

## **PEST AND DISEASE FORECAST FOR THE MONTH OF SEPTEMBER 2017**

Generally, the pest and diseases incidence were found below economic threshold level in Tamil Nadu. Hence, the farmers are advised to monitor the crop for pest activities by setting light traps and pheromone traps in their fields. Heavy rainfall was recorded in most parts of Tamil Nadu. Pest problems will emerge after the rainfall, hence farmers are advised to monitor the crops regularly, and take necessary control measures.

### **Rice**

If thrips incidence is noticed in samba crop nursery, spray phosphamidon 40 SL 50 ml in 20 litres of water. To manage rice leaf folder and stem borer problem, noticed in few places set up light trap @ 1 / acre to attract and kill the adult moths and if needed, spray Neem seed Kernel Extract 5% (or) spray any one of the following insecticides; chlorpyrifos 1250ml/ha or cartap hydrochloride 1000g/ha.

Due to the heavy rainfall and cloudy weather prevailing in the coastal districts as well as in other parts of rice growing area of Tamil Nadu, there is a possibility for the outbreak of rice blast, bacterial leaf blight, leaf folder and sucking pests in paddy. Hence farmers are advised to monitor the rice crops for the above pests.

Brown spot incidence was found in rice growing districts of Thanjavur, Tiruvarur and Nagapattinam. Hence, farmers are advised to spray mancozeb (2.0g/lit) particularly nursery for machine planting and the same dose in transplanted rice 2 to 3 times at 10 - 15 day intervals, based on the intensity of disease.

**Sugarcane – Top borer(s) damage was noticed in Kallakuruchi area in Villupuram District. The following management practices may be adopted to reduce the damage.**

- The matured sugarcane crop affected by internode borer (INB) and top shoot borer (TSB) should be harvested at the earliest and crushed.
- Top most priority should be given for harvesting the affected canes. This would help to avoid further multiplication of the pest and also spread to other young crops which are in grand growth phase.
- The farmers are suggested to monitor the moths of inter node borer and top shoot borer in the crops at grand growth phase by installing sex pheromone trap @ 20/ha.
- Release of egg parasitoids, *Trichogramma chilonis* @ 2.5 CC/ha and *Trichogramma japonicum* @ 2.5 CC/ha at fortnightly intervals so as to reduce the damage of INB TSB, respectively. Water logging should be avoided in the fields. Detrashing should be done for the crops at grand growth phases at 5<sup>th</sup> and 7<sup>th</sup> month after planting. Propping should be done to avoid the incidence of borer complex.

### **Cotton**

Leafhopper and whitefly incidence was noticed in cotton fields. Farmers are advised to set up yellow sticky trap @ 12.5 / ha for monitoring the sucking pests and to spray fish

oil rosin soap at the rate of 2.5 kg in 100 lit of water or spray imidacloprid 200SL at 100 ml / ha. Bollworms incidence was also noticed. Hence, farmers are advised to set up pheromone trap at the rate of 12.5 / ha to monitor and kill the adults and need based application of triazophos 40 EC 2500 ml/ha or quinalphos 25 EC @ 2000 ml/ha or thiodicarb 75% W.P. @ 1000 g/ha.

For whitefly incidence monitor the activities of the adult whiteflies by setting up yellow pan traps and sticky traps at 1 foot height above the plant canopy and also in situ counts. To spray any one of the following chemicals: Acetamiprid 20% SP 100g / ha or Fipronil 5% SC 250-340 ml / ha or Imidacloprid 17.8% SL 100-125 ml / ha or Thiacloprid 21.7% SC 500-600 ml / ha or Thiamethoxam 25% WG 100 g/ha or to spray neem seed kernel extract 5% (50 kg) or neem oil at 5 ml / l of water.

### **For thrips**

Spray any one of the following insecticides (500 lit spray fluid / ha) Methyl demeton 25 EC 500 ml/ha (or) Dimethoate 30 EC 500 ml / ha (or) Buprofezin 25% SC 1000 ml / ha (or) Fipronil 5% SC 1500-2000 ml / ha (or) Thiacloprid 21.7% SC 100-125 ml / ha (or) Thiamethoxam 70 % FS 430 g/ ha.

