

Biological control of African Lovegrass (*Eragrostis curvula*): native-range surveys in Africa

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Summary African lovegrass, *Eragrostis curvula* (Schrad.) Nees (Poaceae), is a problematic alien invasive grass in Australia, particularly in New South Wales (NSW), where it reduces the grazing capacity of invaded pastures and increases fuel loads during the fire season. As such, African lovegrass is currently in the process of being nominated as suitable for weed biological control research in Australia. In the interim, surveys for potential biological control agents are being performed across its native range in southern Africa. We surveyed the insect communities on a range of sympatric *Eragrostis* spp. and closely-related genera to determine the field host-range of any potential biological control agents. Two stem-boring wasps

(*Tetramesa* spp.; Eurytomidae) were recorded on *E. curvula* and prioritised as potential agents. Subsequent field surveys, however, yielded several morphologically indistinguishable *Tetramesa* spp. on a number of non-target grasses. We used DNA barcoding to delineate different *Tetramesa* spp. and assess their field host-range. No-choice oviposition trials were performed under greenhouse conditions to evaluate the host-range of both *Tetramesa* spp. Here, we discuss the progress of this project to date, highlighting the prospects and challenges for the biological control of African lovegrass in Australia.

Keywords Grass; Poaceae; host-specificity; field surveys; no-choice tests; *Tetramesa*