

BIO-EFFICACY OF NEW INSECTICIDE MOLECULES AGAINST SPODOPTERA LITURA (FAB) AS POISON BAIT IN GROUNDNUT

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ABSTRACT

An investigation to study the evaluation of new insecticide molecules against Spodoptera litura (fab.) as poison bait in laboratory experiment was conducted during 2013-14, at University of Agricultural Sciences, Raichur. The bait was used for preparation of poison bait is oiled and de-oiled rice bran. The two sets of new insecticides tested in the poison baits were (Set-1: lambda cyhalothrin 5 EC, profenofos 50 EC, chlorpyrifos 20 EC, novaluron 10 EC, methoxyfenozide 20 SC; Set-2: indoxacarb 14.5 SC, chlorfenapyr 10 SC, fipronil 5 SC, spinosad 45 SC and chlorantraniliprole 18.5 SC) along with the standard insecticide monocrotophos 36 SL, in levels lower than their recommended field dosages. The result revealed that, poison bait prepared with oiled rice bran was higher per cent mortality than the de-oiled rice bran was recorded. The result revealed that, chlorfenapyr bait with oiled rice bran bait all four dosages (100, 75, 50 and 25 per cent of recommended dosage) was recorded cent per cent mortality and was significantly superior over all other treatments at 72 hours after exposure of larvae to the baits. Next to follow were chlorpyrifos 20 EC and profenofos 50 EC. Chlorfenapyr bait with de-oiled rice bran bait at 100 and 75 per cent of recommended dosages were found statistically superior by recording cent per cent mortality. Next to follow was monocrotophos at 100 per cent of recommended dosage (80.00) and was found to be statistically superior to rest of the treatments.

KEYWORDS: Groundnut, Poison Bait, De-Oiled Rice Bran, Spodoptera litura, Chlorfenapyr

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