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Herbicide Screening for the Control of *Merremia peltata* (L.) Merr. in Immature Oil Palm Plantings

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Merremia peltata is a native, invasive large-leaved creeping weed which is becoming serious in young oil palm areas located adjacent to jungle fringes and low land rainforests. Two field trials were conducted to evaluate several commercially available herbicides for controlling *Merremia peltata* in immature oil palm plantings.

In the first trial, a range of herbicides and its mixtures were evaluated in comparison with an untreated control. The herbicide treatments were glyphosate (1.5 L, 2.0 L and 3.0 L/ha), glufosinate-ammonium (3.3 L/ha), triclopyr (1.5 L/ha), metsulfuron-methyl (150 g/ha), glyphosate + metsulfuron-methyl (1.5 L + 75 g/ha) and glyphosate + triclopyr (1.5 L + 0.75 L/ha). The treatment effect was assessed visually at 1, 2, 4, 8 and 12 weeks after spraying. Six of the treatments recorded > 90 per cent kill at 12 weeks after spraying. However, triclopyr at 1.5 L per hectare was the most effective and recorded 100 per cent kill. Glufosinate-ammonium and metsulfuron-methyl treatments did not give adequate control.

In the second trial, two of the most effective treatments from the first trial were selected and tested farther. These treatments were glyphosate (2.0 L/ha) and triclopyr (1.5 L/ha). Both these treatments were tested in single large plots. At the end of the trial (12 WAS) glyphosate and triclopyr provided 90 per cent and 100 per cent kill respectively.

The results of both trials showed that triclopyr at 1.5 L gave excellent control of *Merremia peltata*

Keywords: *Merremia peltata*, weed control, immature oil palm, glyphosate, triclopyr.

