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**Studies on the Australian stick insects (Phasmida),
including a checklist of species and bibliography**

PAUL D. BROCK & JACK HASENPUSCH



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Studies on the Australian stick insects (Phasmida), including a checklist of species and bibliography

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Abstract

The Australian phasmid fauna has been revised prior to publication of a field guide by the same authors. Six new genera are described: *Austrosipyloidea* Brock & Hasenpusch, *Cornicandovia* Hasenpusch & Brock, *Davidrentzia* Brock & Hasenpusch, *Micropodacanthus* Brock & Hasenpusch, *Paratropidoderus* Brock & Hasenpusch and *Spinosispyloidea* Hasenpusch & Brock. Sixteen new species from various parts of Australia are described and figured: *Candovia robinsoni* Brock & Hasenpusch, *Rhamphosispyloidea palumensis* Hasenpusch & Brock, *Scionecra milledgei* Hasenpusch & Brock, *Sipyloidea brevicerci* Hasenpusch & Brock, *Sipyloidea garradungensis* Hasenpusch & Brock, *Sipyloidea larryi* Hasenpusch & Brock, *Sipyloidea lewisensis* Hasenpusch & Brock, *Sipyloidea rentzi* Brock & Hasenpusch, *Sipyloidea whitei* Brock & Hasenpusch, *Spinosispyloidea doddi* Hasenpusch & Brock [all Necroschiinae], *Pachymorpha spinosa* Brock & Hasenpusch [Pachymorphinae], *Davidrentzia valida* Brock & Hasenpusch [Platycraninae], *Micropodacanthus mouldsi* Brock & Hasenpusch, *Micropodacanthus sztrakai* Brock & Hasenpusch, *Paratropidoderus spinosus* Brock & Hasenpusch and *Podacanthus keyi* Brock & Hasenpusch [Tropidoderinae].

