PROSPECTS FOR THE BIOLOGICAL CONTROL OF GORSE
IN AUSTRALIA

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Gorse, \textit{Ulex europaeus} L., is a serious agricultural and environmental weed in south-eastern Australia, particularly in Tasmania and Victoria. The difficulty and expense of controlling it by conventional methods has resulted in biological control options being investigated. An early attempt at biological control began with the introduction of the gorse seed weevil, \textit{Exapion ulicis} (Forster), the larvae of which attack the seed. Originally from Europe, \textit{E. ulicis} was introduced from New Zealand to Tasmania in 1939. \textit{E. ulicis} has now spread throughout Tasmania and is now common on the mainland. However, as gorse forms seeds in both spring and autumn the impact of \textit{E. ulicis} on gorse in Australia may have been reduced because seeds set in autumn escape weevil attack (Hill et al. 1991). A new programme for Australia is now being investigated using other European agents that have since been established in New Zealand. The gorse spider mite, \textit{Tetranychus lintearius} Dufour, feeds on mature foliage and was first released in Tasmania and Victoria in December 1998. The mass rearing and release of \textit{T. lintearius} is now being carried out in these states. If establishment is successful, redistribution programmes will be carried out, in association with community groups, to accelerate the spread of the agent. Sites will also be monitored to determine agent impact. Other agents being investigated include the gorse thrips, \textit{Sericothrips staphylinus} Haliday, which attacks new growth and seedlings, the tortricid moth, \textit{Cydia succedana} Dennis & Schiffermüller, whose larvae attack the seed and the oecophorid moth, \textit{Agonopterix ulicetella} (Stainton), whose larvae feed on new growth. The introduction of these three additional agents is planned, pending the outcome of host specificity studies currently underway in New Zealand. It is hoped that the establishment of a guild of biological control agents on gorse in Australia will eventually result in a reduction in gorse vigour to a stage where control, using integrated techniques, becomes economic and spread is restricted due to a significantly reduced seed output.

REFERENCE