

1447-2554 (On-line)

<http://museumvictoria.com.au/about/books-and-journals/journals/memoirs-of-museum-victoria/>

DOI: <http://doi.org/10.24199/j.mmv.2017.76.02>

Notes on Victorian Iulomorphidae (Diplopoda: Spirostreptida)

ROBERT MESIBOV (<http://zoobank.org/urn:lsid:zoobank.org:author:24BA85AE-1266-494F-9DE5-EEF3C9815269>)

West Ulverstone, Tasmania 7315, Australia (email: robert.mesibov@gmail.com)

Abstract

Mesibov, R. 2017. Notes on Victorian Iulomorphidae (Diplopoda: Spirostreptida). *Memoirs of Museum Victoria* 76: 113–120. New locality records and illustrations are given for *Atelomastix solitaria* Jeekel, 2009, *Victoriocambala bidentata* Jeekel, 2009 and *V. buffalensis* Verhoeff, 1944. Diagnostic differences are reviewed for *Victoriocambala* Verhoeff, 1944 versus *Amastigogonus* Brölemann, 1913 and *Equestrigonus* Mesibov, 2017.

Keywords

Diplopoda, Spirostreptida, Iulomorphidae, Victoria, Australia

Introduction

During a recent visit to Museum Victoria, I sorted the Museum's collection of spirostreptidan millipedes to morphospecies. Among the samples were specimens of the three previously described Victorian Iulomorphidae: *Atelomastix solitaria* Jeekel, 2009, *Victoriocambala bidentata* Jeekel, 2009 and *V. buffalensis* Verhoeff, 1944. Here I present new distribution records for the three species and add details to their published descriptions. Specimen locality records are available in table form and as keyhole markup language (KML) files on the Millipedes of Australia website, <https://www.polydesmida.info/millipedesofaustralia/localities.html>.

I was unable to examine any of the type or other published specimens of C.A.W. Jeekel for the three species. Following Jeekel's death in 2010, specimens in his possession and those he had deposited in the Zoological Museum in Amsterdam were transferred to the Naturalis Biodiversity Center in Leiden, the Netherlands. In 2014, a search in the Naturalis Biodiversity Center failed to yield the types of *V. bidentata* or Jeekel's published vouchers of *V. buffalensis* (K. van Dorp, *in litt.*, 17 Sep 2014). The types of *A. solitaria*, described from specimens in the South Australian Museum collection, were apparently not returned by Jeekel because they are not currently in the museum (P. Hudson, *in litt.*, 17 Mar 2017).

Abbreviations: NBC = Naturalis Biodiversity Center, Leiden, the Netherlands; NMV = Museum Victoria, Melbourne, Victoria, Australia; QVM = Queen Victoria Museum and Art Gallery, Launceston, Tasmania, Australia; SAM = South Australian Museum, Adelaide, South Australia, Australia; ZSM = Zoologische Staatssammlung München, München, Germany.

Atelomastix solitaria Jeekel, 2009

Zoobank LSID. <http://zoobank.org/urn:lsid:zoobank.org:act:F603EFD5-9818-4B08-9348-F5C15750BD98>

Figure 1

Atelomastix solitaria Jeekel, 2009: 31–34, figs 1–4; Edward & Harvey, 2010: 35; Korsós & Read, 2012: 45; Mesibov, 2017: 26.

Atelomastix sp. Jeekel, 1985: fig. 4.

Previous record. Male holotype and 2 male, 2 female and 4 juvenile paratypes, near Silverband Falls, Grampians, Victoria [–37.1960 142.5250 ±2 km], J.J.H. Szent-Ivany & M.L. Szent-Ivany, 6 May 1978, under bark of *Eucalyptus* sp. in forest, SAM (Jeekel 2009, p. 31).

Material examined. 1 male, 3 females, Broken Falls, Grampians, Victoria [–37.1110 142.4085 ±500 m], A. Burns, 30 Oct 1949, NMV K-13628; 1 male, 1 female, Grampians, Victoria [–37.2170 142.4350 ±20 km], collector unknown, 10 Nov 1949, NMV K-13655.

Description. Jeekel (2009) provides a detailed description of the types, but his notes on the anterior gonopod are brief. The Broken River male (fig. 1A) has sclerite **a** nearly erect, curving slightly posteriorly at apex, spatulate, concave posteriorly; small field of ca 12 short setae on anterolateral surface; medial margin slightly thickened subapically. Pseudoflagellum arising at ca 1/2 gonopod height on medial surface of sclerite **a**, thin, cylindrical, directed anterolaterally, tapering gradually to rounded tip basal to sclerite **a** tip; posterior surface of pseudoflagellum finely rugose. Sclerite **b** arising at ca 1/2 gonopod height, erect, reaching ca 5/6 gonopod height, directed slightly posteriorly, not expanded distally; distal margin oblique (lower posteriorly), slightly emarginate with sparse comb of short setae; posterior margin slightly sinuous. Sclerite **c** arising at ca 1/3–1/2 gonopod height, somewhat flattened mediolaterally and tapering to rounded tip, directed slightly laterally, strongly curving medially, reaching ca 2/3 gonopod height with 4–5 long well-spaced setae on medial surface at ca

