PEST FORECAST FOR THE MONTH OF JULY' 2018

Rice

The stem borer incidence was noticed in the tillering stage of the crop at Thanjavur and Thiruvarur areas. Cartap hydrochloride 50SP 400g/ac can be used for the management of stem borer. Leaf mite, whorl maggot and rice hispa incidence was moderately recorded in Thanjavur and Coimbatore districts. Leaf mite can be managed by timely application of dicofol 200ml/ac. Leaf mites will be naturally controlled when continuous rainfall occurs in the region. The leaf damaging whorl maggot and rice hispa insects can be managed with spraying of fibronil 5%SC @400g/ac or triazophos 40%EC 300ml/ac.

During this month leaf blast, brown spot and rice tungro disease incidence may appear in the transplanted crop. To control blast disease spraying of tricyclazole 75 WP @ 200 g/ac or azoxystrobin 200ml/ac is recommended. For the control of brown leaf spot disease spray of mancozeb (2.0g/lit) is recommended. Green leafhopper which transmit rice tungro disease has to be monitored. Insecticides like imidacloprid 17.8 SL @ 60ml/ac or triazophos40EC @ 300ml/ac can be recommended for the management of leafhopper.

Pulses

Seed treatment of dimethoate 30 EC @ 5ml/kg for sowing of blackgram and greengram is recommended for the management of stem fly.

Groundnut and Sunflower

Moderate incidence of leafhopper, leaf miner and tobacco caterpillar was recorded in north Pollachi area in groundnut. Spraying of dimethoate 200 ml/ac or quinalphos 500ml/ac is recommended. Pod borer was observed in Vagarai, Dindigul district. Malathion 5 % dust formulation can be applied @ 10 kg/ac for managing the pod borer.

During the ensuing season for groundnut and sunflower crop, seed treatment with talc based bio-formulation of *Trichoderma viride* @ 4 g/kg seed or *Pseudomonas fluorescens* @ 10 g/kg seed can be followed to manage the soil borne diseases.

Cotton

After the harvest of summer cotton crop, disposal off the crop residues by deep pit composting and avoiding ration crop are recommended to reduce the pink boll worm inoculum.

Horticultural crops

Fruit crops

Sucking pest like leafhoppers, thrips, whitefly, mealy bug and spiraling whitefly are expected in horticultural crops *viz.*, guava, mango and sapota. Hence, farmers are advised to monitor the sucking pests by installing yellow sticky traps @ 5 / acre and if needed spray NSKE 5% (50 g/lit. of water) or fish oil rosin soap @ 25 g/lit.of water. Red spider mite incidence was recorded in bhendi and tomato crops in Coimbatore district. The acaricides like propargite 2.5 ml/lit or fenazaquine 2 ml/lit can be applied for the management.

In banana, sigatoka leaf spot disease is expected in banana growing districts of Coimbatore, Erode, Kanyakumari, Trichy, Tirunelveli and Theni. The farmers are advised to spray mancozeb @ 2.5g/litre or propiconazole @ 1ml/litre along with teepol (1 ml/litre) 3 times at 10-15 days interval.

Vegetable crops

Fruit borer in tomato, fruit borer complex in bhendi and leaf caterpillars like *Spodoptera* can be expected in the areas where rain fall is prevailing. The pest can be managed by setting up pheromone traps with Heli lures @ 5/ac and also releasing egg parasitoid *Trichogramma chilonis* @ 20,000/ac coinciding with flowering time. Spraying azadirachtin 0.03% @ 2.0 ml or indoxacarb 15.8 SC @ 0.5 ml per litre of water for the management of fruit borers and leaf caterpillers.

In tomato early blight, late blight and peanut bud necrosis virus incidence is expected during the season. The farmers are advised to spray mancozeb @ 2 g/lit of water, twice at weekly interval for the management of leaf spot. For the management of victor of virus diseases, the farmers are advised to spray Dimethoate 30 EC @ 1 ml/l or Methyl demeton 25 EC @ 1 ml/l along with Neem oil @ 2 ml/l of water.

Besides, in chilli leaf curl virus is expected during the season. Place 15 Nos of Yellow sticky traps/ha and spray Dimethoate 30 EC @ 1 ml/l or Methyl demeton 25 EC @ 1 ml/l along with Neem oil @ 2 ml/l of water.

Coconut

Rugose spiraling whitefly incidence is reported in various coconut growing areas. Hence, farmers are advised to,

- i. Conserve the natural enemies like *Encarsia* parasitoids, chrysopids and coccinellids in coconut ecosystem by avoiding insecticides. The parasitioid *Encarsia* was found to be effective in controlling these insects at Aliyar Nagar areas. The parasitoid *Encarsia* is available at Coconut Research Station, Aliyar Nagar. Chrysopids can be obtained from the Department of Agricultural Entomology, TNAU, Coimbatore.
- ii. Placing yellow sticky traps @ 19/26 smeared with castor oil/ horticultural mineral oil can be used for monitoring the population.
- iii. Spraying water forcibly on the under surface of the palms would have a significant impact in reducing the population build up of the target pest to certain extent.

- iv. If needed spraying with neem oil @ 3% (30 ml/lit.of water) or NSKE @ 5% (50g/lit.of water) would be helpful in minimising the population builds up.
- v. Avoide the use of synthetic insecticides

Apart from rugose whitefly, rhinoceros beetle and eriophyid mite damage have also been noticed in Pollachi and Dindigul areas. Rhinoceros beetle can be managed with pheromone trap with rhino lure @ one for 2.5 acre. At seedling stage use three naphthalene balls/palm at the base of inter space in leaf sheath. Profenophos or triazophos 5 ml/lit can be sprayed on the buttons or nuts for the management of eriophyid mite.

Nematode Management

In crossandra, root lesion nematodes and root knot nematodes are expected in Madurai, Dindigul, Coimbatore, Salem, Thiruvannamalai and Tiruchirapalli districts and cause yield loss 10-15 per cent. The nematodes infested field shows stunting and leaves exhibit mottled appearance and pink colouration which ultimately turn yellow and wither, brown to black coloured lesions on the roots. The farmers are advised to apply neem cake @ 160kg/ac and also *Pseudomonas fluorescens* or *Trichoderma asperellum* @ 1kg/ac mixed with 50 kg FYM.

Further contact:

- The Director, Centre for Plant Protection Studies, TNAU, Coimbatore – 641 003. Phone No: 0422-6611237.
- The Professor and Head, Department of Agrl. Entomology, TNAU, Coimbatore – 641 003. Phone No: 0422-6611214 / 6611414.
- The Professor and Head, Department of Plant Pathology, TNAU, Coimbatore – 641 003. Phone No: 0422-6611226.
- The Professor and Head, Department of Nematology, TNAU, Coimbatore – 641 003. Phone No: 0422-6611224.