.I.2004 (MHNP); paratypes: same data, 1 \mathcal{Q} (QM); Col de Petchecara, middle, 21.34S, 166.06E, G. Menteith lgt, 22.XI.2003-28.I.2004, 3 \mathcal{Q} (QM), 1 \mathcal{Q} (cB).

Diagnosis. A species similar to *Pachycorynus monteithi* sp. n., with different color of elytra and abdomen, and ae-deagus very small, provided with short and thin parameres.

Description. Length of body 4 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Similar to *Pachycorynus monteithi* sp. n. from which differs by slender body, infuscate posterior half of elytra and 5th-6th visible abdominal segments and genital segment; head longer and narrower; eyes smaller; pronotum wider and longer, with more superficial punctation; elitra with sparser punctation.

Tergite and sternite of the male genital segment as in Figs 5-6. Aedeagus (Fig. 7) very small, 0.26 mm long, with very short and thin parameres.

Etymology. The specific epithet is the Latin *flavus- a- um* (yellow), in relation to the body color.

Distribution. This species is known only from New Caledonia.

Remarks. The general structure of the aedeagus is peculiar and very different from those of the other species occurring in New Caledonia. The genital segment of the male is damaged.

Pachycorynus insularis sp. n.

Examined material. Holotype \mathcal{O} : New Caledonia: Farino, 5 km N, 7050 m, 21.37S, 165.46E, C. Darling leg., 3-10.II.2002 (MHNP).

Diagnosis. A species similar to *Pachycorynus flavus* sp. n. from which differs for some external characters and for the aedeagus of large size and peculiar structure.

Description. Length of body 4.1 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Very similar to *Pachycorynus flavus* sp. n. from which differs by wider head, with slightly sparser punctation and larger eyes, robustior pronotum, moderately shorter than head.

Tergite and sternite of the male genital segment as in

Figs 8-9. Aedeagus (Fig. 10) 1 mm long, ovoid, elongate, with particular distal portion and parameres, apparently without inner sac.

Etymology. The specific epithet refers to the island of New Caledonia.

Distribution. This species is known only from New Caledonia.

Remarks. The species differs from *Pachycorynus caledonicus* Fauvel, at moment known only for some females, by the larger size (4.1/2.2), color, and micro-sculpture on head (not polygonal).

Neoxantholinus caledonicus Bordoni, 2013

Examined material. New Caledonia, Mt Koghis, 750 m, 22.11S, 166.01E, G. Menteith lgt, 29.XI.2000, 1 ex. (QM), 1 ex. (cB); Pic du Grand Kaori, 250 m, 22.17S, 166.54E, G. Menteith lgt, 29.I.2002, 1 ex. (QM); Pic d'Amoa, N slope, 500 m, 20.58S, 165.17E, G. Menteith & C. Burwell lgt, 11.XI.2001, 1 ex. (QM).

Distribution. This species is known only from New Caledonia (Bordoni 2013).

Remarks. Some specimens were collected in trunks and logs of *Pyrethrum*.

Zeteotomus pulchellus (Perroud & Montrouzier, 1864)

Examined material. New Caledonia: Riv. Bleue, 160 m, 22.06S, 166.39E, Burwell & Skevington lgt, 20.IX-11. XI.2000, 1 ex. (QM).

Distribution. This species is known only from New Caledonia (Bordoni 2013).

Zeteotomus insularis sp. n.

Examined material. Holotype ♂: **New Caledonia**: Riv. Bleue, Panoramic Track, 22.06S, 166.39E, G. Menteith lgt, 28.XI.2000 (MHNP).

Diagnosis. A species characterized by the color of elytra and abdomen and the peculiar structure of the aedeagus, very different from the typical shape exhibited by most species of this genus.

Description. Length of body 4.6 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Body shiny, reddish brown, with yellowish anterior half of elytra, 1st, 6th abdominal segments, and genital segment. Head sub-rectangular, elongate, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles.



