**Biology and Host Range of *Falconia intermedia* (Hemiptera: Miridae), a Potentially Damaging Natural Enemy on *Lantana camara* in South Africa**

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Although various control measures have been implemented, *lantana* remains one of South Africa’s most aggressive invasive woody weeds. Investigations were made into the biological control potential of a sap-sucking mirid, native to Central America. This active, leaf-feeding mirid has a high reproductive potential and feeds on the leaves, causing severe chlorosis and, eventually, defoliation. Host specificity studies under laboratory conditions indicate that nymphal survival and development occurred on *L. camara* and several closely related indigenous species in the genus *Lippia*. No-choice adult survival trials indicated that oviposition performance was highest on *lantana* and significantly lower on the *Lippia* species throughout the oviposition period. Multi-choice trials with adults provided a better indication of the expected natural host range, with *lantana* as the preferred host for feeding and oviposition. A risk analysis, using the relative suitability scores for the three suitability factors investigated and representing the entire life-cycle of the mirid, indicated that there is, at most, a very low risk involved with the release of the mirid. With a short life-cycle, an active dispersal ability, a high reproductive rate, and high level of specificity, the *lantana* mirid is recommended for release in South Africa as a potentially damaging natural enemy.

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**Oversummering and Host Specificity of *Zygina* sp. (Cicadellidae), a Potential Agent for the Control of Bridal Creeper, *Asparagus asparagoides* (Asparagaceae)**

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Bridal creeper (*Asparagus asparagoides*) is a plant of southern African origin that has escaped from horticulture and attained weedy status in nature reserves across southern
temperate Australia. The plant sends up new shoots in autumn. After producing fruit in spring, the aboveground parts senesce and the plant passes the hot, dry summers as rhizomes and tubers. A potential leaf-feeding, biological control agent against this weed, the leafhopper (Zygina sp.) was introduced into quarantine in Australia for host testing. In non-choice tests, feeding, oviposition, and some nymphal development occurred over a wide range of plants. However, in choice tests, feeding and oviposition was confined to A. asparagoides and closely related species. It is unknown how Zygina sp. oversummers. In South Africa, adults were not found in summer either in leaf litter or on surrounding vegetation. In experiments designed to mimic Australian summer conditions, populations of Zygina sp. transferred from culture cages rapidly declined (without bridal creeper), even when offered plants they fed greatest on in non-choice tests. Some feeding occurred on peach, cherry, and almond leaves, and some oviposition occurred on cherry trees. However, on dissection, surviving 100-day-old females had many more retained eggs (mean 8.2, range 3-21) than females from the culture boxes (mean 0.7, range 0-5). In further experiments with young adults collected from senescing bridal creeper plants, there was neither feeding nor oviposition on cherry trees. Plants of cherry, almond, peach, and sunflower were transplanted next to senescing bridal creeper at sites in South Africa. Neither eggs nor nymphs were found on the test plants, but minor feeding occurred on some of the cherry and almond trees. It is still unclear how Zygina sp. oversummers, but it is concluded that the insect is specific to A. asparagoides and permission has been sought for its release in Australia.

Breeding and Development Statistics of Gratiana spadicea (Col.: Cassidinae) on Wild Tomato (Solanum sisymbriifolium) and Eggplant (S. melongena)

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A leaf-feeding tortoise beetle (Gratiana spadicea), native to South America, was released in 1995 in South Africa as a biological control agent for the invasive exotic weed Solanum sisymbriifolium. In standard starvation tests in quarantine, G. spadicea complet-ed its life cycle on the crop plant, Solanum melongena (eggplant), although with diminished larval survival. In this study, we evaluated the possibility of G. spadicea using S. melongena as an alternative host. In non-choice tests under natural climatic conditions, larvae reared on eggplant had 2.5 times less larval survival than on its natural host, a sig-