

Pheromone technology for the management of economically important insect pests



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6. Summary of achievements

- ✓ • Popularised pheromone technology for the management of red palm weevil and rhinoceros beetle in coconut
 - Red palm weevil activity was recorded throughout the year with maximum recorded in the month of November
 - Maximum activity of rhinoceros beetle was recorded in the month of September
 - Beetle and weevil captured throughout the experiment period revealed that catches were female dominated.
- ✓ • Demonstrated 45 ha area of coconut plantations for the management of RPW and RB in coconut plantations through pheromone technology. Distributed 550 each of RPW and RB pheromone traps to 236 coconut farmers
 - Enhanced the technical knowledge of coconut farmers on use of pheromone technology through trainings and demonstrations. A total of 10 trainings and demonstrations have been organised on use of pheromone technology for the management of RPW and RB in coconut plantations.
- ✓ • Mass trapping of red palm weevil and rhinoceros beetle infested coconut plantations has successfully managed these insect pest
 - Popularised sex pheromone traps viz., Cue lure for cucurbit fruit fly and Methyl eugenol lure for mango fruit fly
 - Imparted hands on training on preparation of Cue lure and Methyl eugenol traps to the farmers
- ✓ • Distributed a total of 615 cue lure traps to 146 farmers.
- ✓ • A total of 145 methyl eugenol traps were distributed to 53 mango farmers.
 - Fruit fly infestation 10 to 15% was reduced in pheromone implemented cucurbits field and mango orchards.
 - A total of 12 trainings and demonstrations have been organised on use of Cue lure and Methyl eugenol lure for the management of fruit flies in cucurbits and mango

✓ 5. Success stories

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✓ Management of red palm weevil and rhinoceros beetle in coconut plantations through pheromone traps

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I am having a coconut based integrated farming system with dairy component. Since I am having dairy unit I was suffering heavy losses in coconut due to the infestation of rhinoceros beetle and red palm weevil. With the assistance from ICAR-CCARI, I started using the pheromone traps in coconut plantations for last two years. Since I started using the pheromone traps, I could see the less damage incidence due to these pest and I have not lost a single tree. Initially, when I started using the pheromone traps I could trap more than 100 weevil in a month. Now they are reduced to a single digit. Thanks to ICAR-CCARI Scientists for providing me the traps, technology, training and knowledge on the life cycles of these insect pests. With the success in my farm I have encouraged the farmers in my neighbourhood to use this pheromone based technology. They are also happy with the results and could save their palms. Similarly we are using the pheromone trap technology for managing fruit flies in cucurbits and mango and the results are encouraging to adopt the technology.