Figs 8-13 – 8, tergite; 9, sternite of the male genital segment; 10, aedeagus of *Pachycorynus insularis* sp. n.; 11, male genital segment; 12, sternite of the male genital segment; 13, aedeagus of *Zeteotomus insularis* sp. n. (scale bar: 0.1 mm).

Eyes medium-sized, slightly protruding. Surface with very long, convergent ocular grooves, 2 setiferous, lateral punctures, 2 setiferous punctures under the eyes, 2 setiferous punctures near the posterior margin. Pronotum narrow, sub-rectangular, narrower and shorter than head, with slightly oblique anterior margins, rounded anterior angles, and not sinuate sides. Surface with 2 anterior punctures and 2 median punctures. Elytra sub-rectangular, narrow, mederately longer and wider than pronotum, with slightly rounded humeral angles. Surface with punctation arranged in three series, one near the suture, one median and one lateral; all the punctures fine and very sparse; 2 setiferous punctures near the scutellum, 2 setiferous punctures in the middle of elytra. Abdomen with fine, very sparse punctation.

Male genital segment as in Fig. 11; sternite of the same as in Fig. 12. Aedeagus (Fig. 13) 0.6 mm long, very narrow and small, with peculiar distal portion.

Etymology. The specific epithet refers to the island of New Caledonia.

Distribution. This species is known only from New Caledonia.

Remarks. The specimen was collected in trunks and logs of *Pyrethrum*. This species differs from *Z. variegatus* (Fauvel) by small size (body 9.5 mm long in *Z. variegatus*) and color. From *Z. pulchellus* differs by distinct color and very different aedeagus. From the others *Zeteotomus* Jacquelin du Val, 1857 differs by the shape of the aedeagus.

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References

- Boheman C. H. 1858. Coleoptera. Species novas descripsit. In: Virgin C., Kongliga Svenska fregatten Eugenies Resa Omkring Jorden 1. Insecta (pp. 1–112). P. A. Norstedt & Söner, Stockholm.
- Bordoni A. 2005. Revision of the Xantholinini of Australia (Coleoptera, Staphylinidae). Monografie del Museo regionale di Scienze naturali, Torino, 42: 435–614.
- Bordoni A. 2013. Revisione degli Xantholinini della sottoregione polinesiana (Coleoptera Staphylinidae). Memorie della Società entomologica italiana, 90: 1: 1–58.

- Bordoni A. 2014. New data on the Australasian Xantholinini (Coleoptera: Staphylinidae). 7. New Caledonian species in the Queensland Museum. Australian Entomologist, 41(3): 147–151.
- Bordoni A. 2017. New data on the Australasian Xantholinini (Coleoptera: Staphylinidae). 9th. New genus, new species, and new records from Australia, New Caledonia and New Zealand (Coleoptera: Staphylinidae). Fragmenta entomologica, 49 (1): 115–120.
- Cameron M. 1933. New species of Staphylinidae (Col.) from Japan. The Entomologist's Montly Magazine, 69: 168–175.
- Fauvel A. 1874. Les Staphylinides de la Nouvelle-Calédonie. Annales de la Société Entomologique de France, 5 (4): 432– 438.
- Fauvel A. 1878. Les Staphylinides de l'Australie et de la Polynésie (2e mém.). Annali del Museo civico di Storia naturale di Genova, 13: 465–598.
- Fauvel A. 1889. Les Coléoptères de la Nouvelle-Calédonie et dépendences avec descriptions, notes et synontmies nouvelles. Révue d'Entomologie, 8: 242–271.
- Jacquelin du Val P. N. C. 1857. Genera des Colèoptères d'Europe, Paris, 2: 41–96.
- Motschulsky V. 1858. Enumération des nouvelles espèces des Coléoptères rapportés de ses voyages par M. Victor Motschulsky. Bulletin de la Société Impérial des Naturalistes de Moscou, 31 (3): 204–264.
- Perroud B. P. & Montrouzier R. P. 1864. Essai sur la faune entomologique de Kanala (Nouvelle-Calédonie) et description de quelques espéces nouvelles ou peu connues. Annales de la Société Linnéenne de Lyon, n. s., 11: 46–257.