

Xantholinini of the Australasian Region (Coleoptera, Staphylinidae). III. Description of *Otagonia nunni* n.sp. and new records from New Zealand

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ABSTRACT

Specimens of Xantholinini (Staphylinidae) from the private collection of John Nunn (Dunedin, New Zealand) were studied. *Otagonia nunni* n. sp. is described from North Island. New records for another 14 species of Xantholinini that occur in New Zealand are provided.

KEY WORDS

Coleoptera, Staphylinidae, Xantholinini, Nunn collection, *Otagonia*, new species, New Zealand.

INTRODUCTION

With the kind cooperation of John Nunn I was able to study the Xantholinini in his collection. As a result, I describe a new species belonging to the genus *Otagonia* Bordoni, 2005, and, with additional reference to specimens from my own collection, provide new distribution records for an additional 14 species of the 24 present in New Zealand.

Nunn's collection significantly increases the known distribution of species of Xantholinini in New Zealand. This note is the first supplement to Bordoni (2005) on the Xantholinini of New Zealand

MATERIAL EXAMINED

All specimens examined were from John Nunn's private collection (cN) and the author's collection (A. Bordoni, Firenze (cB)). NZAC is the New Zealand Arthropod Collection. The two letter area codes for collection data are those assigned by Crosby *et al.* (1998).

Otagonia nunni n. sp.

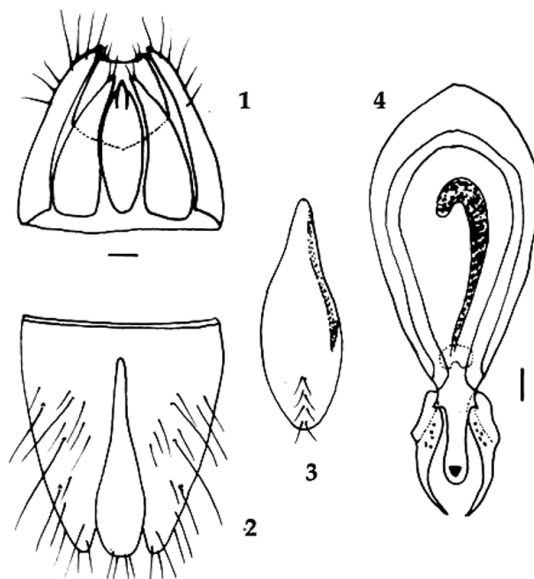
Type series. Holotype ♂: WN, Manawatu River estuary, J. Nunn leg. 14.IV.1979 (NZAC); paratypes: Karori Reservoir, 9.III.1995, 1 ex. (cN); 23.VII.1996, 1 ex. (cB), 1 ex. without data (cN), under stone near top dam; Pakuratahi Forks, 25.VIII.1996, 1 ex. (cN), under stone on river bank; Tinakori Hill, 18.X-15.XII.1991, 3 exx. (cN), in old lawn clippings, in cut grass; Brooklyn, 28.X.1995, 1 ex. (cN); WA, Whareama River mouth,

2.XI.1996, 1 ex. (cB), under log on sandy beach; Riversdale, 1.XI.1996, 1 ex. (cB), in estuarine debris; Balance Ferry Res., 23.X.1994, 1 ex (cB).

DESCRIPTION

Length of body 10 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Very similar to *O. chathamensis* Bordoni, 2005, but much larger, much more robust, with longer elytra. *O. nunni* also differs from *O. labralis* significantly by its smaller body and sexual characteristics. Body shiny; head black; pronotum, elytra and abdomen black brown; antennae and legs brown.

Head subrectangular but barely longer than wide, with subrectilinear sides and broadly rounded posterior angles. Eyes small and slightly protruding. Surface of the head with numerous deep punctures on the sides and backwards.



Figures 1-4. *Pseudocorynus mediocris* (Broun): female genital segment in ventral view, (1); *Otagonia nunni* n. sp.: male genital segment, (2); sternite of the same, (3); aedeagus, (4). Scale bars = 0.1 mm.

Pronotum longer and narrower than head, with barely sinuate sides, very oblique anterior margins and very largely rounded anterior angles. Surface with dorsal series composed of 2 anterior punctures and 3 posterior punctures; lateral series of 5-6 irregular punctures.

Elytra very long, much longer and wider than pronotum, with distinct humeri. Surface with numerous series of fine punctures.

Abdomen with fine and dense transverse microstriation and fine punctation, especially on the sides of the segments.

Male genital segment as in Fig. 2; sternite with two series of setae in the distal portion (Fig. 3). Aedeagus (Fig. 4) much larger than the aedeagus of *O. chathamensis*, with thinner parameres; distal lobule more sinuate and narrow.

Geographic distribution: *Otagonia nunni* occurs in North Island, particularly in WA and WN.

Etymology. Dedicated to its collector, John Nunn.

