Host Specificity Studies of the Pathogen *Mycovellosiella lantanae* var. *lantanae* for the Biological Control of *Lantana camara* in South Africa

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*Lantana camara* L. is a poisonous, bushy shrub from South and Central America which has invaded many of the moist, warm sub-tropical parts of South Africa. It rapidly reinvades disturbed areas or areas cleared of other weeds. An isolate (C386) of a leaf pathogen, *Mycovellosiella lantanae* var. *lantanae*, which causes extensive defoliation of the plant, was collected in Florida, USA, and subsequently inoculated in quarantine onto South African biotypes of *L. camara* and a number of closely-related species, i.e. *Clerodendrum glabrum*, *Duranta repens*, *Lantana rugosa*, *Lippia javanica*, *Lippia rehmannii*, *Lippia scaberrima*, *Phylla nodiflora*, *Stachytarpheta* sp., *Verbena bousariensis*, and *Verbena brasiliensis*, to determine its host specificity. None of the potential alternate hosts showed any symptoms of infection and no signs of hyphal growth were observed. Inoculation of *L. camara* with the same isolate caused chlorotic, grey lesions (20-60 per leaf), and necrosis of flower buds and stalks, as well as defoliation of some plants after three weeks. This indicates a very restricted host range, making this pathogen a promising control candidate which should reduce the vigour and reproductive potential of the plant.

Host Specificity of *Algarobius bottimeri* and *Algarobius prosopis* in Australia

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The mesquite bruchids (*Algarobius bottimeri* and *Algarobius prosopis*) were tested for host specificity as biological control agents of mesquite, *Prosopis* spp., in Australia, following their release in South Africa. In multiple-choice tests in which test-plant pods and mesquite pods were placed close together, both *A. bottimeri* and *A. prosopis* oviposited heavily on pods of most non-mesquite test plants as well as on mesquite pods. Both bruchids developed through to adults in low numbers in seeds of *Acacia aneura*, *Petalostylis labicheoides*, *Neptunia gracilis*, and *Arachis hypogaea* with much longer development times than in mesquite seeds. *Algarobius prosopis* also developed in