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**STUDIES ON THE CHEMICAL CONTROL OF BANANA RHIZOME
WEEVIL (*COSMOPOLITES SORDIDUS*)**

Rhizome Weevil (*Cosmopolites sordidus*) is one of the serious pests affecting banana in Kerala. In the national level this is the most serious pest of banana (Singh, 1970). Early stage attack by Rhizome Weevil results in the cessation of growth and gradual death of the plant, while reduction in vigour and yield are the results of incidence of the insect in the advanced stage of growth of the crop. Planting pest free suckers and spraying 0.1 % B. H. C. or D. D. T. (Nair, 1970) and application of 50 g Furadan 3 g/ plant (Nair, 1976) are reported to control the pest effectively. The present study was initiated to find out how far external treatment of banana suckers with insecticides would help in checking the infestation by Rhizome weevil.

One field experiment was laid out at the Banana Research Station, Kannara during October 1976 with three replications and nine treatments vide Table 1.

Table 1 Effect of treating banana suckers with various insecticides in cowdung slurry prior to planting on the extent of infestation by rhizome weevil and yield of the crop.

| Treatment | Percentage of dead plants | No. of grubs and pupae | Bunch wt./ plant kgs. |
|--------------------|---------------------------|------------------------|-----------------------|
| Ekatin | 11.1 | 4.2 | 9.28 |
| B. H. C suspension | , , | 1.1 | 10.05 |
| Sevin suspension | , , | 2.1 | 9.36 |
| Dimecron | 5.5 | 3.9 | 9.35 |
| Disyston | , , | 0.4 | 10.22 |
| Furadan | , , | 1.8 | 9.55 |
| Thimet | , , | 3.1 | 9.00 |
| Solvi rex | , , | 0.9 | 9.92 |
| Control | 27.7 | 8.1 | 7.77 |

The required quantity of pesticide formulations were mixed with cowdung slurry, and the suckers (variety Nendran) were dipped in it and dried partially. The granular formulations were spread over the suckers after dipping

them previously in the cowdung slurry. Insect free suckers were used for the trial. There were six plants in each treatment in a replication. Pest incidence and yield are presented in Table 1. The data show that B. H. C., sevin and all the granular insecticides used in the treatments are very effective in preventing the death of the plants due to the attack of the pest. The grub and pupal population are very low in Disyston applied plots. Maximum population of grub and pupae are seen in the untreated plots. Maximum yield was obtained from the plots treated with disyston. The yield in all the treated plots were superior to control.

സംഗ്രഹം

വാഴയിൽ, മാണപ്പുഴവിൻറെ ആക്രമണം കുറയ്ക്കുന്നതിന്, വിവിധ കീടനാശിനികൾ ഉപയോഗിച്ച് കണ്ണാറ വാഴ ഗവേഷണകേന്ദ്രത്തിൽ ഒരു പരീക്ഷണം നടത്തി നോക്കി. അതിൽ 'ഡൈസിസ്റ്റോൺ' എന്ന തരി രൂപത്തിലുള്ളതും അന്തർവ്യാപന ശക്തിയുള്ളതുമായ കീടനാശിനി വളരെ ഫലപ്രദമാണെന്നു കാണുകയുണ്ടായി. ഈ കീടനാശിനി ഒരു വാഴയ്ക്ക് 1.5 ഗ്രാം സജീ വാംശം എന്ന തോതിൽ നട്ടുന്നതിന് മുൻപ് വാഴ കന്നിൽ പുരട്ടി നടേണ്ടതാണ്.

REFERENCES

- Nair, M. R. G. K. 1972. Insect pests and mites of crops in India. pp 191.
- Nair, K. K. R. 1976. Control of rhizome weevil (*Cosmopolites sordidus*) and banana aphid by use of granular insecticides. *Agri. Res. J. Kerala* 1977 1S, 97—99.
- Singh, J. P. 1970. Insect pest of banana. *Allahabad Farmer*. 44, 295—303.

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