

In addition to chemical control, removal of water weeds is achieved by periodic drain cleaning, primarily intended for the removal of accumulated silt.

An estimated \$25,000 is spent annually on aquatic weed control.

### WOODY WEEDS AND WEEDS OF FORESTS IN SOUTH AUSTRALIA

Reviewed by

M.J. Catt

Department of Agriculture, South Australia

South Australia has a range of woody weeds whose limits extend from those occurring in low rainfall pastoral areas to inhabitants of higher rainfall zones.

In the first group one can include *Lycium ferocissimum* (African boxthorn), *Acacia armata* (kangaroo thorn), *Alhagi camelorum* (camel thorn) and various *Opuntia* spp. (prickly pears and devil's rope). Of this list perhaps two only are worthy of mention. African boxthorn is being treated effectively with either 2,4,5-T or bromacil and the severity of infestations is decreasing. On the other hand the prevalence of small patches of *Opuntia* species and the expanding nature of some of the infestations particularly in the Flinders Ranges is causing concern. 2,4,5-T is being used and formulations of picloram are being tested. With the exception of kangaroo thorn, all the above weeds are to be destroyed or controlled under the Weeds Act.

*Nicotiana glauca* (Tobacco bush) is also prevalent in the lower rainfall areas, particularly in creek beds. It is found in waste places throughout the State but is of little consequence or concern to landholders.

In higher rainfall areas *Rubus* spp. (blackberries), *Rosa* spp. (briars), *Eucalyptus* spp. (as regrowth) and *Ulex europaeus* (gorse or furze) must be classified as weedy species.

Blackberries and gorse are required to be destroyed or controlled under the Weeds Act and are mainly problems in areas which have been cleared and used for some agricultural purpose

and then neglected. The use of 2,4,5-T has been successful in most cases. Briars are of limited importance. Eucalypt regrowth is a problem of land clearing and is being dealt with by cultivation and the use of 2,4,5-T or picloram along fence lines and firebreaks.

In special cases poplars, olives and bamboos are weedy plants and their control is a household problem.

With the exception of *Prosopis juliflora* (mesquite) on the New South Wales border, no new woody weeds have been found in South Australia recently and it is felt that adequate control measures exist for those already present.

Weeds of forests may be split into two groups; those encountered during the first years of establishment and those considered as brush and coppice.

*Pinus radiata* and *P. pinaster*, the two major species used for plantations in South Australia are planted on grazing land in strips treated with 3 lb Vorox AA, 1½ pints Weedazol TL plus with ½ pint Agserv Plus 50 per acre in 40 to 80 gallons of water. The old pasture complex is thus restrained for a year to enable the young trees to gain the lead.

All coppicing or suckering species of Eucalyptus, many tea tree and proteaceous species, and some Epacridaceae, Compositae and Leguminosae particularly *Acacia pycnantha* and *A. myrtifolia* are treated successfully with a mixture of 2,4-D and 2,4,5-T. The diluent and concentration are varied from species to species and from one ecological situation to the next. The variations required exist as personal knowledge by members of the Woods and Forests Department and are not documented.