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ETHYL ALCOHOL; A MAJOR CHEMICAL ATTRACTANT OF RED WEEVIL *(RHYNCOPHORUS FERRUGINEUS)*

R.Gunatilaka and N.E.Gunawardena
Dept. of Chemistry, University of Kelaniya

Rhyncophorus ferrugineus, a serious pest of coconut is known[1] to be attracted to the sap oozing from damaged parts of young coconut palms. An investigation

was carried out on the nature of the chemical attractants involved. Batches of young parts of coconut stem and petioles exposed to air (few hours to 18 days) were subjected to steam distillation. Residues from steam distillations were soxhlet extracted. Steam and soxhlet extracts were bio-assayed using a modified Olfactometer.[2] Seta of 8 to 14 experiments were conducted with 6 to 10 insects per set. Steam volatile fractions of plant material exposed for 1 to 6 days were found to be significantly biologically active, where the number of weevils selecting baited and non-baited arms differed at : .05, two-tailed. None of the soxhlet fractions were active. GLC analysis (20% carbowax) of these fractions in conjunction with bioassay experiments identified ethyl alcohol as one of the major attractants involved. Pure ethyl alcohol when tested, was found to have very high activity with high percentage mean differences.

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References

1. CRI, Lunuwila *Personal Communications*

2. Bandarage, U and Gunawardena, N.E. (1986) A preliminary study on the pheromones of *Hyblaea puera* and *Hapalia machaeralis*; the two major pests on Teak *(Tectona grandis)* , Proc. Sri Lanka Ass. Advmt. Sci. 43 (1)