Notes. The study of genus *Otagonia* Bordon, 2005 is not easy, despite the good-sized species. This is due to the fact that the species are similar to each other in size, colour and punctuation and females are particularly hard to identify. Study of aedeagus then becomes crucial.

In light of these considerations and following a better knowledge of the genus gained from the additional material, it becomes necessary to make some changes to my previous interpretations.

Some specimens attributed to *Otagonia labralis* (Broun) should instead refer to the new species, especially those labeled "HB, Kereru" (NZAC, cB); "WN, Pukepuka Lagoon" (MONZ, cB); "WN, Foxton" (NZAC, cB) (Bordon, 2005).

Other species studied, with additional records and notes on geographical distribution are:

***Gyrophypnus fracticornis* (Müller, 1776)**

RI, Wharite, Ruahine Range, 22.X.1994, 1 ex. (cN), leaf litter; WN, Tinakori Hill, 30.XI.1991, 2 ex. (cN), under lawn clippings; Levin, 3.IX.1994, 1 ex. (cN), in garden compost; Whitby, 30.I.1978, 1 ex. (cN), in composting lawn clippings; NC, Klondyke Corner, Arthurs Pass NP, 21.III.2009, 1 ex. (cN), sifted ground moss berlesate; DN, Glencoe SR, Herbert, 1 ex. (cN), ground litter from kanuka forest; Boulder Beach, 27.VI.1999, 1 ex. (cB), under log near beach; Taieri Mouth, 8.X.2000, 2 ex. (cN), under driftwood on beach; Warrington Spit, 10.X.1999, 1 ex. (cN), under driftwood on beach; Aramoana Beach, 17.X.1999, 1 ex. (cB), under driftwood on beach; Aramoana Spit, 17.VI.2000, 1 ex. (cN), in beach debris.

Geographic distribution: Introduced Palaearctic species, known from North and South Island in New Zealand (Bordon, 2005).

***Leptacinus pusillus* (Stephens, 1833)**

DN, Vauxhall, 13.III.2008, 2 ex. (cN), 1 ex. (cB), in pile of lawn clippings; North East Valley, 15.III.2008, 1 ex. (cN), in compost-heap, plant nursery.

Geographic distribution: Introduced Palaearctic species, known in New Zealand only from AK (Bordon, 2005). New record for DN.

***Neohypnus andinus* (Fauvel, 1866)**

WN, Whitby, 11.V.1991, 3 ex. (cN), in lawn clippings; 7.IX.1991, 1 ex. (cN), in garden rubbish; Levin, 3.IX.1994, 2 ex. (cN), 2 ex. (cB), in garden compost; 30.VII.1995, 1 ex. (cN), in garden compost.

Geographic distribution: This species was known from Chile, Argentina, Uruguay, New Zealand: North Island, introduced (Bordon, 2005). Some specimens with fungi Laboulbeniales (in study by Walter Rossi, L'Aquila).

***Neoxantholinus pseudorufulus* Bordon, 2005**

WN, Tinakori Hill, 10.V.1991, 8.IX.1991, 2 ex. (cN), under bark of *Pinus* log.

Geographic distribution. *N. pseudorufulus* was known from North Island (Bordon, 2005).

***Notolinus socius* (Fauvel, 1877)**

WN, Island Bay, 4.IX.1985, 1 ex. (cN), in straw and rabbit manure; Whitby, 30.I.1978, 1 ex. (cN), composting lawn clippings; Karori Reservoir, 22.III.1997, 1 ex. (cN), under possum carcass; Brooklyn, 15.X.1995, 1 ex. (cN), in soil and humus; Tinakori Hill, 6.X-14.XII.1991, 1 ex. (cN), 2 ex. (cB), in garden rubbish, in puddle, in cut grass; Johnston Hill, Karori, V.1992, 1 ex. (cN); DN, Vauxhall, 30.VI.2002, 1 ex. (cN), in garden compost; 13.III.2008, 4 ex. (cN), in pile of lawn clippings.

Geographic distribution: This species was known from South Africa, St. Helena, Chile, Australia and New Zealand (KE, North and South Islands) (Bordon, 2005, 2005a).

***Otagonia chathamensis* Bordon, 2005**

DN, Trotters Ck estuary, near Palmerston, 16.I.2002, 1 ex. (cN); Old Dunstan Road, 20.III.1994, 1 ex. (cN).

Geographic distribution: This species was known from the Wellington area of the North Island, South Island and Chatham Island (Bordon, 2005).

***Paracorynus arecae* (Broun, 1880)**

ND, Mair Park, Whangarei, 6.VIII.1986, 2 exx. (cN); Claudlands, Hamilton, 4.VIII.1990, 1 ex. (cN), underside of log; WN, Trentham Memorial Park, 26.IX.1993, 1 ex. (cN), under bark of dead tree; Pukerua Bay, 27.X.1996, 1 ex. (cN), under bark of dead karaka tree; Bartons Bush, Trentham, 18.IX.1996, 2 exx. (cN), under bark of *Plagianthus* log; DN, Outram Glen, 17.VI.2001, 8 exx. (cN), 5 exx. (cB), under bark of dead *Plagianthus regius*.

