

WEED MANAGEMENT IN PUMPKINS AND OTHER CUCURBITS

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Currently there is only one herbicide registered for use in Cucurbits and this only controls grasses. Much of the weed control is achieved by cultural methods such as the use of black plastic and mechanical methods, including hand hoeing. The costs and associated problems with this are large. The disposal of used plastic presenting a significant environmental problem. Currently many crops are contaminated with huge weed populations, with this situation impacting on subsequent crops.

This three year project, funded by the Horticultural Research and Development Corporation commenced in 1997, and aims to provide growers with a number of alternative herbicides for use in cucurbit production and also develop a number of non chemical weed management techniques. Herbicide screening trials have been conducted in major cucurbit production areas throughout the country over the past two years. These include Manjump - Western Australia, Atherton - Far North Queensland, Gatton - South East Queensland, North West Tasmania and Mildura - Victoria. In addition, a number of trials to investigate the use of cover crops and mulches have been conducted on the North West Coast of Tasmania.

A number of new herbicides having potential for use in cucurbits have been identified. The pending registration of clomazone for use in cucurbits is one of the new products arising from this work. Other products for which registration maybe pursued include dimethenamid and sulfentrazone. A number of living mulches were evaluated for weed efficacy, including oats, ryegrass, and peas. Oats at 150 kg ha⁻¹ provided the most effective weed control.