

ALLIGATOR WEED—A NEW DILEMMA

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Summary Alligator weed is considered one of the world's worst weeds. Its aquatic form rapidly produces dense rafts, killing aquatic life, reducing water quality and stream flow and destroying wetlands. The terrestrial form grows into a dense mat and excludes most other plant species. It was recently discovered being widely grown as a garden vegetable by people of Sri Lankan and perhaps other Asian origins. The capacity to eradicate this State Prohibited Weed from Victoria hinges on gaining the understanding and co-operation of those people who for some years apparently have been growing, distributing and regularly utilizing this weed as a vegetable.

INTRODUCTION

Alligator weed (*Alternanthera philoxeroides* (Mart.) Griseb.) is a potentially disastrous weed in Australia, capable of significant impacts, environmentally in wetlands and economically in irrigated agriculture.

It has been known to occur at a number of locations in New South Wales since the 1940s and until recently was believed not to occur outside those areas in Australia. A small infestation in Brisbane was eradicated in the 1980s. In 1994, two new infestations were found. A small one on Lake Ginninderra, Canberra was eradicated, and a large one covering 50 km of irrigation channel and Barren Box Swamp is currently the subject of an intensive eradication campaign (Julien 1995).

As a State Prohibited Weed the Department of Natural Resources and Environment is responsible for ensuring it is eradicated within Victoria.

DISCUSSION

A recent discovery that alligator weed is being cultivated widely in home gardens as a vegetable, has raised concerns about the likelihood of escape of plant material to areas where great damage could be done. Apparently, alligator weed is grown instead of a close relative *Alternanthera sessilis*, which is used in Sri Lanka as a green vegetable dish known as Mukunawanna or Poonankani (Anon. 1996). Parsons and Cuthbertson (1992) also refer to its use in a similar way by Burmese.

In December 1995 an observant CSIRO scientist discovered by chance the growth of alligator weed in a home garden in Brisbane. After initial investigation and consultation it was found that the plant was quite widely grown within the Sri Lankan community in Brisbane. Further discussion suggested that it would also be likely

to be found in other major cities and regional centres. Response teams have been set up in Brisbane and Sydney to identify the extent of use and co-ordinate control action in Queensland and New South Wales.

Since being alerted to the possibility of the same situation in Victoria, the Department of Natural Resources and Environment has been consulting with the community (particularly those of Sri Lankan origin), to obtain an indication of the extent of knowledge and use of alligator weed as a food source. Initial indications suggest widespread use.

Before embarking on a broadscale media campaign to create awareness and understanding and promote co-operative action, it has been decided to conduct a reconnaissance exercise so that an informed strategic approach can be developed. The aim is to determine the extent of use as a vegetable, ascertain the attitude to prohibition of growth, and seek co-operation in removing existing gardens of alligator weed utilizing available technology. An inventory of infestations and network of contacts would be compiled, information leaflets produced and distributed, and distribution outlets such as markets, commercial outlets and restaurants investigated.

The next stages of Enlightenment and Action would require the appointment of a Response Team to develop and implement an Action Plan. This would involve preparing and disseminating information, devising an education program, considering replacement species, training advisory staff, responding to enquiries, developing management options and co-ordinating the activities of the Department, local government and landowners. The focus will clearly be on developing an appreciation of the threat posed by the weed and gaining maximum co-operation of those affected by an eradication program, rather than adopting a legal enforcement approach.

The importance of developing trust with communities who are utilizing such a potentially devastating weed as a food source cannot be overstated. Successful implementation of an effective program aimed at eradication depends on understanding, co-operation and commitment by all the stakeholders.

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