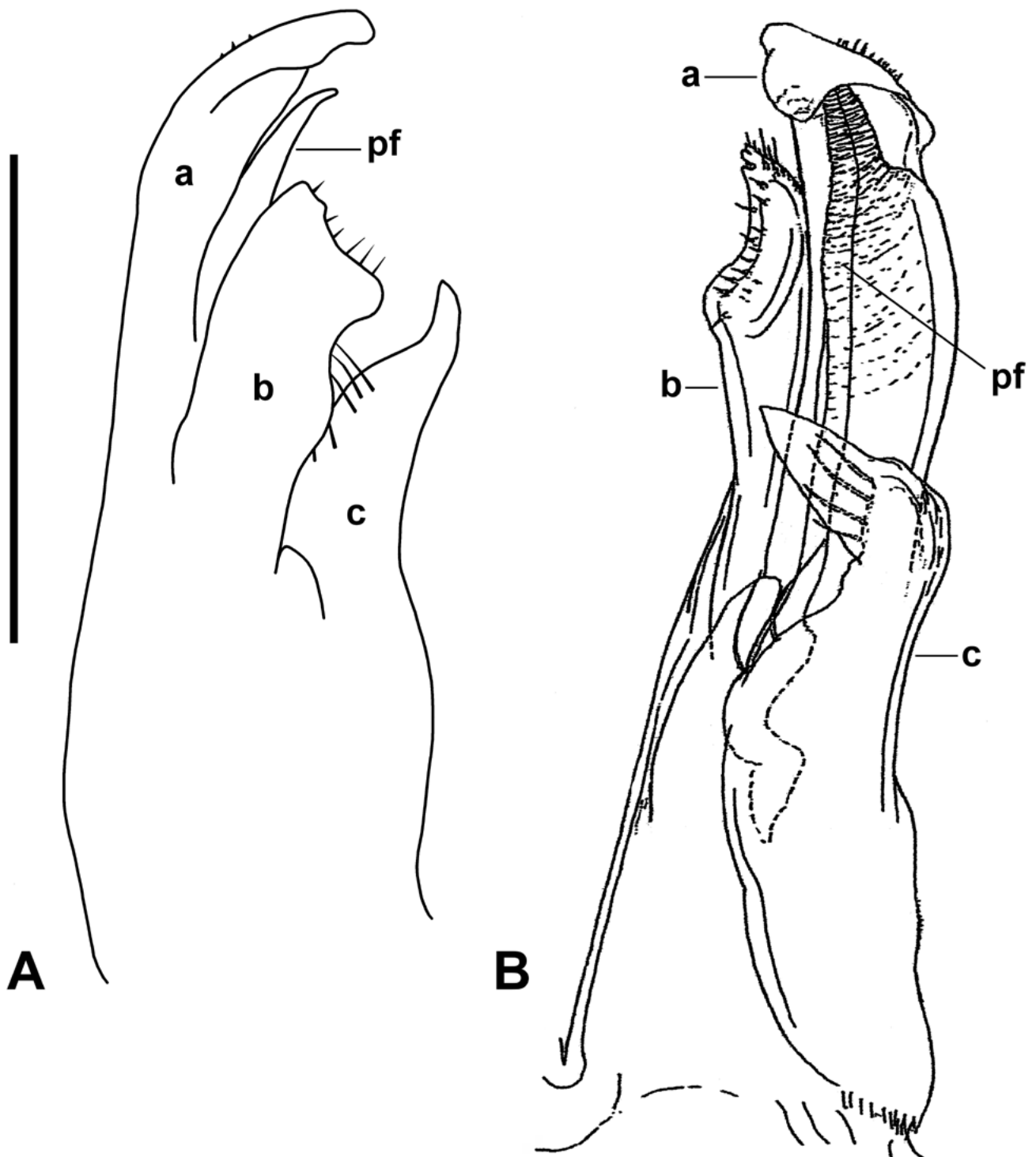


Figure 1. *Atelomastix solitaria* Jeekel, 2009, left anterior gonopod. **A**, medial and slightly posterior view of male from NMV K-13628; **B**, posterior and slightly ventral (i.e. distal) view of male holotype, de-speckled scan of fig. 4 in Jeekel (2009). Pseudoflagellum (**pf**) and sclerites **a**, **b** and **c** labelled; scale bar for **A** = 1.0 mm.

1/3–1/2 sclerite **c** height.

Distribution. So far known only from the Grampians National Park in western Victoria (fig. 2).

Remarks. Jeekel (2009, p. 34) wrote that he had previously illustrated the anterior gonopod of *A. solitaria* in Jeekel (1985), where the species is referred to as “*Atelomastix* spec. from South Australia [sic]”. Fig. 5 in Jeekel (1985; p. 108) shows a posterior view of the right anterior gonopod and is close to a mirror image of the posterior view of the left anterior gonopod in fig. 4 of the 2009 paper (reproduced here in modified form as fig. 1B). Neither of the two anterior gonopod illustrations in Jeekel (2009) is in side view, leaving the shapes of the gonopod sclerites a little unclear. The medial view in fig. 1A will allow easier comparison with *Atelomastix* anterior gonopods, as illustrated in side view by Attems (1911), Edward and Harvey (2010) and Mesibov (2017).

***Victoriocambala* Verhoeff, 1944**

Zoobank **LSID.** <http://zoobank.org/urn:lsid:zoobank.org:act:330CE9AA-124D-47EF-BCCC-6B60BE370A96>

Victoriocambala Verhoeff, 1944: 35, 41; Jeekel, 1971: 115; Hoffman, 1980: 91; Jeekel, 1981: 40; Jeekel, 1985: 106, fig 4; Mauriès, 1987: 196, 198; Korsós & Johns, 2009: 3; Jeekel, 2009: 35; Edward & Harvey, 2010: 5; Korsós & Read, 2012: 46.

