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New data on the Australasian Region. 15. New species and new records from Australia, New Zealand and Irian Jaya (Coleoptera, Staphylinidae) 320th contribution to the knowledge of Staphylinidae

ABSTRACT

Three new species from Irian Jaya and Australia are described and illustrated: *Pachycorynus yamoensis* sp.n. (Irian Jaya), *Eachamia cooksoni* sp.n. (Northern Territory) and *Enervia meridionalis* sp.n. (Victoria). *Thyreoscephalus cyanocephalus* (Erichson, 1839) is new record for Northern Territory, *T. chloropterus* (Erichson, 1839) is new record for New Zealand and *T. cyanocephalus* (Erichson, 1839) is new record for Northern Territory.

Keywords: Coleoptera, Staphylinidae, Xantholinini, *Pachycorynus*, *Eachamia*, *Enervia*, new species, new records, Irian Jaya, Australia.

INTRODUCTION

I received a small number of Xantholinini collected in Australia from Lawrence Cookson (Warrandyte) and other specimens from New Zealand and Irian Jaya to be studied. With some surprise I found in the first material that 11 specimens out of 21 belong to two new species, therefore each represented by a comfortable series of specimens. These pages which constitute the fifteen contribution to the knowledge of the Xantholinini of the Australasian Region are therefore dedicated to these specimens.

MATERIAL AND METHODS.

The Australian Region are listed with the following acronyms: ACT (territory of the capital); NSW (New South Wales); NT (Northern Territory); QLD (Queensland); SA (South Australia); VIC (Victoria), WA (Western Australia). Collections and Museum: cB-collection Bordini, Florence, Italy; cC- collection Lawrence Cookson (Warrandyte, Australia); cM-collection Jan Matejicek (Hradec Kralove, Czechia); VM-Victoria Museum (Australia). The environmental data and the collection documents are transcribed from the original labels. The genitalia of the species are included in Euparal on a transparent label attached to the specimen. The holotypes are preserved in the Victoria Museum. The

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specimens were examined using a Wild M5A binocular and an Optika B-290 triocular microscope.

TAXONOMY (IN SYSTEMATIC ORDER)

***Pachycorynus yamorensis* sp.n.**

Examined material. Holotype ♂: Irian Jaya, Yamor Lake, loc. coll. III.2016 (cB).

Diagnosis. A species characterized by large size, rounded head and genitalia.

Description. Length of body 5.8 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Uniformly reddish brown. Head dilated, sub-spherical, with widely rounded sides and posterior angles. Eyes small and almost flat. Surface of head with vertical, fine and dense micro-striation and few punctures, with a groove from the eyes to the posterior angles. Frontal grooves very long and deep; some broad, deep punctures on the disc of head, except from the median surface. Lateral and posterior margins without micro-sculpture and punctation. Pronotum short, very shorter and wider than head, with rounded anterior angles and not emarginate sides. Surface with traces of transverse micro-striation; dorsal series of 6-7 irregular punctures and lateral series of 3-4 irregular and spaced punctures. Elytra sub-rectangular, dilated posteriad, with marked humeral angles and sub-rectilinear sides. Surface with fine, dense punctation, arranged in numerous series. Abdomen with transverse micro-striation and fine, sparse punctation on the sides of each segment. Tergite and sternite of male genital segment as in Figs 1-2. Aedeagus (Figs 3-4) 0.3 mm long (the measure refers only to the distal portion and not also to the subsequent membranous portion).

Etymology. The specific epithet refers to the type locality.

Distribution. The species is known only from the type locality.

Remarks. In Irian Jaya occurs the following species: *P. dekaiensis* Bordon, 2010 (Jawaijaya) and *P. analis* Fauvel, 1878 (Maffin Bay) from which it is distinguished by the characters indicated in the diagnosis.

***Thyreocephalus rufitarsis* (Fauvel, 1877)**

Examined material. VIC, Loch Sport, L.J.Cookson 1.X.1998 (cC). Derby, WA, L.J.Cookson 27.II.2004 (cC).

Distribution. This species is known from almost all the coastal regions of Australasian Region, from NT to Tasmania (Bordon, 2005).

Remarks. The specimen was collected under washed up seagrass.

