

Weed management in pyrethrum

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Summary Pyrethrum (*Chrysanthemum cinerariifolium* (Trev.) Vis.) is a perennial crop grown in Tasmania as a natural source of insecticide compounds. The move from transplanting to direct seeding in 1997, for crop establishment, created a number of weed management issues in pyrethrum crops and weed management during crop establishment remains a major input cost. Weed management research is currently focusing on reducing the cost and also improving the effectiveness of the herbicide strategies during crop establishment. Early screening trials identified two new herbicides, which have now been extensively evaluated as early

post emergent herbicides in pyrethrum crops. Both these products have shown activity on significant problem weeds such as *Galium aparine* L. (cleavers), *Amaranthus powellii* S.Wats. (amaranthus/Prince of Wales feather) and *Raphanus raphanistrum* L. (wild radish). Research is currently focusing on integrating these new herbicides into the pyrethrum weed management program. Both products are registered in Australia in other crops.

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Keywords Pyrethrum, weed management, herbicides.

Weed management in transplanted and direct-seeded brassicas

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Summary The options for weed management in commercial brassica crops, including broccoli, cauliflower and cabbage in Australia are limited. Currently, mechanical methods are the principal means of weed control, as the crop is generally planted from container grown transplants (with the exception of broadacre systems in Queensland and New South Wales). Cultivation of soil to remove weeds can result in damage to the crops, and stimulates weed germination. Current registered herbicides do not control a number of common weeds. An increase in the use of direct seeding for brassica production has further complicated weed management, as the currently used herbicides can cause damage to direct seeded crops.

This project, funded by Horticulture Australia, is evaluating a range of new herbicides to be added as part of an integrated weed management program in both direct seeded and transplanted brassica crops. It is a collaborative project between Agronico Pty. Ltd. and Serve-Ag Research. Early screening trials identified a number of herbicides with potential for use in transplanted and direct seeded brassica production. These products have now been screened in replicated trials in major production areas throughout the country, enabling registration data to be collected.

Keywords Cabbage, broccoli, cauliflower, weed management, herbicides, direct seeded.