A number of new combinations are proposed, new synonyms and incorrect synonymy corrected following detailed examination of type and other material: 1. (Lonchodinae): *Austrocarausius* Brock, 2000: *Carausius macerrimus* Brunner, 1907 is a new synonym of *Austrocarausius nigropunctatus* (Kirby, 1896). *Denhama* Werner, 1912: *D. austrocarinata* (Otte & Brock, 2005), *D. longiceps* (Brunner, 1907), *D. striata* (Sjöstedt, 1918) and *D. eutrachelia* (Westwood, 1859) are transferred from *Hyrtacus* Stål, 1875, the latter species also removed from synonymy with *Hyrtacus coenosa* (Gray, 1833). *D. gracilis* (Sjöstedt, 1918), a former *Marcenia* species, is also transferred. *Hyrtacus* Stål, 1875 (= *Marcenia* Sjöstedt, 1918 syn. n.): *H. caurus* (Tepper, 1905) comb. n. transferred from *Lonchodes* Gray, 1835 (three new synonyms also reported for this species: *Bacillus peristhenellus* Tepper, 1905, *Hyrtacus cunctatrix* (Sjöstedt, 1918) and *Hyrtacus nigrogranulosus* Sjöstedt, 1918). *Marcenia frenchi* (Wood-Mason, 1877) is a new synonym of *Hyrtacus tuberculatus* Stål, 1875. 2. (Necroschiinae): *Austrosipyloidea* Brock & Hasenpusch, gen. n.: *A. carterus* (Westwood, 1859) comb. n., transferred from *Sipyloidea* Brunner, 1893 (= *Sipyloidea filiformis* Redtenbacher, 1908 syn. n.). *Candovia* Stål, 1875 is removed from synonymy with *Hyrtacus*, along with the type species, *C. coenosa*. This has resulted in all former Australian species placed in *Parasipyloidea* Redtenbacher, 1908 being transferred to *Candovia* i.e. *C. aberrata* (Brunner, 1907) comb. n., *C. annulata* (Brunner, 1907) comb. n., *C. granulosa* (Brunner, 1907) comb. n., *C. pallida* (Sjöstedt, 1918), comb. n., *C. spurcata* (Brunner, 1907) comb. n. and *C. strumosa* (Redtenbacher, 1908) comb. n. In addition, *C. evoneobertii* (Zompro & Adis, 2001) comb. n. and *C. peridromes* (Westwood, 1859) comb. n. (including its new synonyms *Clitarchus longipes* Brunner, 1907, *Bacunculus tener* Brunner, 1907 and *E. cercatus* (Redtenbacher, 1908)) are transferred from *Echetlus* Stål, 1875. *Cornicandovia* Hasenpusch & Brock gen. n.: *C. australica* (Redtenbacher, 1908) comb. n. *Sipyloidea* Brunner, 1893: *S. bella* (Tepper, 1905) comb. n. (new synonym *S. ovabditia* Rentz & John, 1987) is transferred from *Necroschia* Serville, 1838, *S. caeca* Sjöstedt, 1918 rev. stat., is removed from synonymy with *Sipyloidea carterus* (Westwood, 1859). *Rhamphosispyloidea* Redtenbacher, 1908: *R. queenslandica* (Sjöstedt, 1918) comb. n. is transferred from *Sipyloidea*, also removed from synonymy with *carterus*. 3. (Pachymorphinae): *Pachymorpha* Gray, 1835: *P. pasithoe* (Westwood, 1859) is a new synonym of *P. simplicipes* Serville, 1838. 4. (Eurycanthinae). *Eurycantha* Boisduval, 1835: *E. sifia* (Westwood, 1859) is a new synonym of *E. calcarata* Lucas, 1870. 5. (Phasmatinae): *Vetilia* Stål, 1875 is a new synonym of *Acrophylla* Gray, 1835, resulting in the transfer of these species to *Acrophylla*: *A. enceladus* (Gray, 1835) comb. n. and *A. thoon* (Stål, 1875) comb. n. *Vetilia ligia* Redtenbacher, 1908 is a new synonym of *Acrophylla wuelfingi* Redtenbacher, 1908. *A. paula* (Tepper, 1905) and *A. aliena* Redtenbacher, 1908 are new synonyms of *A. nubilosa* Tepper, 1905. *A. caprella* (Westwood, 1859) comb. n. is transferred from *Ctenomorpha* Gray, 1833. *Anchiale* Stål, 1875 (= *Ctenomorphodes* Karny, 1923 syn. n.), resulting in the transfer of *A. briareus* (Gray, 1834) comb. n. and *A. tessulata* (Gray, 1835) which is renamed *Anchiale austrotessulata* name nov., as *tessulata* Gray is preoccupied by *Anchiale tessulata* (Goeze, 1778). *Austroclonistria* Redtenbacher, 1908 is a new synonym of *Arphax* Stål, 1875, as *A. serrulata* Redtenbacher, 1908 is a new synonym of *Arphax dolomedes* (Westwood, 1859). *Ctenomorpha* Gray, 1833: *Paractenomorpha macrotegmus* (Tepper, 1887) is confirmed as a synonym of *Ctenomorpha marginipennis* Gray, 1833. *Hermarchus* Stål, 1875: *H. polynesianus* Redtenbacher, 1908 is a new synonym of *H. insignis* (Kaup, 1871). *Paronchestus* Redtenbacher, 1908: *P. cornutus* (Tepper, 1905) comb. n. is transferred from *Acrophylla* Gray, 1835 and *P. pasimachus* (Westwood, 1859) from *Onchestus* Stål, 1875. 6. (Platycraninae): *Megacrania batesii* (Kirby, 1896) is removed from synonymy with *Megacrania alpheus* (Westwood, 1859). 7. (Tropidoderinae): *Didymuria* Kirby 1904: *D. virginea* Stål, 1875 is removed from synonymy with *D. violescens* (Leach, 1814). *Lysicles* Stål, 1877: *L. periphanes* (Westwood, 1859) comb. n. is transferred from *Echetlus* Stål, 1875. *Tropidoderus* Gray 1835: *T. michaelsoni* Werner, 1912 is removed from synonymy with *T. childrenii* (Gray, 1833). 8. (Xeroderinae): *Cooktownia* Sjöstedt, 1918 becomes a new synonym of *Xeroderus* Gray, 1835, as *Cooktownia plana* Sjöstedt, 1918 is a new synonym of *Xeroderus kirbii* Gray, 1835.