Type species. *Victoriocambala buffalensis* Verhoeff, 1944, by monotypy.

Remarks. Verhoeff (1944, p. 41) noted that his new, monotypic *Victoriocambala* was most closely related to *Amastigogonus* Brölemann, 1913, a then-monotypic Tasmanian genus to which he added two new Tasmanian species. By the time Jeekel

(2009) described a second Victorian *Victoriocambala* species, the number of Tasmanian *Amastigogonus* species had increased to four (Hoffman 1972; Mauriès *et al.* 2001), and I have since added another six Tasmanian species (Mesibov, 2017). Consistent and taxonomically useful differences between species in the two genera are listed in Table 1.

The two *Victoriocambala* species share several characters with the Tasmanian endemic *Equestrigonus tasmaniensis* Mesibov, 2017. In all three cases, there is an apical fringe of long setae on the anterior gonopod telopodite, the leg 7 coxa is not elongated, there is a prominent tab anteriorly on the leg 1 prefemur and the leg 2 coxa, and prefemoral tabs begin on ring 5. *E. tasmaniensis* differs from the *Victoriocambala* species in diplosegment sculpture (suture weakly defined, longitudinal metazonite striae curving upwards towards suture), having a prominent setal crown on the posterior gonopod and the coxite process on the anterior gonopod directed posterodistally rather than parallelling the telopodite and protecting the pseudoflagellum (Mesibov, 2017). It seems likely that in a three-taxon molecular phylogeny, *Equestrigonus* and *Victoriocambala* would be more closely related than either is to *Amastigogonus*.

***Victoriocambala bidentata* Jeekel, 2009**

Zoobank **LSID.** <http://zoobank.org/urn:lsid:zoobank.org:act:CF72AC10-F464-42F6-BB72-1BE85208D37E>

Figures 4C, 4D, 5A

Victoriocambala bidentata Jeekel, 2009: 35–38, figs 6–9.—Korsós & Read, 2012: 46.

Previous record. Male holotype and 4 male, 2 female and 5 juvenile paratypes, Drummer State Forest, 15 km E of Cann River, Victoria [–37.5765 149.3105 ±1 km], C.A.W. Jeekel & A.M. Jeekel-

Table 1. Character state differences between species of *Amastigogonus* Brölemann, 1913 and *Victoriocambala* Verhoeff, 1944.

	<i>Victoriocambala</i>	<i>Amastigogonus</i>
Diplosegment suture	distinct around entire ring (fig. 3A, s)	indistinct, ventrally undetectable
Metazonite striae	longitudinal, stop at suture (fig. 3A, ms)	curve upwards anteriorly, extend onto prozonite (fig. 3B, ms)
Prozonite striae	semi-annular (below ozopore) (fig. 3, ps)	absent
Male leg 1 coxosternite	in two pieces (fig. 4A)	in one piece (fig. 4B)
Male leg1 prefemur	nearly fused with coxa, not distinguishable anteriorly	clearly demarcated from coxa (fig. 4B)
Male leg 1 tarsus	fused with tibia (fig. 4A)	clearly demarcated from tibia (fig. 4B)
Male prefemoral pads	begin on leg 4 or 5 (ring 5) (fig. 3C, ptl)	begin on leg 10 (ring 8) (fig. 3D, ptl)
Male leg 7 coxa	same as other anterior coxae (fig. 3C, 7c)	elongated and distally swollen (fig. 3D, 7c; see also figs 2A, B in Mesibov, 2017)
Anterior gonopod telopodite	with apical fringe of setae	without apical fringe of setae
Posterior gonopod	with posterolateral bump or process bearing minute setae (“telopodite remnant”; fig. 4C)	without posterolateral bump or process

