

BIOLOGICAL CONTROL OF WEEDS IN NEW ZEALAND - CURRENT PROJECTS

P. Syrett
 DSIR Plant Protection, Private Bag, Christchurch
 New Zealand

Abstract. In New Zealand DSIR is currently undertaking biological control programmes against the weeds gorse (*Ulex europaeus*), broom (*Cytisus scoparius*), ragwort (*Senecio jacobaea*), nodding thistle (*Carduus nutans*), Californian thistle (*Cirsium arvense*) and alligator weed (*Alternanthera philoxeroides*). New projects have been proposed for old man's beard (*Clematis vitalba*), heather (*Calluna vulgaris*), hawkweeds (*Hieracium spp.*) and sweet briar (*Rosa rubiginosa*). An active extension programme encourages participation by local government, forestry and farming interests and the Department of Conservation in the release and management of biological control agents in the field. Evaluation studies of the ragwort flea beetle *Longitarsus jacobaeae* and the gorse spider mite *Tetranychus lintearius* have begun recently. The status of agents for biological control of weeds in New Zealand is shown in the table below:

Table 1: Status of agents introduced for the biological control of weeds in New Zealand.

Weed species	Agent	Date released	Established	Widespread distribution
Gorse	<i>Apion ulicis</i>	1931	Yes	Achieved
	<i>Tetranychus lintearius</i>	1989	Probably	Being undertaken
	<i>Sericothrips staphylinus</i>	1990		
	<i>Cydia succedana</i>	1990		
Broom	<i>Leucoptera spartifoliella</i>	accidental by 1950	Yes	Yes
	<i>Bruchidius villosus</i>	1987		
Ragwort	<i>Tyria jacobaeae</i>	1929	Yes	Being undertaken
	<i>Botanophila (=Pegohylemyia) jacobaeae</i>	1936	Yes	Central N. Island only
	<i>Longitarsus jacobaeae</i>	1983	Yes	Being undertaken
Nodding thistle	<i>Rhinocyllus conicus</i>	1973	Yes	Achieved
	<i>Trichosiocalus horridus</i>	1982	Yes	Being undertaken
	<i>Urophora solstitialis</i>	1990		

Californian thistle	<i>Urophora cardui</i>	1976	No	
	<i>Ceutorhynchus</i>	1976	No	
	<i>litura</i>	1990		
Alligator weed	<i>Agasicles</i>	1982	Yes	Achieved
	<i>hygrophila</i>			
	<i>Vogtia malloi</i>	1987	Yes	
	<i>Disonycha</i>	1982	No	
	<i>argentinensis</i>			