



Mass rearing of sterile *Bactrocera dorsalis* White thorax genetic sexing strain (GSS – White thorax) Using radiation technique

Sterile Insect Technique (SIT) is an environmentally friendly technique and has proven to be a powerful method for eradication, suppression, containment and prevention of unwanted several insect species populations. The SIT consists of introduction and mass production of target insect species, sterilization of the insects using radiation and release into the target area. Sterile males find and mate with wild fertile females, transferring infertile sperm. The objective is to have no resulting viable offspring, thus leading to reduction in the targeted pest population. It has been recognized that modifying the genetic characteristics of the insect used in SIT programme can generate significant cost reduction. Through classical genetics insect strains were constructed where the female can be eliminated and only the component active in the SIT, the male, is reared and released.

1. Adult maintenance



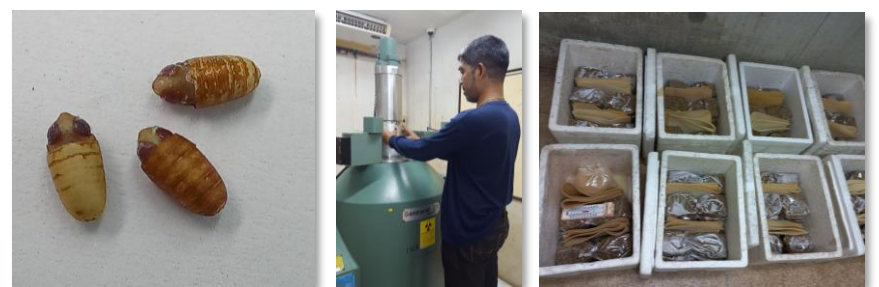
5. Pupae production and sexing



2. Egg production



6. Sterilization using radiation



3. Egg seeding



7. Quality control of produced fruit fly



4. Larvae maintenance



8. Pupae transportation and adult releasing in target area

