

1999 where fruit was presented on a pale background and red was found to be significantly preferred. These results have to be tested further and the effect of fruit smells examined.

Poster Session

Barley yellow dwarf luteovirus (BYDV) invasions of Australasia's native grass flora.

Davis, L.T. & Guy, P.L.

The introduced barley yellow dwarf viruses (BYDVs) have invaded native grasses in New Zealand. Virus incidence was significantly lower in the native species (2%) than in the introduced species (12%). Even though overall incidences were low, hotspots were found where incidences reached 30-40% in some species. Four different serotypes (RMV, RPV, PAV, MAV) were detected in the introduced grass flora but only two (RMV, PAV) were detected in native species. In experimental transmission tests the aphid vector *Rhopalosiphum padi*'s survival was variable on the 20 native species tested but this was not due to the presence or absence of endophytic fungi as none were detected in the New Zealand species. Aphid numbers increased and plants were killed when *R. padi* fed on *Agrostis muelleriana* and *Festuca multinodis*. *R. padi* transmitted a PAV isolate to these and six other native species. *Agrostis capillaris*, *Dactylis glomerata* and *Lolium perenne* were identified as the most likely reservoirs of infection for the native flora. *Anthoxanthum odoratum* was not infected but if the SGV serotype and its vector *Schizaphis graminum* were ever introduced, *A. odoratum* could form an effective reservoir from near sea level into alpine areas.

Six viruses in *Narcissus* spp. from New Zealand.

Clark, V.R. & Guy, P.L.

Narcissus spp. from Otago showing virus-like symptoms were surveyed for viruses using ELISA and mechanical transmission tests. High incidence of virus infection was detected at five sites. *Arabid mosaic virus*, *Cucumber mosaic virus*, *Narcissus latent virus*, *Narcissus mosaic virus*, *Narcissus tip necrosis virus*, and *Narcissus yellow stripe virus* (NYSV) were detected but not *Tobacco rattle virus*, the only virus previously identified from infected *Narcissus* spp in New Zealand. There was a high incidence of NYSV in infected plants both as single and mixed infections. This is the first record for each of these viruses in *Narcissus* in NZ.