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## Taxonomic revision of Australian *Platynectes* Régimbart, 1879 (part I)—four new species from Queensland (Coleoptera: Dytiscidae, Agabinae)

LARS HENDRICH<sup>1</sup> & JAROSLAV ŠŤASTNÝ<sup>2</sup>

<sup>1</sup>Zoologische Staatssammlung München, Münchhausenstraße 21, 81247 München, Germany. E-mail: [hendrich@zsm.mwn.de](mailto:hendrich@zsm.mwn.de)

<sup>2</sup>Kosmonautů 359, CZ-46005 Liberec, Czech Republic. E-mail: [stastnyj@jergym.cz](mailto:stastnyj@jergym.cz)

### Abstract

Four species of the genus *Platynectes* subgenus *Gueorguievtes* Vazirani, 1976 are described from Queensland, Australia: *Platynectes brancuccii* sp. n. (Atherton Tableland), *P. larsoni* sp. n. (Mulgrave Range and Windsor Tableland), *P. ponderi* sp. n. (Carnarvon Range) and *Platynectes weiri* sp. n. (White Mountains National Park and Hope Vale Mission). The latter two are the first species of the genus with striae on elytra and the informal *P. weiri*-species group is established for them. *Platynectes brancuccii* sp. n. and *P. larsoni* sp. n. belong to the *P. decempunctatus*-species group. All four species were collected from small rain forest streams or rest pools of intermittent creeks. Important species characters (median lobes, parameres and colour patterns) of all species are figured, and notes on their distribution and ecology are given. Altogether 17 species of the genus are now known from Australia.

**Key words:** Coleoptera, Dytiscidae, Agabinae, *Platynectes*, Australia, Queensland, new species

### Introduction

The diving beetle genus *Platynectes* Régimbart, 1879 of the subfamily Agabinae has three subgenera (*Australonectes* Guéorguiev, 1972, *Gueorguievtes* Vazirani, 1976 and *Platynectes* Régimbart, 1879) and 46 species in the Neotropical, Oriental, Palearctic and Australasian regions (Nilsson 2014). On a global level it was first revised by Guéorguiev (1972). Later, several taxonomic contributions were published to the Oriental, Palearctic and Australasian fauna: Satô (1982) described two new species from Japan and Taiwan. Guéorguiev (1978) and Guéorguiev & Rocchi (1993) added three species to the Fauna of New Guinea, and Hendrich & Balke (2000) gave a review of the Moluccan *Platynectes*, adding five new species to the *decempunctatus*-group. Nilsson (1998) and Šťastný (2003) revised the eastern Palearctic and Oriental taxa of the *dissimilis*-group and described four, and five new species and a new subspecies, respectively. Finally, Brancucci (2008) and Brancucci & Vongsana (2010) revised the *Platynectes* of Laos and described two new species. In 1978 Watts re-described all Australian species and added two new ones, one of which was later synonymized (Watts 1985).

Nevertheless, the genus is currently in need of a comprehensive revision and many species, especially in Melanesia, remain unnamed. Some Australian species are rather characteristic and are readily identified. Others, which generally include the most abundant and widely distributed ones, are not. In many cases species identities, ranges, subspecies boundaries and color variations are subject to confusion and misinterpretation. In recent years the authors have studied all relevant type material of the Australian taxa in preparation of a taxonomic revision (Šťastný et al. in prep.). Here we describe four distinctive new *Platynectes* species of the subgenus *Gueorguievtes* from Queensland, including the first species with striate elytra, raising the number of known Australian *Platynectes* species to 17.

Two of the four species treated herein were collected and recognized as new by our retired colleague David Larson (Maple Creek, Canada) in 1990, but never formally described, and later deposited in the Australian National Insect Collection in Canberra. The first species with striae on elytra were obtained by Tom Weir (ANIC, Canberra) during an entomological survey to the White Mountain National Park, and the second one by a team of scientists of the Australian Museum in Sydney, during a survey of the Carnarvon Range in 2007.

- P. monostigma* (Hope, 1842) NW Western Australia, NT, N QLD  
*latissimus* (Clark, 1863)  
*P. octodecimmaculatus* (W.S. Macleay, 1825) N QLD, SE Asia, New Guinea, Moluccas  
*flavoscriptus* Zimmermann, 1919  
*nigroangularis* Zimmermann, 1919  
*variegatus* Régimbart, 1899  
*P. semperi* Régimbart, 1899 QLD, New Guinea, Philippines, Indonesia (Sulawesi)  
*P. tasmaniae* (Clark, 1863) TAS, NSW  
*daemeli* Sharp, 1882  
*gagatinus* Lea, 1899

#### ***P. dissimilis*-group**

- P. darlingtoni* Guéorguiev, 1972 NSW, VIC, at higher altitudes  
*multimaculatus* Watts, 1978

#### ***P. weiri*-group**

- P. ponderi* sp. n. QLD (Carnarvon Range)  
*P. weiri* sp. n. QLD (White Mountains NP and Hope Vale Mission)

#### **Subgenus *Platynectes* Régimbart, 1879**

- P. aenescens* Sharp, 1882 SW Australia  
*subaenescens* Lea, 1899  
*P. laurianus* Watts, 1978 NSW, TAS  
*P. magellanicus* (Babington, 1841) SW Australia  
*P. reticulosus* (Clark, 1863) SA, VIC, TAS  
*limbatus* Sharp, 1882

Abbreviations: ACT = Australian Capital Territory, NSW = New South Wales, NT = Northern Territory QLD = Queensland, SA = South Australia, TAS = Tasmania, VIC = Victoria, WA = Western Australia.

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