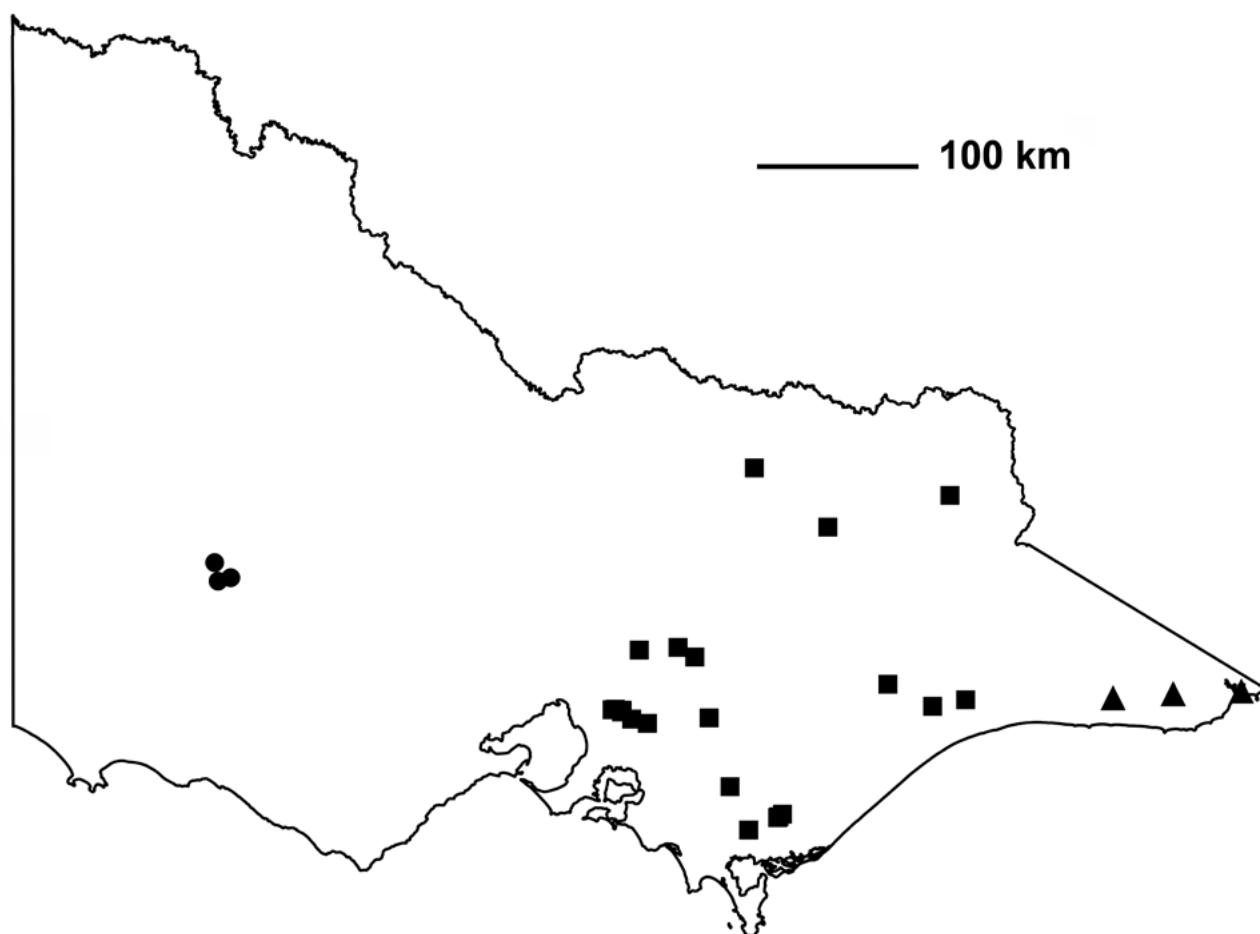


Figure 2. Map of Victoria showing known localities as of 1 March 2017 for *Atelomastix solitaria* Jeekel, 2009 (circles), *Victoriocambala bidentata* Jeekel, 2009 (triangles) and *V. buffalensis* Verhoeff, 1944 (squares). Mercator projection.

Rijvers, 13 Nov 1980, Australia Expedition station 84, *Eucalyptus* forest along Princes Highway, under logs, Naturalis Biodiversity Center (Jeekel 2009, p. 35).

Material examined. 1 male, 1 female, McKenzie River on Princes Highway, 20 km NE of Cabbage Tree Creek ("196357"), Victoria [-37.6294 148.8845 ± 500 m], Australian Biological Resources Study snail survey, 13 Apr 1975, NMV K-13634; 1 male, Marshmead Bush Blitz, end of Lakeview Road, Victoria, $37^{\circ} 31.565' S$ $149^{\circ} 47.646' E$ [37.5261 149.7941 ± 100 m], S. Hinkley & P. Lillywhite, 3 Dec 2016, beating and direct search, NMV K-13651.

Distribution. Known from three localities in far East Gippsland, Victoria (fig. 2).

Remarks. This species is easily recognised by the tooth on the anterodistal margin of the anterior gonopod telopodite (fig. 5A, t) and by the thinness of the tip of the coxite process (fig. 4D).

***Victoriocambala buffalensis* Verhoeff, 1944**

Zoobank LSID. <http://zoobank.org/urn:lsid:zoobank.org:act:0BA89A30-C7D6-4437-90B7-A427AD8E2CF3>

Figures 4A, 4E, 4F, 5B, 5C

Victoriocambala buffalensis Verhoeff, 1944: 42–43, figs 9–12; Jeekel, 1971: 115; Jeekel, 1981: 40; Jeekel, 2009: 38–41, figs 10–13; Korsós & Read, 2012: 46.

Previous records. Male holotype (Verhoeff described only one male specimen), Mt Buffalo, Victoria [-36.7760 146.7670 ± 10 km], date unknown, possibly collected by G.E. Nicholls, ZSM 20060631; [the following five records are from Jeekel, 2009, p. 38] 1 female, Gunyah Gunyah, 32 km SSW of Morwell, Victoria [-38.5306 146.3286 ± 100 m], station 92, C.A.W. Jeekel & A.M. Jeekel-Rijvers, 17 Nov 1980, timber track along Grand Ridge Road, temperate rainforest with tree ferns, under logs and litter and in rotting trees; 1 juvenile, Mt Taylor, 11 km NNW of Bairnsdale, Victoria [-37.7578 147.5986 ± 1 km] station 87, same collectors, 14 Nov 1980, fragment of *Eucalyptus*

