Weed management:

Productive Pastures and the CRC for Weed Management Systems

Ursula Taylor

CRC for Weed Management Systems, University of New England, Armidale NSW 2351

The Cooperative Research Centre (CRC) for Weed Management Systems officially commenced on 1 July 1995 in response to growing concerns about the effects of weeds on the Australian environment and economy. It has been estimated that weeds cost Australia more than $3.3 billion annually in terms of lost productivity and the cost of control. The CRC for Weed Management Systems recognises the enormity of the problems caused by weeds and aims to:

- reduce costs caused by weeds in agriculture and the natural environment;
- raise the level of awareness, knowledge and adoption of weed management strategies; and
- increase sustainability and protect the natural environment.

The CRC goals will be achieved through the cooperative efforts of researchers from universities, CSIRO, government agencies and private industry. The participants of the CRC for Weed Management Systems include CSIRO Division of Entomology, NSW Agriculture, University of Adelaide, Agriculture Western Australia, AVCARE, Charles Sturt University, CSIRO Division of Plant Industry, Grains Research & Development Corporation (GRDC), University of New England and the Victorian Department of Conservation and Natural Resources.

Researchers from these institutions are involved with five programs concentrating on temperate southern Australia. The programs are:

1. Cropping systems;
2. Perennial pasture ecosystems;
3. Natural ecosystems;
4. Education; and
5. Communication and adoption.

Programs relevant to graziers

Perennial Pasture Ecosystems

The CRC will emphasise practical, cost-effective and adoptable non-chemical weed control techniques to enhance sustainability and productivity of Australian temperate perennial pasture ecosystems. These weed control techniques include grazing management, knowledge of population biology and biological control measures that can be integrated with herbicides for long-term sustainable management of weeds.

Within the Perennial Pasture program there are five research orientated sub-programs:

2.1 Ecology and population dynamics;

2.2 Economics and decision support;

2.3 Herbicide management;

2.4 Biological control and;

2.5 Pasture and grazing management.

Four key weeds/weed groups have been selected for the development and testing of integrated management systems within the sub-programs and the weeds are: annual grasses, Paterson's curse, thistles and Bathurst burr.

Education, communication and adoption

The CRC for Weed Management Systems recognised early in its development that communication in the field of weed management needed improvement. To address this problem the CRC made a commitment to employ a group of people whose sole purpose would be to aid the communication/education process.

Three education/ liaison officers have recently been appointed:

- Cropping systems - Toni Commens at Charles Sturt University, Wagga Wagga, NSW,
- Perennial Pastures - Ursula Taylor at University of New England, NSW; and,
- Natural Ecosystems - Kate Blood at Keith Turnbull Research Institute, Frankston, Victoria.

Within the Perennial Pasture Ecosystems program, Ursula Taylor will be responsible for improving weed awareness and communicating weed management practices for pasture ecosystems to the community through regional and national programs.

Contact: Ursula tel: (067) 733075 fax: (067) 733238 email: utaylor@metz.une.edu.au