LACK OF RESPONSE OF GLASSY-WINGED SHARPSHOOTER (*HOMALODISCA VITRIPENNIS*) TO A RANGE OF CHEMICAL LURES

M-C. NIELSEN[1], M.S. HODDLE[2], N.B. PERRY[3] and D.A.J. TEULON[1]

[1]*Crop & Food Research, Private Bag 4704, Christchurch, New Zealand*
[2]*University of California, Riverside, Department of Entomology, CA 92521, USA*
[3]*Crop & Food Research, University of Otago, Box 56, Dunedin, New Zealand*

Corresponding author: nielsenm@crop.cri.co.nz

Glassy-winged sharpshooter (GWSS), *Homalodisca vitripennis* Say (Hemiptera: Cicadellidae), a native leafhopper in the south-eastern United States and a vector of the lethal grape malady Pierce's disease, are both major threats to New Zealand's productive and natural ecosystems. Currently a serious pest in California, GWSS has successfully invaded French Polynesia, Hawaii, Easter Island and recently the Cook Islands. To date, GWSS has not been reported from New Zealand. Two field bioassays were carried out in a bare field plot adjacent to citrus trees at Agricultural Operations at the University of California, Riverside, USA, in August 2006 to examine the efficacy of 14 chemical lures for attracting GWSS to yellow sticky traps. In Trial 1 ethyl isonicotinate, ethyl nicotinate, methyl-4-pyridyl ketone, cis jasmine, methyl isonicotinate, 2-methoxy-4-methylphenol, 4-methoxybenzaldehyde and 4-formyl pyridine were tested. The lures used in Trial 2 are commercially sensitive and are not listed here. The number of GWSS on each trap was counted after 24 hours. There was no difference in GWSS trap catch between treatment lures or with the control in both trials.

MEASURING THE IMPACTS OF SOIL APPLIED *BEAUVERIA BASSIANA* ON ABOVE GROUND NON-TARGET COLEOPTERA IN WAIKATO PASTURE

M.R. MCNEILL, M. BROWNBRIDGE and T.L. NELSON

AgResearch, Lincoln, Private Bag 4749, Christchurch 8140, New Zealand

Corresponding author: mark.mcneill@agresearch.co.nz

Clover root weevil (CRW), *Sitona lepidus* (Coleoptera: Curculionidae), has a significant detrimental impact on white clover (*Trifolium repens*) in New Zealand pastures. The key damaging life stage is the larvae that attack the root system, destroying the nitrogen fixing nodules. The insect-pathogenic *Beauveria bassiana* F418 strain is being evaluated as a biopesticide for CRW. The research has included an assessment of effects on adult Coleoptera found in association with CRW. F418 was drilled into three CRW-infested white clover/ryegrass pastures in Waikato in October 2006, targeting the larvae. At intervals after drilling, sites were sampled to determine numbers and diversity of Coleopteran species and the presence of *B. bassiana* in individuals that died subsequently in the laboratory. There was site and seasonal variation in the number and diversity of Coleoptera collected. The most abundant were: CRW (52%), Argentine stem weevil (*Listronotus bonariensis*) (38%) and Coccinelid spp. (4%). Native weevils represented <1% of the total Coleoptera collected. *Beauveria bassiana* was prevalent at all sites but of the non-target species, the incidence of *B. bassiana* was highest in the ryegrass pest *L. bonariensis* (44%) and beneficial Coccinelid spp. (56%). Suitable methods to distinguish F418 from the wild strains of *B. bassiana* are being investigated.