

## **PEST FORECAST FOR THE MONTH OF MARCH 2017**

### **Rice**

In rice growing tracks leaf folder and stem borer incidence are observed in rice growing tracks of Tamil Nadu, Hence farmers are advised to set up light traps and if needed they can spray neem seed kernel extract 5% or chlorpyrifos 20 EC 1250 ml/ha or flubendiamide 20 WG 250 g/ha.

In rice, brown spot will appear on the leaves and also in the grains. Spray metominostrobin @ 500ml/ha at the initial appearance of the disease and repeat at 15 days interval. Besides, rice tungro virus is also expected during the season. Spray two rounds of thiamethoxam 25 WDG 100g/ha and imidacloprid 17.8 SL 100ml/ha at 15 days interval to control the insect vector. The farmers are advised to use the bioagents for the management of rice diseases. Bioagents can be applied as: seed treatment with TNAU Pf 1 liquid formulation @ 10 ml/kg of seeds, seedling root dipping with TNAU Pf 1 liquid formulation (500 ml for one hectare seedlings), soil application with TNAU Pf 1 liquid formulation (500 ml/ha) and foliar spray with TNAU Pf 1 liquid formulation @ 5ml/lit.

### **Maize**

For managing stemborer damage, farmers are advised to setup light traps till mid night to monitor, attract and kill adults of stem borer. If needed, farmers are advised to apply carbofuran 3 G 17 kg/ha or phorate 10 G 8 kg /ha with sand to make up a total quantity of 50 kg/ha and apply in the leaf whorls.

### **Tomato**

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 vector, 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.

### **Bhendi**

For the management of powdery mildew in bhendi, dust sulphur @ 25 kg/ha or apply wettable sulphur @ 2 g/lit immediately after noticing the incidence and repeat 15 days interval.

### **Chillies**

In chillies, powdery mildew is noticed during this season. For the management, spray wettable sulphur 80 % WP @ 2.5 kg/ha or hexaconazole @ 60 g/ha. Besides, 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.

### **Cucurbits**

In cucurbits, to manage powdery mildew and downy mildew, spray azoxystrobin 23% SC @ 1ml/l or carbendazim 50% WP @ 0.5 g/l or zineb 75% WP @ 2g/l.

### **Onion**

In onion, leaf blotch and basal rot is expected. The farmers are advised to spray mancozeb @ 2 g/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.

### **Banana**

In banana, sigatoka leaf spot is expected 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<sup>nd</sup>, 4<sup>th</sup> and 6<sup>th</sup> month after planting.

### **Mango**

In mango, anthracnose is expected during the season. Spray carbendazim 0.1% or mancozeb @ 0.2% at flowering stage and at fruiting stage twice at 15 days interval.

### **Papaya**

In papaya, papaya ring spot virus is expected. For the management of the disease, the farmers are advised to raise two rows of maize as border crop one month prior to planting, place yellow sticky traps (12 nos. /ha) swabbed with grease or castor oil to attract the aphids, spray neem oil 1% or acephate 1.5 g/lit or imidacloprid 0.075% up to 4 months of planting, spray boron 0.1% and zinc sulphate 0.5 % in 3<sup>rd</sup> and 7<sup>th</sup> month to sustain yield of infected plants.

### **Pulses**

In blackgram and greengram, powdery mildew is expected. Spray propiconazole @ 1 ml/l or wettable sulphur @ 2.5 g/l twice at 15 days interval. In redgram, root rot and yellow mosaic is expected. 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.

### **Sesame**

In sesame, powdery mildew and leaf spot is expected. Apply sulphur dust @ 25 kg/ha or wettable sulphur @ 2 g/l to manage powdery mildew and spray mancozeb @ 2 g/ lit of water, twice at weekly interval to manage leaf spot.

### **Jasmine**

Jasmine budworm incidences were observed from Thiruvannamalai and nearby areas. To manage the bud worm spray the following chemicals. monocrotophos 36 SL 2 ml/lit or profenofos 50 EC @ 1 ml/lit or thiacloprid 240 SC @ 1 ml /lit

### **Cotton**

Crop residues are to be removed or ploughed or cut and burnt immediately after harvest to break the developmental cycle of pink bollworm to move to the next generation crops. Harvested kapas are to be dried well and stored to prevent the dusky cotton bug.

