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## Control of Wild Bamboos (*Schizostachyum* spp.) in Tongod Region of Sabah

GANESAN NALLAN<sup>1\*</sup>, HANIFF SALLEH<sup>2</sup>, MD MUSLIM MOHD SEIN<sup>1</sup>, ALEXANDER ABAN<sup>2</sup> AND LEE  
TECK FAH<sup>2</sup>

There are over 1400 species of bamboos worldwide and about 200 species of bamboos in Southeast Asia. They are perennial with a rhizomatous growth habit and possess unique adaptability capabilities to grow from parts of rhizomes in various habitats. In Sabah, many oil palm plantations are established on cleared timber forests. As a result, wild bamboo has established in many areas and hinders some estate operations such as harvesting and frond stacking. Two species of standing bamboos have been identified in Genting Plantations Berhad (GENP) estates in Tongod region which are *Schizostachyum brachycalum* and *Schizostachyum jaculans*. Removal and eradication of these bamboos have proven to be very difficult and labour intensive leading to a trial being conducted to assess the most cost-effective way to control these bamboos. The trial was conducted on hilly terrain with an annual rainfall of around 1500 mm. Equipment used in the trial were Inter-12 knapsack sprayer calibrated to 150 L per blanket hectare using Black Adjustable Cone Nozzle 2.0 Bar, paint brush and fertiliser bowl. There are five treatments involved in the trial of which three treatments were applied using knapsack sprayer and the other two were applied using fertiliser bowl and paint brush. The treatments were applied one day after the bamboos were slashed. Post treatment assessments were carried out based on visual observations on the percentage of completely killed bamboos, regenerated or no effect (0%=no effect / full regeneration, 100%=complete kill). Results show that sodium chlorate has no effect on both unslashed *S. brachycalum* and *S. jaculans* either applied dry or sprayed. Herbicide effect from the treatment was more noticeable on slashed bamboos. Slashed *S. jaculans* did not show any regeneration even at 48 weeks after treatment (WAT) when sprayed with sodium chlorate at a rate of 3 kg per plot [each plot (4 m<sup>2</sup>) consisted of 3 clumps of bamboos]. There was no regeneration at 48 WAT on slashed *S. brachycalum* when applied with triclopyr + diesel at a ratio of 1:9 (90 ml: 810 ml) per plot. In terms of costing, sodium chlorate + slashing treatment is the most expensive at RM18.30 per plot. Brushing of triclopyr + diesel at a ratio of 1:9 is the most cost-effective treatment which is at RM7.26 per plot. It can be concluded that the best control for standing bamboos (*Schizostachyum* spp.) both on bio-efficacy and costing is the brushing of triclopyr + diesel on slashed bamboos at a ratio of 1:9 (90 ml: 810 ml) per plot.

**Keynote:** Wild bamboos, *Schizostachyum* spp., oil palm.