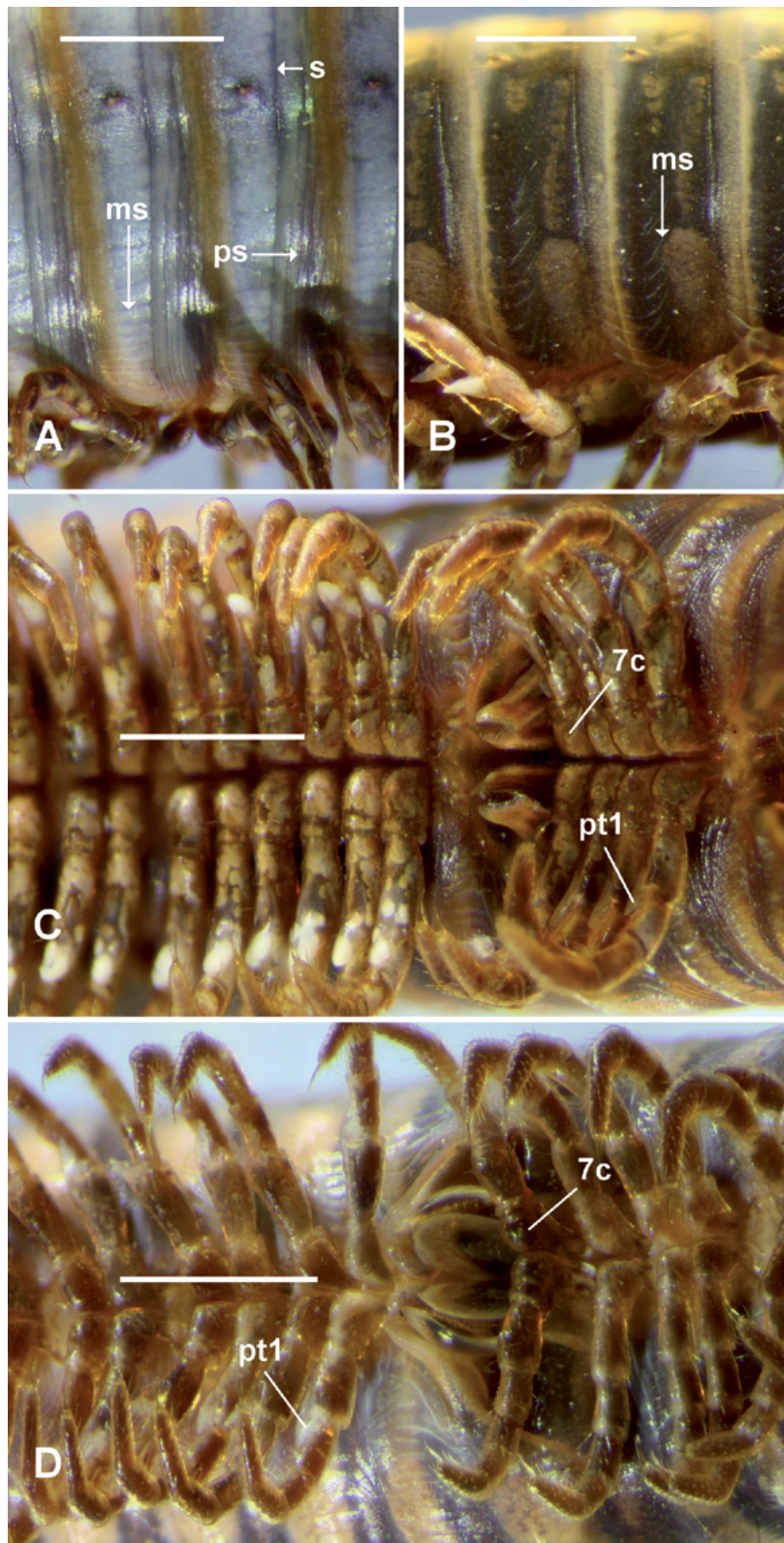


Figure 3. *Victoriocambala buffalensis* Verhoeff, 1944, NMV K-13624 (A, C) and *Amastigogonus tasmanianus* Brölemann, 1913, QVM 23:54414 (B, D). A, B, right lateral views (anterior to right) of midbody rings showing suture (s), metazonite striae (ms) and prozonite striae (ps). C, D, ventral views of anterior portion of body (anterior to right) showing first prefemoral tab (pt1) and leg 7 coxa (7c). Scale bars = 1.0 mm.

