

Laboratory and Small-Scale Field Tests of Four Insecticides against Defoliating Caterpillars of *Epicampoptera strandi glauca* Hamps. (Lepidoptera: Drepanidae) On Coffee In Ghana

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SUMMARY

Four insecticides, Karate, Folimat, Ofunac and Delfin, were tested at the manufacturers' recommended dosages in the laboratory against 1st-5th instar caterpillars of *Epicampoptera strandi glauca* Hamps., a serious defoliator of coffee in Ghana. There were five replicates per treatment and 25 caterpillars per replicate. Subsequently, Karate and Ofunac were compared in a small-scale field trial on a 5 ha plot during a caterpillar outbreak. There were two 0.2 ha replicate plots per treatment and caterpillar mortality was assessed on 100 trees randomly selected at the centre of each plot.

Folimat emerged as the best insecticide in the laboratory test but was excluded from the field trial upon advice from the manufacturers for being uneconomical for pest control on coffee in Ghana where coffee is a minor cash crop. Karate was better than Ofunac and Delfin for its quick initial kill of 1st- 4th instar caterpillars. Two weeks after treatment, reinfestation by 1st instar caterpillars occurred on both the karate and Ofunac treated plots. It was concluded that two treatments, two weeks apart, will be required for the effective control of the caterpillars on coffee. It was also considered necessary to develop a reliable method for detecting outbreaks at an early stage when caterpillars are more vulnerable to insecticides.