

WEEDS IN NON CROP SITUATIONS IN THE NORTHERN TERRITORY

Reviewed by

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In the Northern Territory the major weed problems occur in the wetter 'Top End', at airports, on road sides, under telephone and power lines and lawns and playing fields. Aquatic weeds occur in dams and channels of irrigated areas and stock water supplies.

The actual cost to the community is impossible to estimate, but increased hazards on roads, fire hazards in industrial sites, and damages due to fires along telephone lines and other costs, add up to a sizeable cost.

Many methods are used to control the weeds, and these include mowing, herbicides, and grading with machines to remove weed cover.

The use of soil sterilants and knockdown herbicides is becoming more widespread. Tenders called by the Department of Works increased five times in size over the previous year. A large percentage of the area treated by herbicides are areas where mowing or other methods are not possible.

The most serious weed in channels is *Eleocharis acicularis*. Others include *Leptochloa* spp., *Echinochloa stagnina*, *Oryza Spontanea*, and *Typha Latifolia*. A Weedacol - M.C.P.A. mixture at about 10 lb per acre (11 kg per hectare) Weedazol and 4 lb per acre (4.4 kg per hectare) M.C.P.A. is used to kill weeds in channels.

Research has mainly been confined to the chemical firms with some work being done by various government departments. Not many details are known about the best method of handling some of these problems, or of the long-term results of treatments.

Difficulties exist in the introduction of the fairly sophisticated techniques needed with most of the herbicides, particularly with the pre-emergent types. Problems of explaining the use of these chemicals are often compounded by language difficulties. Most extension work is done on an individual basis. There exists many difficulties in the incorporation of herbicides into the particular system used by the producer. Often completely new management systems are warranted to make most use of herbicides.

It has been found that the best method of introducing herbicides to a grower is to use paraquat. Once the toxicity of the chemical has been explained and the method of use and application shown, the farmer can use the chemical in the inter-row area. Any drift, or careless techniques show up rapidly and the grower soon learns

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the basics of herbicide use.

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FORESTS AND WOODY WEEDS OF THE NORTHERN TERRITORY

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FORESTS

The industry is still in the early developmental stages, but a large expansion in the area under management is being planned. Weeds are problems in all phases of the industry, with the most concern being for the damage caused in the nursery and plantations.

In the nursery total herbicides are used for the areas not used as seedling beds, with weeds being controlled before planting by diquat. Research is being undertaken in the use of selective pre- and post-emergent herbicides.

In the plantation, the critical period is during the first 5-6 years before the canopy closes over. Research is being undertaken to determine the best selective herbicide to control the regrowth of the native vegetation cleared during planting operations. Grasses and herbacious weeds are controlled initially by the clearing and ploughing operations during planting. Scope exists for better vegetation control on areas such as fire breaks and under telephone lines, and other non-planted areas.

With the native forests use is being made of suitable aborcides in the culling of trees. Research has been undertaken to determine the best herbicides, methods, and time of treatment. Again problems of weed control on fire breaks, roadsides etc. exist.

WOODY WEEDS

Woody weeds can be split into two groups. Introduced and native species. The approach to each group is basically different as with the introduced plants, eradication may be possible. With the native species, the ecological approach is