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ASSESSMENT OF THE EFFICACY OF SOME INSECTICIDES AGAINST THE JUTE HAIRY CATERPILLAR

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ABSTRACT

In field conditions binapacryl EC (.08%), carbosulfan EC (.075%), chlorpyrifos EC (.075%) and flucythrinate EC (.013%) revealed erratic and inconclusive results against the older (larger-sized) larvae of the jute hairy caterpillar, Spilosoma obliqua Walker. Feeding treated leaves 2 days post-treatment of the same field to larvae of similar age indicated some level of stomach poison activity of carbosulfan and chlorpyrifos. A low level of the emergence of dipterous parasitic flies (Carcelia sp.) was noted 18 days post release in the treated lot as compared to the untreated lot which showed a high level of emergence of the flies. Feeding leaves to the young larvae 1-2 days post-treatment treated in the field with cypermethrin EC (.011%), decamethrin + triazophos EC (.022%), flucythrinate EC (.016%) and fenpropathrin EC (.011%) revealed that the former 3 insecticides were effective while the 4th one was ineffective. Feeding leaves to the different stage categories (8-15 days old) of larvae, 1-8 days post-treatment, treated in the field with decamethrin + triazophos EC (.031%), flucythrinate EC (.044%), methamidophos SL (.16%), and binapacryl EC (.016%) indicated that the first insecticide was effective for more than a week while the 2nd for about a week; the 3rd one for a moderate period of time and the 4th one was ineffective at all. In laboratory test cyfluthrin EC (.005%), cypermethrin EC (.01%), fenpropathrin EC (.01%) and flucythrinate EC (.025%) were more effective as a contact poison (direct spray) to the young and old larvae than as a stomach poison which were chronically toxic. Differences in the toxic effect of fenpropathrin was noted in the field and laboratory tests which have been discussed.