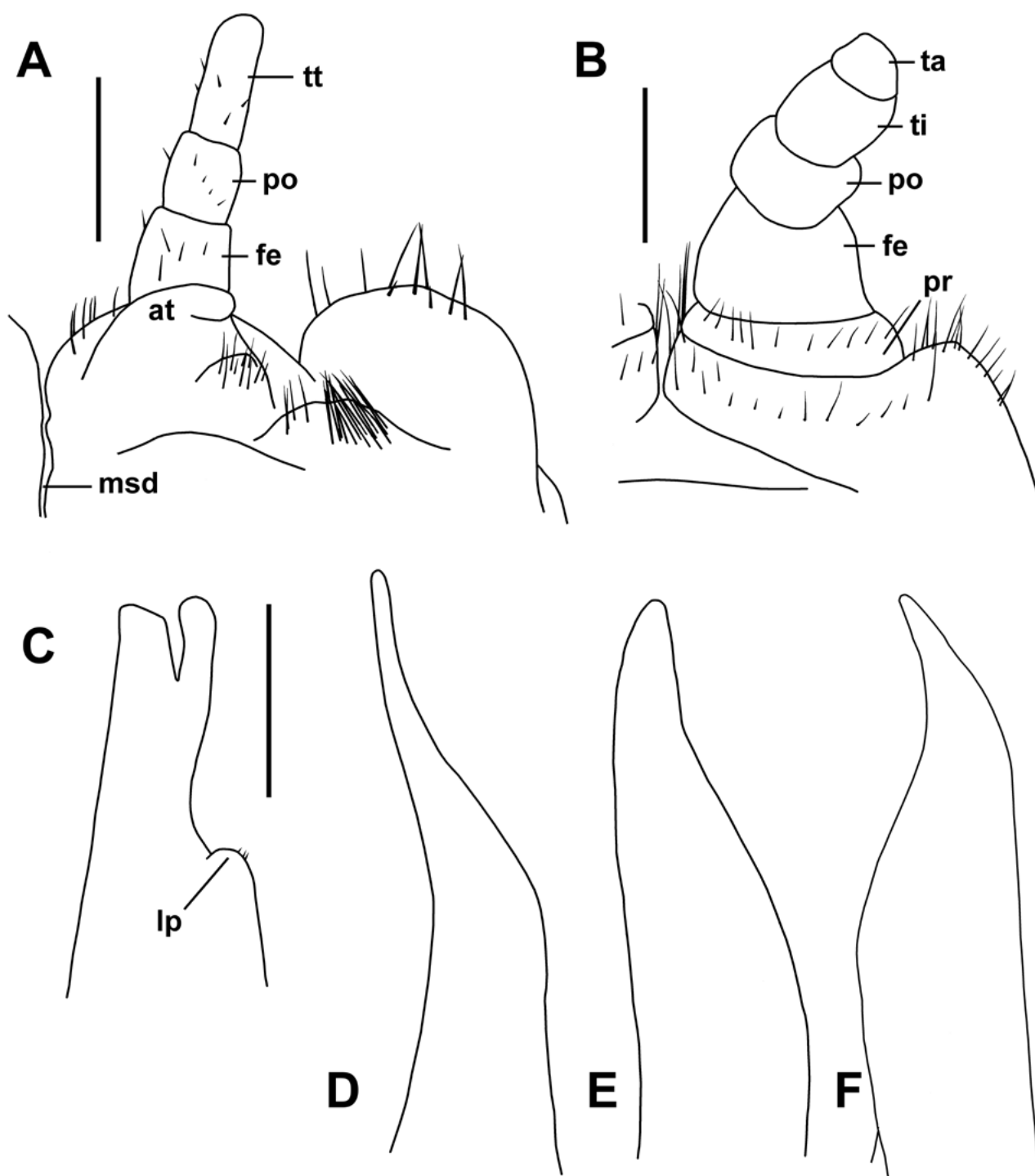


Figure 4. *Victoriocambala buffalensis* Verhoeff, 1944 (**A**, **F**, NMV K-13624; **E**, NMV K-12000), *Amastigogonus tasmanianus* Brölemann, 1913 (**B**, QVM 23:54414) and *V. bidentata* Jeekel, 2009 (**C**, **D**, NMV K-13651). **A**, **B**, anterior views of left leg 1. **C** posterior view of right posterior gonopod. **D**–**F**, lateral outlines of distal portion of coxite process on left anterior gonopod (anterior to left). **at** = anterior tab on prefemur, **fe** = femur, **lp** = lateral process (telopodite remnant), **msd** = median sternite division, **po** = postfemur, **pr** = prefemur, **ta** = tarsus, **ti** = tibia, **tt** = fused tibiotarsus. Scale bars for **A**–**C** = 0.25 mm; **D**–**F** not to scale.

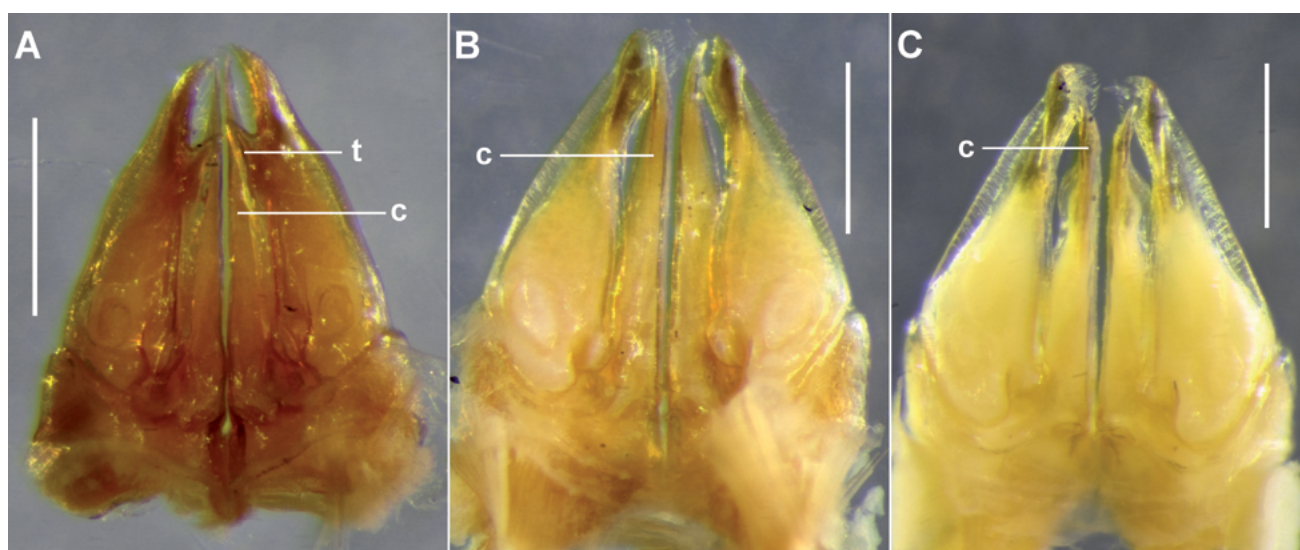


Figure 5. *Victoriocambala bidentata* Jeekel, 2009 (A, NMV K-13634) and *V. buffalensis* Verhoeff, 1944 (B, NMV K-13646; C, NMV K-13625). Anterior views of anterior gonopods. c = coxite process, t = tooth on telopodite margin. Scale bars = 0.5 mm.

