

ROLE OF SPICY BOTANICALS ON THE MANAGEMENT OF STORAGE PESTS

The following botanicals will be tested

- T1— Ginger, *Zingiber officinale*, 1% RP
- T2— Turmeric, *Curcuma longa* 1% RP
- T3— Cinnamon, *Cinnamomum zylanicum* 2% LP
- T4— Black pepper, *Piper nigrum* 1% SP
- T5— Red chillies, *Capsicum annuum* 1% PP
- T6— Fenugreek, *Trigonella foenumgreekum* 1% SP
- T7— Clove, *Zygegium aromaticum* 1% FBP
- T8— Malathion 5D 1%
- T9 -Untreated control

Evaluation of spicy botanicals against Rice weevil – *Sitophilus oryzae*, Curculionidae, Coleoptera



- Release 10 adults in test tube containing 10g of treated grains
- ↓
- Record adult mortality on 2nd, 7th, and 14th days after release

- Release 10 adults to 50 g treated seeds



- Count F1, F2 and F3 adults at 40days interval after release



- Weigh the grain at monthly interval for 8 months



- Work out the % loss in weight

Evaluation of spicy botanicals against Lesser grain borer - *Rhyzopertha dominica*, Bostrychidae, Coleoptera

- Confine 10 adults in test tube containing 10g of treated grains
- ↓
- On 3rd day count the surviving/dead adults (work out the mortality)



Confine 10 freshly emerged adults in
100 g of paddy



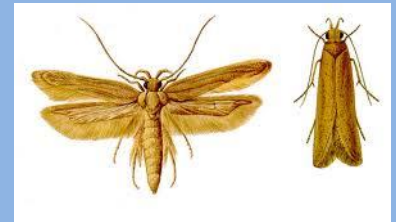
Record F1, F2, F3 adults



Record the grain weight at monthly
interval and fine out the loss in grain
weight

Evaluation of spicy botanicals against Angoumois grain moth - *Sitotroga cerealella*, Gelechiidae, Lepidoptera

Release 5 pairs to 50 g of treated grains



Record mortality on 1,3,5 days after confinement

Evaluation of spicy botanicals against Angoumois grain moth - *Sitotroga cerealella*, Gelechiidae, Lepidoptera

Confine 10 freshly emerged adults in 50 g of treated grains



Record the adults of F1 and F2



Record the grain weight at monthly interval and find out loss in grain weight

Evaluation of spicy botanicals against Rice moth - *Corcyra cephalonica*, Galleridae, Lepidoptera

- Confine 5 second instar larvae to 100g of treated grains



- After one month interval calculate the population of larvae and adults



- Record weight of grains to assess weight loss

Thank you