Thyreocephalus chloropterus (Erichson, 1839)

Examined material. VIC, Thornton, L.J.Cookson 8.xi, 1992 (cC); Tasmania, Dip Falls forest, Big tree env., M. Marik 18.XI.2014, 1 ex. (cM); New Zealand, Northern Isl., Auckland-Manukau, M. Krejcek 9.II.2007, 1 ex. (cM).

Distribution. SE Australia (Bordoni, 2005). New record for New Zealand.

Remarks. The specimen was collected on bank of Goulburn River.

Thyreocephalus cyanopterus (Erichson, 1839)

Examined material. VIC, Loch Sport, L.J.Cookson 1.X.1989, 1 ex. (cC).

Distribution. This species is known in QLD, NSW, SA, ACT, VIC. New record for NT.

Remarks. The specimen was collected under washed up seagrass.

Thyreocephalus lorquini (Fauvel, 1877)

Examined material. QLD, Caboolture env., N Brisbane, M. Marik 10-22.XI.2012, 1 ex. (cM).

Distribution. Sulawesi, Moluccas, Australia (Bordoni, 2005).

Thyreocephalus chalcopterus (Erichson, 1839)

Examined material. Australia, Taylors Bch, NSW, J Cookson 25.II.1993, 1 ex. (cB).

Distribution. Australia (Bordoni, 2005).

Eachamia cooksoni sp.n.

Examined material. Holotype♂: Australia, NT, Humpty Doo, L.J.Cookson leg. 15.VIII.2018 (VM); paratypes: same data, 3 ♀♀ (cC), 1 ♂, 1 ♀ (cB).

Diagnosis. The new species differs from the congeners in variables characters: different sizes, slightly different coloring, punctuation, labrum shape, micro-striation, bronze or other reflections but above all in the shape of the aedeagus, the parameres and the inner sac.

Description. Length of body 13.5 mm; from anterior margin of head to posterior margin of elytra: 8 mm. Body shiny, without micro-sculpture, reddish brown very dark, antennae and legs brown; part of the humeral angles ed epipleura reddish. Head sub-quadrangular, slightly narrow forward, with barely rounded sides and narrowly rounded posterior angles. Antennae brown, the last antennomeres yellowish. Eyes medium-sized and almost flat. Labrum as in Fig. 5. Surface of head with one puncture near the anterior margin of eyes, 2 puncture near the anterior angles, near the posterior margin of eyes; some other, smaller, sparse punctures on the lateral surface of head, below the eyes. Pronotum a little shorter and narrower than head, squarish, barely narrow posteriad, with oblique anterior margins, narrowly rounded anterior angles and sub-rectilinear sides. Surface with the usual puncture

near the anterior angles. Elytra sub-rectangular, slightly dilated posteriorly, visibly longer and wider than pronotum, with rounded humeral angles and sub-rectilinear sides. Surface with fine, regular punctation, arranged in numerous series; some punctures with long setae near the humeral angles and at half the length of the suture. Abdomen covered with deep, broad, dense punctation. Tergite and sternite of male genital segments as in Figs 6-7. Aedeagus (Fig. 8) 1.66 mm long, ovoid, with narrow anterior and posterior portion of basal bulb; parameres narrow, almost at right angles; inner sac long and narrow, to form a sort of U, covered with fine spinulae and in the right portion also with thread-like structures.

Etymology. The species is dedicated with pleasure to Dr. Lawrence Cookson who collected the specimens, giving them some generously.

Distribution. The species is known only from the type locality.

Remarks. Another undescribed *Eachamia* (Bordoni, in press), from Northern Australia, compared to the new species has micro-striation from the front edge of the head almost to the rear edge of the head, larger eyes, last three yellowish antennomeres, longer elytra dilated posteriorly. Including the species that are in print, this is Australia's third species of *Enervia* Bordoni, 2005 while others live in Papua New Guinea. Among the first *E. corusca* Bordoni, 2005 occurs in the northern part of the QLD, where the environmental conditions are similar to the tropical ones of Papua New Guinea. In fact, this area has a tropical savannah climate with two seasons. The specimens were collected with MV light.

