chamber trial, the same treatment caused disease in 77% of the germinated *Striga* seeds and in 100% of attached tubercles. If these results can be confirmed under field conditions, seed treatment might contribute to a more meaningful application of Foxy 2 as an antagonist for *Striga* within an integrated control approach.

**Keeping tabs on biological control agents by remote control**

Lynley Hayes
Landcare Research, PO Box 69, Lincoln, Canterbury, New Zealand

As the numbers of release sites and biological control agents continue to increase, it becomes impossible for a handful of researchers to keep track of them all. However, at the same time it is critical for the success of biological-control programs that we carefully monitor what is happening in the field. One solution is to make use of trained volunteers. In New Zealand we have, over two decades, built up a network of people throughout the country (mostly local government staff) who can manage biological-control programs for us once agents are established. We are now able to perform many operations (e.g. releasing and redistribution) by remote control. Members of our network are also able to carry out simple monitoring for us if we give them sufficient warning. For this approach to monitoring to be successful, our helpers need to feel confident that they can find the release sites and recognise the agents, and we need to feel sure that the data they send are reliable. We make these things possible by encouraging good record keeping using simple standardised forms, running regular training workshops, spending time with people in the field, and by providing regular newsletters and reference materials. Our network has also helped with a nationwide pheromone trapping operation for two agents that can be difficult to find, and this yielded a lot of useful information about establishment success. Likewise, some of our helpers have put out window traps for us. We have also attempted to go a step further and involve our helpers in trials to assess the impact of one agent. However, we have found that for most people the effort required to maintain and assess even fairly simple impact-assessment plots regularly for several years was too onerous. We believe that assessment trials are probably best left to the experts.

**Biological control: an important tool in integrated weed management (IWM) of pasture weeds**

R.K. Huwer,1,2 D.T. Briese,1 P.M. Dowling,3 D.R. Kemp,4
W.M. Lonsdale,1 D.L. Michalk,3 M.J. Neave,1 A.W. Sheppard1
and T.L. Woodburn5

1 CSIRO Entomology and Cooperative Research Centre for Weed Management Systems,
GPO Box 1700, Canberra, ACT 2601, Australia
2 NSW Agriculture, Tropical Fruit Research Station, PO Box 72, Alstonville, NSW 2477, Australia
3 NSW Agriculture and CRC for Weed Management Systems, Orange Agricultural Institute, Forest Road, Orange, NSW 2800, Australia
4 University of Sydney and CRC for Weed Management Systems, Orange, PO Box 883, Orange, NSW 2800 Australia.
5 CSIRO Entomology and CRC for Weed Management Systems, Private Bag PO Wembley, WA 6014, Australia

Broadleaf weeds, such as nodding thistle, *Carduus nutans* L., Scotch thistle, *Onopordum* spp. ( Asteraceae) and Paterson’s curse, *Echium plantagineum* L. (Boraginaceae), are a major problem for graziers in high-rainfall grazing areas in south-eastern Australia. Many attempts to control weeds in the past with a single control technique have been successful only in the short-term, and the need for a more