### **For Aphids**

Spray any one of the following insecticides (500 lit spray fluid / ha) Methyl demeton 25 EC 500 ml/ha (or) Dimethoate 30 EC 500 ml / ha (or) Azadirachtin 0.03% EC 500 ml / ha (or) Buprofezin 25% SC 1000 ml / ha (or) Fipronil 5% SC 1500-2000 ml / ha.

### **Groundnut**

Set up light traps to monitor the movement of leaf miner. If adults are attracted to light trap spray immediately dichlorvos 76 WSC 500 ml / ac. (or) chlorpyrifos 20 EC 500 ml / ac. (or) phosalone 35 EC 300 ml / ac (or) diflubenzuron 25 WP 400 g/ha (or) monocrotophos 36 WSC 500 ml/ha (or) methydemeton 1000 ml/ha.

In groundnut, leaf spot and root rot is expected in Coimbatore and Tindivanam districts of Tamil Nadu. The farmers are advised to drench Carbendazim @ 0.1% to manage root rot and foliar spraying of mancozeb or chlorothalanil 1000g/ha to manage the leaf spot disease.

### **Pulses**

In blackgram and greengram, root rot and yellow mosaic is expected in pulse growing districts viz., Pudukkottai, Tirunelveli and Theni. The farmers are advised to drench carbendazim@ 0.1 % for management of root rot. Besides, place 15 nos of Yellow sticky traps /ha and spray dimethoate 30 EC or methyl demeton 25 EC @ 2 ml/l along with neem oil @ 2 ml/l of water for the management of virus diseases.

### **Banana**

In banana, sigatoka leaf spot is expected in Coimbatore, Erode and Trichy districts during the rainy season. The farmers are advised to spray carbendazim @ 0.1 % or propiconazole @ 0.1 % or mancozeb @ 0.25 % along with teepol 3 times at 10-15 days

interval. Besides, Fusarium wilt is also expected during this season. Dip the suckers in 0.1 % carbendazim (1g/lit) for 30 min or *Pseudomonas fluorescens* 10g/sucker at the time of planting. Corm injection of 3 ml of 2 % carbendazim on 3, 5, and 7<sup>th</sup> month after planting. Drench infected plants with 0.1 % carbendazim at 2, 4<sup>th</sup> and 6<sup>th</sup> month after planting.

### **Onion**

In onion, leaf blotch and basal rot is expected in all onion growing regions of Tamil Nadu. The farmers are advised to spray mancozeb @ 2g/l or copper oxychloride @ 2.5 g/l for managing the leaf blotch incidence. For the management of basal rot, seed or bulb treatment with *Trichoderma viride* @ 4g/kg and basal application of *T. viride* @ 2.5 kg/ha should be followed.

### **Coconut**

Incidence of spiralling whitefly was noticed in coconut growing tracts particularly in Pollachi. Insect predatory population were also found to co-occur with the whitefly. If required, the predators can be obtained from Department of Agricultural Entomology, TNAU, Coimbatore and released as an inoculative release.

### **Sucking pest management in Agricultural and Horticultural crops**

There is a possibility for multiplication of sucking pest like jassids, thrips, whitefly, spiralling whitefly and different species of mealybug including papaya mealybug in Agricultural and Horticultural crops.

Hence, farmers are advised to setup the yellow sticky traps to monitor the sucking pests @ 5 traps / acre and if needed, they can spray neem seed kernel extract 5% (or) fish oil rosin soap @ 1 kg in 40 litres of water. Spray systemic insecticides like methyl demeton 2 ml/l or imidacloprid 17.8 SL / 0.2 ml / l or dimethoate @2 ml / l to manage the insect vector, whitefly.

To monitor fruit borers in vegetables: Integrated pest management of fruit borer:

1. Set up pheromone traps for *Helicoverpa armigera* / *Spodoptera litura* @ 12 no. / ha.
2. Collection and destruction of damaged fruits and grown up caterpillars.
3. Spray *Bacillus thuringiensis* @ 2 g / lit.

This is for the favour of your kind information. Necessary control measures may please be adopted.

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