Recommendation made by Department of Entomology for Scientific community:

Year: 2020-2021

1. **Management of rugose spiralling whitefly through root feeding of insecticides in coconut**

For effective management of rugose spiralling whitefly in coconut (>5 year old palms), root feeding (pencil size root) application of spiromesifen 22.9 SC @ 5 ml with 10 ml of water per palm, first at initiation of pest infestation and second at one month after first application was found effective.

2. **Monitoring of fall army worm, S*podoptera frugiperda*(J. E. Smith) infesting maize in saurashtra region**

The infestation of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) was monitored in different districts of North and South Saurashtra region of Gujarat in fodder maize (Sweet corn) and the highest infestation was observed in Amreli (46.67-60.13%) followed by Rajkot (19.33-35.00%) and Junagadh (22.15-24.50%) districts. The infestation was comparatively higher in *Kharif* season as compared to *Rabi* season.

2021-22: Nil

2022-23: Nil

2023-24

1. **Standardization of number of pheromone traps for pink bollworm, *Pectinophora gossypiella* (Saunders) in cotton**

Installation of 50 sex pheromone traps per hectare at crop canopy level after 40 days of sowing for effective management of cotton pink bollworm and the lure to be changed three times at an interval of 40 days.

2. **Effect of different poison baits against fall army worm *Spodoptera frugiperda* (J. E. Smith) infesting maize**

Two applications of poison baits in whorl of plants containing indoxacarb 15.8 EC 125 ml, 5 kg jaggery and 25 kg maize flour in 8 L of water/ha, first at the initiation of pest infestation and second application at 20 days after first application found effective against fall armyworm infesting maize.

3. **Effect of date of sowing and acaricides against yellow mite, *Polyphagotarsonemus latus* (Banks) infesting cluster bean**

Sowing of cluster bean crop during fourth week of February and two sprays of diafenthiuron 50 WP 0.05% (10 g/10 lit of water) or fenpyroximate 5 EC 0.005% (10 ml /10 lit of water), first spray at initiation of the pest and second at 20 days after first spray found effective against mobile stage of yellow mite, Polyphagotarsonemus latus (Banks) infesting cluster bean.

Year: 2024-2025

1. **Effect of different sequence based insecticidal spray against shoot and fruit borer, *Leucinodes orbonalis* (Guenée) in brinjal**

Sequence based spraying of spinetoram 11.7 SC 0.01% (8.5 ml /10 L water), azadirachtin 1.0 EC 0.002% (20 ml/10 L water), lambda-cyhalothrin 4.9 CS 0.003% (6.0 ml/10 L water) and spinosad 45 SC 0.016% (3.5 ml/10 L water) at 15 days interval after pest crosses ETL (5% fruit damage) was found effective for the management of brinjal shoot and fruit borer.

2. **Standardization of number of pheromone traps for pink bollworm, *Pectinophora gossypiella* (Saunders) in cotton**

Installation of 50 sex pheromone traps per hectare at crop canopy level after 40 days of sowing for effective management of cotton pink bollworm and the lure to be changed three times at an interval of 40 days.