

EFFECTIVENESS OF SPRAYING HERBICIDES ON THE CENTRE COMPARED TO THE WHOLE PLANT OF SCOTCH THISTLE (*CIRSIUM VULGARE*) ROSETTES

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A glasshouse experiment on the effectiveness of spot spraying Scotch thistle plants in the centre of rosettes only was compared with full plant coverage. Two herbicides commonly used for spot spraying pasture weeds in New Zealand were used, metsulfuron and a triclopyr/picloram mixture. The herbicides were applied when plants were 13 weeks old and the average rosette diameter was 28 cm. Herbicides were applied either to the centre of rosettes (about 5% of leaf area treated) or the whole rosette using a hand-held micro-sprayer. The application rate was 5 ml/plant for both treatments. Eight herbicide rates (5 ml/plant) and an untreated control were used for each herbicide to obtain dose-response curves. Visual assessments of foliar injury symptoms, such as discoloration, twisting and necrosis, were recorded on a scale of 1-10. There was no significant decrease in weed control from applying either metsulfuron or triclopyr/picloram to the centre 5% of the Scotch thistle rosettes compared to spraying the entire rosette. As pasture damage commonly occurs as a result of spot spraying, treating only the middle of each rosette is likely to greatly reduce this damage to pastures.