

THE WEED SITUATION IN SOUTH AUSTRALIA

Reviewed by
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South Australia is not well blessed so far as rainfall and agricultural resources are concerned. By necessity farmers, graziers and horticulturalists have had to use every technique available to them to get results, and history has shown that they have been remarkably successful. Over recent years they have come to recognize more and more that weed problems are often the most serious obstacles in their way and they have demanded answers.

As a result, during the past ten years, the Weeds Section in the Department of Agriculture has been strengthened from three officers to eighteen. Except for several other officers working part time on horticultural and forestry aspects this group forms one unit within the Agronomy Branch and as such has advantages in that it can carry out its research, extension, and regulatory programmes with a great degree of co-ordination.

Research facilities are still lacking for the weed research officers, but extension work by way of the annual 'Herbicide Recommendation' booklet, the cereal chart and the annual weed control training course is functioning well. The extension programme has been made particularly effective in South Australia by the many active agricultural bureaux through which this information can be disseminated.

South Australian weed research has moved away from the 'recipe finding' work which was more prevalent ten years ago.

We are now paying more attention to the general biology of various weeds, particularly those which are virtually unique in South Australia or which are more troublesome than in other areas of Australia. The group is also accepting the role as a specialist team, supporting other applied research workers in the Department and in other Government services. The assessment of the sensitivity of new barley varieties to barban is an example of this work, which will help guide our plant breeders.

What is perhaps more significant in the overall weed research programme is the recent indication that fundamental work to support our applied research will be given more attention by appropriate authorities in the future. The excellent work on the persistence of picloram being carried out by Dr. Swaby's team in the CSIRO Division of Soils, is giving valuable support to our field work on skeleton weed control.

The research needs of the future will, I believe, be coloured by the 'survival situation' in which many farmers have now found themselves since the introduction of wheat quotas. In a cereal growing State, in which farmers have few alternatives to which they can turn for cash returns, they will need to produce higher yields with better quality grain samples free from contamination. They already recognize the help weed science can give them but they will need more precise knowledge of the limits of the herbicides they use and they will need more effective herbicides particularly for grassy weed control.

To be more precise in our work there is urgent need to establish an adequate survey project to follow changing weed patterns and to gather more information on the distribution of weeds for ecological studies.

In South Australia local government has been given a greater opportunity than in any other state to show that it can handle regulatory services and to keep these in the best possible perspective within the local scene. Concentrated efforts have been made by the Department of Agriculture to train local government inspectors and to keep them adequately informed of technical developments. While good progress has been made in many districts it is evident that more direction must be given by Departmental officers with an appreciation of the State wide situation if progress is to be maintained.

A feature of the South Australian weed research work has been the close co-operation maintained between Departmental officers and industry research workers and much of the progress which has been outlined in the South Australian review papers has been possible only because this liaison exists.