

2017

December

Herbicide Screening for the Control of *Rolandra fruticosa*

CHEONG YEW LOONG*, SUSANTO BAHARUDDIN, ELDAWATY CHANIAGO AND OOLING HOAK

Genetic & Agriculture (G&A) Research Centre, PT Musim Mas, Desa Batang Kulim, Kecamatan Pangkalan Kuras, Kabupaten Pelalawan, Provinsi Riau

Several herbicides were screened to determine their efficacy against an invasive weed, *Rolandra fruticosa*. Tank-mix of 44.5 ml glyphosate isopropylamine 48.6 per cent w/v plus 100 ml triclopyr butyl-ethyl-ester (BEE) 67.0 per cent w/v in 10 L water and tank-mix of 75 ml glufosinate ammonium 15.0 per cent w/v plus 2.22 g saflufenacil 70 per cent w/w in 10 L water achieved 100 per cent kill at the fifth and first week after treatment respectively. The weed did not regenerate in both treatments at the eleventh week, the duration of the trial. In the second trial, the dosage was reduced by 50 per cent and 75 per cent for both treatments. At the reduced dosage, they were equally effective against this weed. A tank-mix of glyphosate isopropylamine and triclopyr BEE at the three rates evaluated in the second trial were repeated in a large commercial scale trial done by the estate. It was confirmed that the lowest dosage of 12 ml glyphosate isopropylamine 48.6 per cent w/v plus 25 ml triclopyr BEE 67.0 per cent w/v in 10 L water was effective in controlling the weed. However, a follow-up spraying was required to eliminate the missed patches. The combination of 75 ml glufosinate ammonium 15.0 per cent w/v plus 2.22 g saflufenacil 70 per cent w/w in 10 L water also provided good control of *R. fruticosa* and could be recommended as an alternative.

Keywords: *Rolandra fruticosa*, weed management, invasive weed.

SENTIASA MAJU

1919