

PROTEA WEED CONTROL

Several herbicide trials were initiated at the Kula Branch Experiment Station to determine if chemicals could effectively control weeds around protea plants without plant injury.

With the large number of plants going into the ground, the first area of concern was to determine if a preemergent herbicide could be safely used during the initial establishment period. Six herbicides were tested at 2 rates along with a control group. The first application was made at planting time in March and repeated again in July. These materials were tested on three genera of protea; *Leucospermum cordifolium*, *Protea eximia* and *Leucadendron discolor*.

Table 1. Proteaceae tolerance to Eptam Herbicide

	Leucospermum cordifolium	Protea Eximia	Leucadendron discolor
EPTC 3#/A	4.0	1.3	1.0
EPTC 6#/A	5.0	1.8	2.5
Control	1.0	1.0	1.0

¹ 1=No injury

5=Dead

Of the chemicals tested, only Eptam (EPTC) caused any injury to the protea plants (Table 1). All the rest were found to be safe when applied at the recommended rate. It was also noted that there was a definite difference in the plants injured by Eptam treatment with *L. cordifolium* being severely injured while *P. eximia* and *L. discolor* were only injured moderate to slight.

Table 2. Herbicides and rates suggested for trial for Protea weed control

CAUTION: Try on Few Plants First!!!

	Rate Active/Acre
Treflan	1 - 2 #
Tok	4 #
Dymid	6 #
Dacthal	10 #

Two other trials are currently underway. The first is designed to determine if herbicides with longer residual activity can be used around established protea plantings. These would require application only 1 or 2 times per year. The second trial involves chemicals that can be used to remove established weeds.

For those who are putting in protea plants, there are several chemicals that should be considered for trial use. Of those tested and found safe, only one, oxadiazon, is not cleared for ornamental use. Table 2 shows the herbicides that are cleared for ornamentals and that are suggested for trial application on proteas. These materials should be used at the suggested rate on a few plants first to determine plant response under your conditions—

Fred D. Rauch
Associate Specialist

Roy K. Nishimoto
Associate Horticulturist

Philip E. Parvin
Horticulturist

NOTE: The use of trade names is for the convenience of readers only and does not constitute an endorsement of these products by the University of Hawaii, the College of Tropical Agriculture, the Hawaii Cooperative Extension Service, or their employees.