forest, along roadside between grassland, under logs; 1 male, Tarra National Park, Victoria [-38.4289 146.5669 ± 1 km], station 91, same collectors, along nature track in temperate rainforest with tree ferns, under logs and in soil; 2 males, 2 females, Ferntree Gully National Park, 18 km NNE of Dandenong, Victoria [-37.8800 145.3185 ± 500 m], station 93, same collectors, 18 Nov 1980, along nature track in temperate rainforest with tree ferns, under logs and litter and in rotting trees; 5 males, 13 females, 4 juveniles, Glenaladale National Park, 28 km WNW of Bairnsdale, Victoria [-37.6500 147.2667 ± 5 km], station 88, same collectors, 15 Nov 1980, dry rainforest along creek, along nature track, under logs and stones, and in litter.

Material examined. 1 male, Glenrowan, Victoria [-36.4620 146.2240 ± 5 km], W. Kershaw, date unknown, NMV K-13633; 1 male, 2 females, Thorpdale, Victoria [-38.2890 146.1760 ± 5 km], collector unknown, 1 Apr 1899, O.A. Sayce purchase 25 Jul 1911, NMV K-13625; 1 male, 2 females, Gembrook, Victoria [-37.9530 145.5540 ± 5 km], J. Kershaw, Nov 1901, NMV K-13646; 1 male, 2 females, Emerald district, Victoria [-37.9320 145.4400 ± 10 km], E.N. Jarvis, Aug 1904, NMV K-13629; 2 males, 3 females, 1 juvenile (fragments), either Neerim North Post Office or Noojee (unclear if site or collector address), Victoria [-37.9030 145.9980 ± 5 km], T.G. Robinson, 8 Jul 1908, NMV K-13623; 3 males, 1 female, Toolangi near Healesville, Victoria [-37.5360 145.4710 ± 5 km], J.A. Kershaw, 16 Nov 1909, NMV K-13624; 3 males, Gippsland, Victoria, J.E. Dixon, 1 Jul 1914, NMV K-13640; 1 male, Bruthen, Victoria [-37.7070 147.8320 ± 5 km], Dr J.A. Leach, 12 Mar 1917, NMV K-13644; 1 male, 2 females, Bruthen, Victoria [-37.7070 147.8320 ± 5 km], J. Barling, 3 Jan 1918, NMV K-13645; 1 male (fragments), Marysville, Victoria [-37.5100 145.7480 ± 2 km], G.F. Hill, 19 Aug 1923, NMV K-13654; 1 male, 1 female, Ferntree Gully, Victoria [-37.8840 145.2950 ± 2 km], G.F. Hill, 22 Feb 1924, NMV K-13635; 1 male, Sherbrooke Forest, Ferntree Gully, Victoria [-37.8938 145.3635 ± 2 km], A. McEvey, 25 Sep 1969, “a bird used this sp of millipedes for anting”, NMV K-13650; 1 male, near Shady Creek, Dartmouth Survey locality LN, Victoria [-36.5500 147.6167 ± 2 km], Field Survey Group, Field Naturalists Club of Victoria, 3 Mar 1973, NMV K-13643; 1 female, Tarra-Bulga National Park, 0.5 km NNE of Tarra Valley Picnic Area, Victoria, $38^{\circ} 26' 40''$

S $146^{\circ} 32' 30''$ E [-38.4444 146.5417 ± 1 km], G. Milledge, 14 Nov 1995, direct search, NOH 2239, NMV K-13637; 1 male, The Big Culvert, 2.5 km ENE of Mt Observation, Victoria, $37^{\circ} 33' 36''$ S $145^{\circ} 52' 15''$ E [-37.5600 145.8708 ± 100 m] G. Milledge, 19 Feb 1996, direct search, NOH 1892, NMV K-13631; 1 male, Tarra-Bulga National Park, 0.2 km W of Tarra Valley Picnic Area, Victoria, $38^{\circ} 27' 30''$ S $146^{\circ} 32' 30''$ E [-38.4500 146.5333 ± 2 km], G. Milledge, 6 Mar 1996, direct search, NOH 2238, NMV K-13639; 1 male, 2 juveniles, Dandenong Ranges National Park, ca 0.22 km WNW of Kallista roundabout, Kallista Project Site OS1A, Victoria, $37^{\circ} 53.066' 145^{\circ} 22.006' 145.3678 \pm 25$ m], 395 m a.s.l., N. Porch & A. Lodewyke, 18 Apr 2013, open ground under tree ferns and dead holly on E slope in mountain ash (*Eucalyptus regnans*) forest, Berlesate of all leaf litter on 2 m by 2 m grid, NMV K-11998; 1 male, Dandenong Ranges National Park, ca 0.21 km SW of Kallista roundabout, Kallista Project Site SF2A, Victoria, $37^{\circ} 53.112' 145^{\circ} 22.065' 145.3678 \pm 25$ m], 395 m a.s.l., N. Porch & A. Lodewyke, 20 Apr 2013, shield fern (*Polystichum proliferum*) dominated ground under open canopy, mountain ash (*Eucalyptus regnans*) forest, E slope, Berlesate of all leaf litter on 2 m by 2 m grid; NMV K-12000

Distribution. As circumscribed here (see Remarks); *V. buffalensis* is widespread in eastern Victoria (fig. 2).

