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Evaluation of Thiosultap disodium by Targeted Trunk Injection for the Control of Oil Palm Pests in Papua New Guinea

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*Sexavae and stick insects are serious pests of oil palm in Papua New Guinea. The oil palm industry applies 6 g a.i (10 ml) of methamidophos through targeted trunk injection for their control. However, methamidophos is an organophosphate and its use is either restricted or banned in many parts of the world. Its use in Papua New Guinea is restricted to the oil palm industry. In view of this restricted use and the potential for ban on its use in the future, it is necessary that alternative insecticides are screened for use by the oil palm industry. Thiosultap disodium was evaluated against methamidophos through bioassay feeding following the same treatment procedure. Possible negative effects on the pollinating weevil (*Elaeidobius kamerunicus*) were also investigated. The results showed that both 2.7 g a.i (15 ml) and 3.6 g a.i (20 ml) of Thiosultap disodium were similar in efficacy to 6 g a.i (10 ml) of methamidophos for the control of sexavae on oil palm, and did not have any negative impact on the pollinating weevils. Thiosultap disodium also considerably reduced feeding and egg deposition. On the basis of the results from this study, Thiosultap disodium may be considered as an alternative to methamidophos for the control of oil palm pests in Papua New Guinea.*

Keywords: Methamidophos, insecticide, sexavae, pollinating weevil.

