ECO FRIENDLY MANAGEMENT OF PEST IN RICE

1. Background

Mr. G. Karthikeyan S/O Gurusamy is a 49 years old Farmer residing at Sikkal, Nagapattinam. He is a carpenter. But basically he is interested in farming. He owned 7.0 acre of land. He had 25 years farm experience.

For the last 25 years he was used pesticides for the management of pests and diseases in rice. He used to spray four to five rounds of spray. He was not aware for any ecofriendly pest management methods. Because of repeated spray his cost of cultivation was more and income was low. So he was planned to switch over his farming activity to ecofrindly methods of pest management. Then he approached KVK, Sikkal.

2. Intervention Process

He approached KVK, Sikkal for new ecofriendly technology for rice pests and disease management. KVK established one OFT plot on Assess the performance of Ecological Engineering IPM (EEIPM) module in Samba Paddy during 2015-16.

3. Intervention Technology

- Release of egg parasitoid *Trichogramma japonicum* for the management of stem borer @ 2 cc (40,000 No.) / trial at 30 and 37 days after planning
- Release of egg parasitoid *Trichogramma chilonis* for the management of leaffolder @ 2 cc (40,000 No.) /trial at 37, 44 and 51 days after planting
- Setting up of Pheromone traps for Stem borer @ 5/trial was proved to be effective**.**
- For disease management-*Pseudomonas flourescens* as seed treatment, soil application and foliar spray.

4. Impact Horizontal Spread

Farmers are interested to adopt this technique. By following this technology the number of pesticide spray was reduced drastically. Because the pest infestation was very low. It was 1.67 per cent of pest infestation was observed compared to 7.54 in farmers practices adopted trial. The natural enemies population was more then pest. Lot of predators and parasitoids population like, spiders, dragon fly, damsel fly, ground beetles, *Cyrtorhinus Lividipennis* etc. was more.

5. Impact Economic Gains

It is evident that an amount of Rs 19460/Ha could be obtained in addition through adoption of eco friendly management during Samba season.

He got an yield of 45.15 Q/Ha compared to only 31.25 Q/Ha in farmers practices adopted trial. Besides the yield was also 44% high over than the farmers practice. The net return was Rs. 24335/Ha as compared to Rs.4875/Ha in farmers practice adopted trial.

The benefit cost ratio was 1.6 in the recommended practices adopted plot compared to 1.1 in farmers practices adopted filed.

Not only rice eco friendly management given high yield and net return but also encouraged the natural enimies population and conserved the eco system