Remarks. More than one species may be included here as *V. buffalensis*. As noted by Jeekel (2009, p. 41), “This species seems rather unstable in various characters”, among them the shape of the coxite process. The process is fairly straight in specimens from parts of Gippsland and the mountains north-east of Melbourne (figs 4E, 5B and fig. 10 in Jeekel, 2009), but elsewhere in eastern Victoria, the tip is bent anterolaterally (figs 4F, 5C and fig. 12 in Verhoeff, 1944) the posterior surface is depressed, and the anterior and lateral surfaces bowed outwards around the depression (figs 4F, 5C). I have not noticed any other differences between specimens with the two coxite process forms, and I am reluctant to erect new *Victoriocambala* species without more intensive sampling across the *V. buffalensis* range.

Acknowledgements

I am grateful to Peter Lillywhite and Catriona McPhee (NMV) for assistance with the registration and loan of specimens during my visit to Museum Victoria in February 2017, to Karen van Dorp (NBC) and Peter Hudson (SAM) for advice on specimen holdings, and to reviewers Nesrine Akkari and Sergei Golovatch for helpful comments on the draft manuscript. This study was funded by the author.

References

- Attems, C. 1911. Myriopoda exkl. Scolopendridae. pp. 147–204. In: Michaelsen, W., and Hartmeyer, R. (eds), *Die Fauna Südwest-Australiens. Ergebnisse der Hamburger südwest-Australischen Forschungsreise 1905*. Verlag von Gustav Fischer: Jena. <http://biodiversitylibrary.org/page/1286042>
- Brölemann, H.W. 1913. The Myriopoda in the Australian Museum. Part II. Diplopoda. *Records of the Australian Museum* 10(6): 77–158, 5 pls. <https://doi.org/10.3853/j.0067-1975.10.1913.899>
- Edward, K.L., and Harvey, M.S. 2010. A review of the Australian millipede genus *Atelomastix* (Diplopoda: Spirostreptida: Iulomorphidae). *Zootaxa* 2371: 1–63. <http://www.mapress.com/zootaxa/2010/f/zt02371p063.pdf>
- Hoffman, R.L. 1972. On the identity of three genera of cambaloid millipeds from the Australian region (Spirostreptida). *Psyche* 79(3): 200–208. <https://doi.org/10.1155/1972/86103>
- Hoffman, R.L. 1980 (1979). *Classification of the Diplopoda*. Muséum d'Histoire Naturelle: Geneva. 237 pp.
- Jeekel, C.A.W. 1971 (1970). Nomenclator generum et familiarum Diplopodorum: A list of the genus and family-group names in the Class Diplopoda from the 10th edition of Linnaeus, 1758, to the end of 1957. *Monografieën van de Nederlandse Entomologische Vereniging* 5: i–xii, 1–412.
- Jeekel, C.A.W. 1981. Australia Expedition 1980: Legit C.A.W. Jeekel and A.M. Jeekel-Rijvers. List of collecting stations, together with general notes on the distribution of millipedes in eastern Australia and Tasmania. *Verslagen en Technische Gegevens, Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Universiteit van Amsterdam* 30: 1–59. <http://www.repository.naturalis.nl/document/550141>
- Jeekel, C.A.W. 1985. The distribution of the Diplochaeta and the “lost” continent Pacifica (Diplopoda). *Bijdragen tot de Dierkunde* 55(1): 100–112. <http://www.repository.naturalis.nl/document/547773>
- Jeekel, C.A.W. 2009. Millipedes from Australia, 24: Iulomorphidae from Victoria, with the description of two new species (Diplopoda, Spirostreptida). *Myriapod Memoranda* 11: 31–41.
- Korsós, Z., and Johns, P.M. 2009. Introduction to the taxonomy of Iulomorphidae of New Zealand, with descriptions of two new species of *Eumastigonus* Chamberlin, 1920 (Diplopoda: Spirostreptida: Epinannolenidea). *Zootaxa* 2065: 1–24.
- Korsós, Z., and Read, H.J. 2012. Redescription of *Zinagon chilensis* (Silvestri, 1903) from Chile, with a species list of Iulomorphidae from the Southern Hemisphere (Diplopoda: Spirostreptida: Epinannolenidea). *Zootaxa* 3493: 39–48.
- Mauriès, J.-P. 1987. Cambalides nouveau et peu connus d'Asie, d'Amérique et d'Océanie. II. Pseudonannolenidae, Choctellidae (Myriapoda, Diplopoda). *Bulletin du Muséum national d'Histoire naturelle, Paris, 4th series, section A* 9(1): 169–199. http://bibliotheques.mnhn.fr/EXPLOITATION/infodoc/digitalCollections/viewerpopup.aspx?seid=BMAZO_S004_1987_T009_N001
- Mauriès, J.-P., Golovatch, S.I., and Hoffman, R.L. 2001. On type material and the identity of several *Iulus* species in the collection of the Muséum national d'Histoire naturelle in Paris (Diplopoda, Spirostreptida, Spirobolida). *Zoosystema* 23(3): 579–589. <http://sciencepress.mnhn.fr/sites/default/files/articles/pdf/z2001n3a12.pdf>
- Mesibov, R. 2017. Iulomorphid millipedes (Diplopoda, Spirostreptida, Iulomorphidae) of Tasmania, Australia. *ZooKeys* 652: 1–36. <https://doi.org/10.3897/zookeys.652.12035>
- Verhoeff, K.W. 1944. Zur Kenntnis der Cambaliden und über einige neue australische Formen derselben. *Zoologischer Anzeiger* 145: 27–45.