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## Strategy to Manage Herbicide Resistant *Eleusine indica* in an Oil Palm Nursery in Jerantut Area

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*The present studies were conducted in an oil palm nursery in the Jerantut area where the main weed *Eleusine indica* was suspected to be resistant to glufosinate-ammonium. In Experiment 1, sodium chlorate -7.5 kg per hectare and glufosinate-ammonium -3.3 L per hectare gave moderate and poor control (60% and 40%) at 28 days after spraying respectively. Glyphosate at normal rate recommended for soft grass weed control (1x) was ineffective. In Experiment 2, glyphosate at highest rate (x8) gave good weed control (79% scorched at 28 days after spraying). Flucifop-butyl was ineffective at the 3 rates tested. Glufosinate-ammonium required higher rates (x4 and x8) to achieve good control at 14 days after spraying. Some of these herbicide mixtures gave high percentage weed scorching but the costs can be higher. Pre-emergent herbicide (ametryn, atrazine) in mixture with flucifop-butyl and sodium chlorate were promising and can be included to manage resistant weed populations by reducing its seeds bank. Other than that, planters should practice integrated weed management programme including cultural practices such as grass cutting/mowing and rotation of crops or nursery site.*

**Keywords:** *Eleusine indica, herbicides, biotype, resistance, integrated weed management.*