***Phacophallus japonicus* (Cameron, 1933)**

Examined material. QLD, Kuranda, L.J. Cookson 29.IX.2016, 3 exx. (cC), 1 ex. (cB); Mission Beach, L.J. Cookson 9.II.2014, 1 ex (cC), 1 ex. (cB).

Distribution. Oriental Region from Thailand to South China and southwards down to Bali (Bordoni, 2002). In Australia occurs in NT and QLD (Bordoni, 2005).

Remarks. The specimens were collected by MV light.

***Enervia meridionalis* sp.n.**

Examined material. Holotype ♂: Australia, VIC, Guildford, L.J.Cookson 25.I.2020 (MV); paratypes: same data, 2 ♀♀ (cC), 1 ♀, 1 ex. (without genital segment) (cB); VIC, Port Campbell, L.J.Cookson 1.I.1999, 1 ♀ (cC).

Diagnosis. A species that differs from *E. bisulciceps* (Lea, 1925) from Western Australia by wider body, shape of head, by denser punctation, less dense on the elytra and by the aedeagus. It differs from *E. wilsoniana* Bordoni, 2005 from Wilson Promontory for its different coloring (brown orange in *E. wilsoniana*), for the dimensions of the pronotum, micro-striation and punctuation and genitalia.

Description. Length of body 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Body reddish brown very dark, with forebody barely clearer; antennae and legs brown. Head sub-quadrangular, moderately narrow anteriorly, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes very small, barely protruding. Surface of head wrinkled, totally covered with deep, dense punctation. Pronotum with more or less as long

and wide as head, with very oblique anterior margins, and widely rounded anterior angles. Surface with fine, irregular transverse micro-striation and several series of punctures, on the sides of a large median stripe. Elytra sub-rectangular, slightly dilated posteriad, with rounded humeral angles. Surface with very fine, dense punctation, arranged in some series with yellowish setae. Abdomen with wrinkled, deep punctation, arranged in 3-4 series on each segments. Tergite and sternite of male genital segment as in Figs 9-10. Aedeagus (Fig. 11) 0.66 mm long, sub-ovoid but dilated posteriad, with asymmetrical parameres; distal lobule very large, as long as the parameres; inner sac of peculiar shape, covered irregularly with very fine spinulae.

Etymology. The specific epithet is the Latin *meridionalis*-e (southern).

Distribution. The species is known only from VIC.

Remarks. *Enervia meridionalis* sp.n. differs from its congeners by the structure of the inner sac. In particular it differs from *E. bisulciceps* (Lea, 1925) from Western Australia by wider body, shape of head (sub-rectangular in *E. bisulciceps*), by denser punctation, less dense on the elytra and by the aedeagus. Due to the form of the inner sac of the aedeagus the new species approaches *E. sclerophyllica* Bordon, 2005 from Healesville, although the distal triangular lobe is larger and without an additional stylus-shaped lobule. It also differs from *E. sclerophyllica* for its darker coloring, the head shape (sub-rectangular in *E. sclerophyllica*), the different micro-sculpture on the head, and the punctuation, and from the female holotype of *E. elongata* Bordon, 2010 from Brindabella for the body much longer (5.5 / 4.8), color, head not elongated and for the shorter elytra. Finally, it differs from *E. wilsoniana* Bordon, 2005 from Wilson Promontory Natural Park for its larger size, for its different coloring (brown orange in *E. wilsoniana*), for the dimensions of the pronotum, micro-striation and punctuation and genitalia. The specimens were collected by MV light.

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RIASSUNTO

Nuovi dati sulla regione Australasiana. 15. Nuove specie e nuovi ritrovamenti dall'Australia, Nuova Zelanda e Irian Jaya (Coleoptera, Staphylinidae). 320° contributo alla conoscenza degli Staphylinidae.

