

## ABSTRACT

### Weed Management Strategies in *Eryngium foetidum* (Shadon beni) at University Field Station

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Weed control is frequently a severe limiting factor in Shadon beni (*Eryngium foetidum*) production in Trinidad. This study evaluated six weed management treatments in Shadon beni at the University Field Station (UFS), located at Valsayn, Trinidad. The soil is a Class 1, River estate loam with a pH of 6.5. The experiment was conducted over a period of sixty days commencing on 2<sup>nd</sup> March, 2009 and concluded on 7<sup>th</sup> May, 2009. The six weed management treatments used was: Untreated Control; Chemical Control – Gramoxone®; Manual Control – hand weeding; Black plastic mulch; Bermuda grass (*Cynodon dactylon* L.) mulch and Banana leaf mulch. Fresh and dried weights analysis of Shadon beni and weeds yields were conducted at University of West Indies, Faculty of Science and Agriculture laboratory. Analysis of the data without UC and CC showed no significant differences between HW; BPM; BGM and BLM for the presence of grasses and broadleaf, while sedges results differs. Hand Weeding; Black Plastic Mulch; Bermuda Grass Mulch and Banana Leaf Mulch respectively gave acceptable weed control up to eight weeks after planting (at harvesting), while UC and CC started to lose its efficacy at fourteen and thirty five days respectively after planting, especially with broadleaf weeds. Broadleaf weed populations were consistently much greater than the

grasses and sedge weeds and composed about 53% of the weed flora in the experiment while grasses and sedges accounted for 23% and 24% of the total weed flora respectively. Results of this study indicate that Bermuda grass mulch can be used effectively as a weed management treatment in Shadon beni production.

**Key words:** Broadleaf weed, *Eryngium foetidum* (Shadon beni), University Field Station, weed flora, weed management treatments