RADUMERIS TASMANIENSIS SAUSSURE IN NEW
ZEALAND: DISTRIBUTION AND POTENTIAL HOST
RANGE

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The yellow flower wasp (\textit{Radumeris tasmaniensis}) was first reported in Northland, New Zealand, in February 2000 at three locations, Herekino and Twilight on the west coast and Whareana on the east. \textit{Radumeris tasmaniensis} is a solitary wasp that occurs extensively in Australia and Papua New Guinea, and is a parastoid of large (>1.5 g) scarab larvae. As the threat to native Scarabaeidae was unknown, MAF Biosecurity commissioned a survey to determine the distribution and potential host range of \textit{R. tasmaniensis}. A delineation survey using Malaise, attractant, pitfall, and sticky traps conducted over February and March 2001 at 40 sites on both coasts of Northland confirmed that \textit{R. tasmaniensis} had only established at the three original sites. Parasitised scarab larvae were not detected in a concurrent soil fauna survey. However, circumstantial evidence indicated that larvae of the sand scarab (\textit{Pericoptus truncatus}), a suitable size for \textit{R. tasmaniensis} larvae, were the primary hosts. Adult \textit{R. tasmaniensis} were only observed in dune country, the habitat of the sand scarab and were active during March when the sand scarab larvae were present. African black beetle (\textit{Heteronychus arator}) reaches pest populations in pasture in Northland and is a potential host. However, it was scarce in dune land and was in the adult stage during March so was not available as a host to \textit{R. tasmaniensis}.

GC-EAD STUDIES OF STRIPED CUCUMBER BEETLE
(\textit{ACALYMMA VITTATUM}) AGGREGATION PHEROMONE

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Field trapping studies in New York using caged striped cucumber beetles (\textit{Acalymma vittatum}) with cucumber seedlings as trap lures have demonstrated the presence of a male-produced aggregation pheromone for this species. Consequently we undertook a study to identify pheromone components using gas chromatography coupled to an electroantennographic detector (GC-EAD). Effluvia were collected from feeding male beetles using Super-Q porous polymer, or by solid phase microextraction (SPME) with a polydimethylsiloxane/divinylbenzene (PDMS/DVB) coated fibre. These collections contained one GC peak that consistently gave a large EAD response from female antennae. However, analysis of this peak by GC-MS gave a poor mass spectrum with insufficient diagnostic ions to identify the pheromone.

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