

## STUDY ON HOST PREFERENCE AND MANAGEMENT OF RICE WEEVIL USING SOME BOTANICALS UNDER STORAGE CONDITION

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### **Executive Summary**

The rice weevil, *Sitophilus oryzae* (L.) is a serious pest of stored grains in the rice weevil, *Sitophilus oryzae* (L.) is a serious pest of stored grains in Bangladesh. The efficient control of the stored grain pests has long been the aim of entomologists throughout the world. Synthetic chemical pesticides have been used for many years to control stored grain pests. The lab experiment was conducted at the Entomology laboratory of Sher-e-Bangla Agricultural University, Dhaka, in the year 2017- 2018, with Complete Randomized Design (CRD) with four replications, using 6 different botanical pesticides. In this experiment the most effective botanical insecticide to control rice weevil (*Sitophilus oryzae*) in storage condition. From the above finding it can be said that neem leaf powder (5.50 dead rice weevil) possesses very high insecticidal effect on *S. oryzae* adults. Mehogoni leaf (3.25 dead rice weevil), Garlic powder (2.25 dead rice weevil) and Marigold leaf (1.00 dead rice weevil) were followed by neem leaf. Significantly lowest number of dead rice weevil was observed in case of Bel leaf (0.75 dead rice weevil) and untreated control (no dead rice weevil). The number of dead insects were increased with the increase of rate of the treatment. The highest percent of mortality was found in neem leaf treatment (63.25%). The insecticidal property of the plants also affects the adult emergence of rice weevil. Results showed that at all rates (1gm, 3gm and 5gm) of the treatments highest number of weevil was recorded in untreated control (128.8, 132.5 and 133.3, respectively). On the other hand, lowest number of adult emergences was recorded in case of neem leaf treatment (76.75, 54.25, 21.50, respectively). So, it can be said that though mehogoni leaf, marigold leaf, garlic powder and bel leaf possess some insecticidal property, neem leaf was found the best one to control rice weevil in storage condition.

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