In Perambalur district, veppur and kunnam taluk farmers stored cotton kapas at high moisture condition, which favour the situation to the dusky cotton bug and mite causing allergies to human beings dwelling nearby storage place.

Cotton kapas should be sun dried for 2-3 days before storing bag. Farmers are advised to dispose the produce immediately after harvest.

### **Groundnut**

Leaf miner incidence is expected in the groundnut track. The farmers are advised to monitor the insect using light traps and spray malathion 50 EC 1250 ml/ha. or dimethoate 30 EC 675 ml /ha or methyl demeton 25% EC 1000 ml/ha.

In groundnut, rust and late leaf spot is expected. The farmers are advised to spray carbendazim + mancozeb @ 1 kg/ha or chlorothalonil @ 1 kg/ha to manage rust and leaf spot.

### **Coconut**

Spiralling whitefly incidence were noticed from Anamalai, Udumalaipettai and Kinathukadavu. Severity of spiralling whitefly incidence is getting declined in pollachi track. Stray incidence of chrysopids and coccinellids also co-occur. Hence, the above natural enemies are expected to take care of the pest. However, Tanjore and Nagapattinam districts are reported to face the spiralling whitefly incidence. Which could be managed by releasing predator chrysopids and coccinellids available at the Department of Agricultural Entomology TNAU Coimbatore and ARS Aliyar nagar?

In coconut leaf blight is expected for which farmers are advised to spray Bordeaux mixture @ 1% or copper oxychloride @ 0.25 % or mancozeb @ 0.2 % (2 times at 45 days interval), root feeding of carbendazim 2 g or hexaconazole 2 ml + 100 ml water (3 times at 3 months interval) along with application of an additional quantity of 2 kg of MOP.

### **Cashew**

Tea mosquito bug incidence is expected in Cuddalore district.

Monitoring bugs at regular intervals. Removal of alternate hosts like neem, cashew, and guava in the surroundings. Farmers are advised to install yellow sticky traps and spray imidacloprid (0.6 ml/l) or thiamethoxan (0.6 g /l) or profenophos (2 ml/l).

### **Sugarcane**

Inter node borer( INB) and Top shoot borer( TSB) damages were noticed in Pudupettai, Thirukandeeswaram, Vazhapattu, Palur and Sitarasur areas in Cuddalore district.. The following management practices are suggested to reduce the damage.

The farmers have 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 and 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.

The incidence of whitefly were noticed in Cuddalore, Manamedu, Mullikirampattu, Nellikuppam and Pudupettai villages of Cuddalore district.

The following management practices are suggested to reduce the damage.

1. Water logging should be avoided in the fields.
2. Detrashing should be done for the crops at grand growth phases at 5<sup>th</sup> and 7<sup>th</sup> month after planting.
3. Judicious application of nitrogenous fertilizers.

The incidence of sugarcane woolly aphid was noticed on COC24 variety in Cuddalore, Nellikuppam and Palur villages of Cuddalore district.

The following management practices are suggested to reduce the damage.

**Cultural method:**

- Paired row system of planting.
- Avoid excessive use of nitrogenous fertilizers.
- Use of organic fertilizers.
- Infested canes should not be used as seed material for planting.
- Collection and destruction of affected leaves.

**Biological method:**

- Encourage natural predators viz., *Dipha aphidivora*, *Chrysopa sp.*, *Scymnus sp.*, *Cheilomenes sexmaculata*, *Coccinella septempunctata*, *Synonycha grandis* and *Brumus sp.*
- Pathogens like *Metarhizium anisopliae*, *Verticillium lecanii* and *Beauveria bassiana* can be applied.

**Chemical method:**

- Dip the seed setts in chlorpyrifos 20 EC solution (2 ml / lit) before planting.
- Spray with acephate 75 SP 2g / lit or chlorpyrifos 20 EC @ 2 ml / lit in the absence of predators.

**Sett treatment for early season planting.**

Planting of sugarcane with setts for the mid season should have to be completed by the farmers during March 2017.

The following practices should be adopted to prevent the incidence of pests and diseases.

1. Selection of healthy seed canes of six to seven months old.

2. Seed canes infested with pests *viz.*,internode borer, mealy bugs, scales, whiteflies, termites and diseases like red rot, smut should be avoided.
3. The setts should be soaked in 100 litres of water dissolved with 50g Carbendazim, 200 ml malathion and 1 kg urea for 15 minutes.

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