

## Evaluation of new herbicides in carrot crops

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**Summary** Weeds are a significant hindrance to carrot production in Australia. Production in Victoria, where nearly half of Australia's carrots are produced, is affected by a number of weeds which are not controlled by the current herbicide programs. The removal of the herbicide metoxuron from the market has also created a number of weed escapes in other regions including Western Australia and Tasmania.

Current herbicides utilised for carrot production are limited to a small number of registered products. Linuron and prometryn are probably the most widely used products, however these do not control all weeds, particularly *Onopordum acaulon* L. (stemless thistle). Other products registered for grass and limited broadleaf control in carrots are trifluralin and pendimethalin.

These can not be used in some areas due to crop tolerance and rotation issues. A range of products is also currently available for grass weed control, however these products are not effective on all grass weeds occurring in carrot crops.

This project has just commenced with a review of new herbicides which maybe suitable for carrot production. These products are currently being screened for crop safety and weed efficacy in replicated field trials in Victoria. Data will be collected to meet NRA requirements, for registration of promising products that have manufacturer support.

**Keywords** Carrots, weed management, *Onopordum acanthium* L., stemless thistle.

## Weed management in capsicums and chillies

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**Summary** Capsicums and chillies are a high value, intensively produced crop with significant and growing export markets. Effective weed management strategies are limited for capsicum and chilli producers, particularly in broad acre, fresh market production systems. Current weed management practices include the use of plastic, herbicides or tillage. A number of grass weed herbicides are registered in capsicum and chilli crops but there are no suitable broadleaf weed herbicides registered in this crop.

This project, funded by Horticulture Australia, aims to improve the profitability of capsicum and chilli production by developing more effective weed

management strategies. Developing new herbicides for registration is the major focus of this project. Initial screening trials, conducted in key growing regions around Australia identified a number of herbicides suitable for capsicum and chilli production, these include, oxadiargyl, pendimethalin, clomazone, bentazone, metolachlor and dimethenamid. Effective herbicides identified from these trials are currently being evaluated in further trials.

**Keywords** Capsicum, chilli, weed management, herbicides, oxadiargyl, pendimethalin, clomazone, bentazone, metolachlor, dimethenamid.