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New species of the hairy-eyed horse fly subgenera *Scaptia* (*Myioscaptia*) Mackerras, 1955 and *Scaptia* (*Scaptia*) Walker, 1850 (Diptera: Tabanidae) from Australia

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Abstract

New material has accumulated in several Australian Museums since Mackerras' extensive 1960's revision of the austral horse fly genus *Scaptia* Walker 1850, including one new species of *Scaptia* (*Scaptia*) Walker, 1850 and two new species of *Scaptia* (*Myioscaptia*) Mackerras, 1955. The new species are *Scaptia* (*Scaptia*) *aurinigra* Lessard, **sp. n.** and *Scaptia* (*Myioscaptia*) *collessi* Lessard, **sp. n.** both from Queensland, and *Scaptia* (*Myioscaptia*) *lambkinae* Lessard, **sp. n.** from Western Australia. All new species are described and illustrated. Additionally, an updated key to species of *Scaptia* (*Myioscaptia*) is provided and includes all eleven known species of the subgenus. One novel species significantly extends the known distribution of the genus over 700 km further NE into central Western Australia.

Key words: Pangoniinae, Scionini, morphology, descriptive taxonomy

Introduction

Australian horse flies (Diptera: Tabanidae) are important pollinators of *Eucalyptus*, *Leptospermum* and other myrtaceous plants (Johnson and Morita 2006; Tillyard 1926; Lessard and Yeates 2012b; Mackerras 1957, 1960; Morita 2008). The family is more disreputable for the biting behaviour of females that can lead to the mechanical transmission of microorganisms causing a myriad of diseases affecting livestock, native mammals and even humans (Foil *et al.* 1984; Foil *et al.* 1988; Foil 1989; Krinsky 1976; Reid *et al.* 2001; Scoles *et al.* 2008; Spratt 1972a, 1972b, 1974a, 1974b, 1975). The Australian species *Scaptia* (*Myioscaptia*) *calliphora* Mackerras 1955, *Scaptia* (*Myioscaptia*) *ferromontana* Daniels 2011, *Scaptia* (*Myioscaptia*) *inopinata* Fairchild & Mackerras 1977, *Scaptia* (*Myioscaptia*) *violacea* (Macquart 1850) and *Scaptia* (*Myioscaptia*) *bancrofti* (Austen, 1912) have all been reported to attack humans (Mackerras 1960), with the latter two also feeding on cattle (Mackerras 1960; Fairchild and Mackerras 1977; Daniels 2011).

The genus *Scaptia* usually comprises stout and hairy flies and is currently divided into seven subgenera, including *Lepmia* Fairchild 1969 (found in Brazil), *Pseudomelpia* Enderlein 1922 (Chile), *Myioscaptia* Mackerras 1955 (Australia), *Palimmecomylia* Taylor 1917 (Australia) and *Plinthina* Walker 1850 (Australia), along with the more widely dispersed and species-rich subgenera *Pseudoscione* Lutz in Lutz, Araujo & Fonseca 1918 (Australia, Argentina, Brazil, Chile, New Guinea and New Zealand) and *Scaptia* Walker 1850 (Australia, Chile, Peru, Bolivia, Argentina).

Australian members of *Scaptia* (*Scaptia*) are mostly solidly built species, with relatively short and strong legs, distinguished from other subgenera by the parallel frons, large pointed and sabre-like palpi, and short and thick proboscis with large well-developed labella. In contrast, the Australian subgenus *Scaptia* (*Myioscaptia*) comprises small and rotund species, usually semi-metallic or metallic in colour. Some species are obvious blowfly mimics, resembling the general appearance of the calliphorid genera *Calliphora* Robineau-Desvoidy, 1830 and *Lucilia* Robineau-Desvoidy, 1830, as well as the sound, and directionless, low level approach in flight (Nicholson 1927;