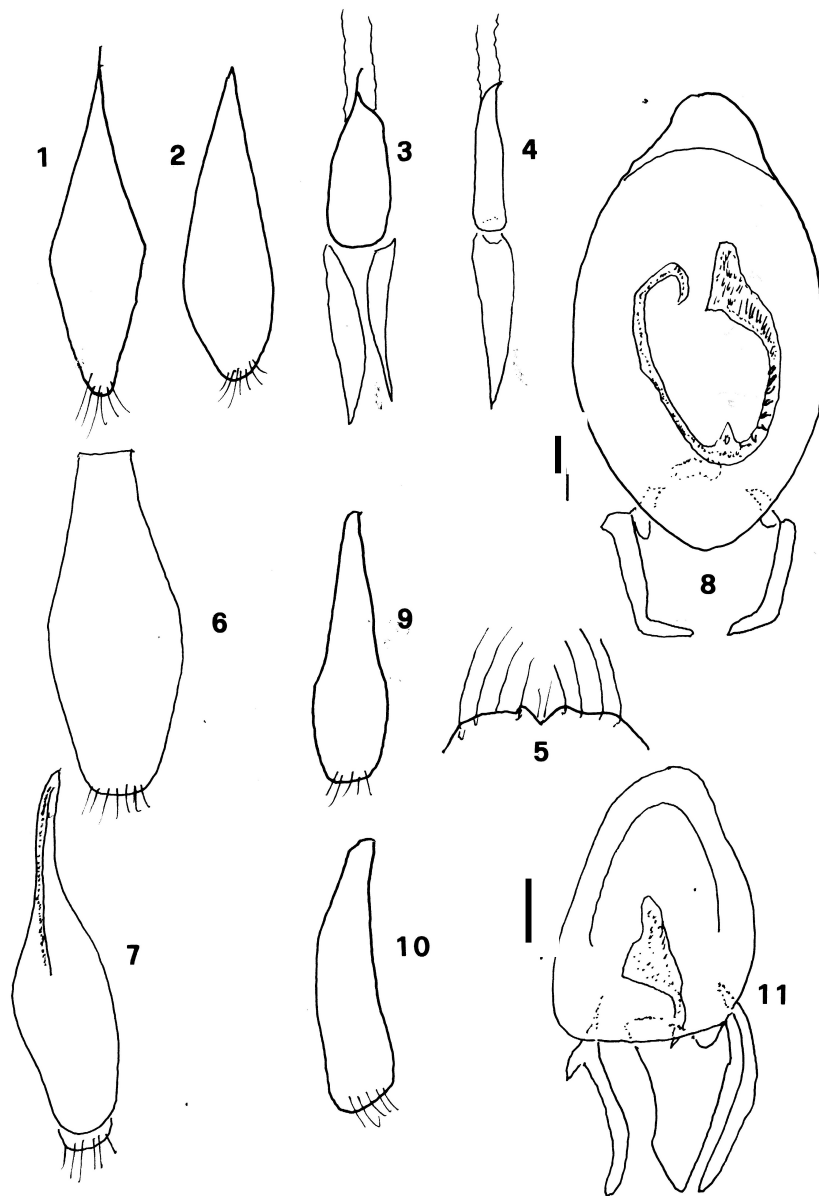
Vengono descritte e illustrate tre nuove specie provenienti da Irian Jaya e Australia: *Pachycorynus yamoensis* sp.n. (Irian Jaya), *Eachamia cooksoni* sp.n. (Territorio del Nord) e *Enervia meridionalis* sp.n. (Victoria). *Thyreoscephalus cyanocephalus* (Erichson, 1839) è una nuova segnalazione per il Territorio del Nord. *Thyreoscephalus chloropterus* (Erichson, 1839) è una nuova segnalazione per la Nuova Zelanda, e *Thyreoscephalus cyanocephalus* (Erichson, 1839) è una nuova segnalazione per il Territorio del Nord.

Parole chiave: Coleoptera, Staphylinidae, Xantholinini, *Pachycorynus*, *Eachamia*, *Enervia*, nuove specie, nuovi ritrovamenti, Irian Jaya, Australia.

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Figs 1-11. *Pachycorynus yamorensis* sp.n.: tergite (1) and sternite (2) of male genital segment, aedeagus in dorsal (3) and lateral (4) view; *Eachamia cooksoni* sp.n.: labrum (5), tergite (6) and sternite (7) of male genital segment, aedeagus (8); *Enervia meridionalis* sp.n.: tergite (9) and sternite (10) of male genital segment, aedeagus (11) (scale bar: 0.1 mm).