Geographic distribution: This species was known especially from North Island and from two localities in the South Island (Bordoni, 2005).

***Pseudocorynus cultus* (Broun, 1880)**

WN, Pakuratahi Forks, 18.VII-12.IX.1993, 1 ex. (cN), 1 ex. (cB), in decayed rimu wood; Atatapia Stm, Tararua FP, 19.IX.1993, 1 ex. (cN), in much decayed rimu stump.

Geographic distribution: This species was known especially from North Island (only one locality in South Island) (Bordoni, 2005). New record for WN.

***Pseudocorynus mediocris* (Broun, 1880)**

ND, Omahuta Forest, 14.XI.1994, 1 ex. (cN); TO, Te Poananga Saddle, 13.VII.1996, 1 ex. (cN), in *Cortaderia* litter; TK, Patea Walk, Mt. Egmont, 8.XII.1995, 1 ex. (cB), in forest litter; WA, Manawatu Gorge, 17.XI.1991, 1 ex. (cB); WN, Tinakori Hill, 13.IX.1991, 9.XI.1991, 1 ex. (cB), under stone, edge of stream, in streamside mud and gravel; 5.IX.1992, 1 ex. (cN), in wood mould under bark; Tunnel Gully, The Plateau, 23.IX.1995, 1 ex. (cN); Karori Reservoir, 8.X.1994, 1 ex. (cB), in flood debris; 15.IV.1995, 1 ex. (cN), 1 ex. (cB), twiggy flood debris; FD, South Arm, L. Manapouri, 14.XII.1998, 1 ex. (cN), under wood splinter of fallen beech tree.

Geographic distribution: South and North Islands (Bordoni, 2005) but new records for FD.

Notes: The study of cN specimens allows me to define more accurately diagnostic features of the female genitalia of this species. The genital segment is composed of three ventral parts (Fig. 1) rather than two, as indicated in the revision of the New Zealand Xantholinini (Bordoni, 2005). The third is located between the two lateral sclerites, almost covered by them and has a particular form, with apex provided with a subacute protrusion.

***Pseudoxantholinus sharpi* (Broun, 1880)**

WN, Tinakori Hill, 30.VI-21.IX.1991, 4 ex. (cN), 1 ex. (cB), in decayed wood, in borer-riddled stump; 20.VI.191192, 1 ex. (cB), in borer-riddled stump.

Geographic distribution: *P. sharpi* was known only from North Island (Bordoni, 2005).

***Thyrecephalus orthodoxus* (Olliff, 1887)**

WN, Whitby, 8.IX.1991, 1 ex. (cN), in compost; Tinakori Hill, 12.X.1991, 1 ex. (cN), in lawn clippings; Brooklyn, 7.V.1995, 1 ex. (cN), in garden rubbish.

Geographic distribution: This introduced species was known from Australia and New Zealand (North Island) (Bordoni, 2005).

***Xantholinus linearis* (Olivier, 1794)**

SC, Temuka Beach, 9.VIII.2009, 1 ex. (cN), under driftwood, top of beach; DN, Aramoana Spit, 17.VI.2000, 1 ex. (cN), in beach drift.

Geographic distribution: This Palaeartic introduced species was known only from two localities in MC (Bordoni, 2005).

***Waitatia maoriana* Bordoni, 2005**

DN, Leith Saddle, 3.II.2001, 1 ex., on forest vegetation (cN).

Geographic distribution. This species until now was known only from WN, CL and NN (Bordoni, 2005).

***Whangareiella fulvipes* (Broun, 1880)**

WN, Tinakori Hill, 30.IV.1991- 14.IX.1991; 9.VII.1996, 4 exx. (cN), 3 exx. (cB), in dead *Griselinia* wood, under bark, dead *Pinus radiata*, under bark of pine log; Bartons Bush, Trentham, 25.VII.1996, 1 ex. (cN), in fibrous bark of dead lacebark tree; Staglands, Akatarawa Vly, 9.VII.1995, 1 ex. (cN), in accumulated bird droppings; OL, Lake Sylvan, Mt. Aspiring NP, 21.IX.1997, 1 ex. (cN), under bark dead *Nothophagus*; DN, Waipori Gorge, 23.VI.2002, 2 exx. (cN), in decayed wood; SL, Princhester Base Hut, Takitimu Forest, 14-19.I.2000, 1 ex. (cN), 1 ex. (cB), on dead branches; DN, Ross Creek Reserve, 30.VIII.2009, 3 exx. (cN), in borer-ridden, *Pseudopanax*.

Geographic distribution: South and North Islands (Bordoni, 2005) but new records for OL and DN.

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