

## **PEST FORECAST FOR THE MONTH OF DECEMBER 2016**

### **Rice**

Leaffolder incidence may become severe in the rice crops at the vegetative stage. The larvae feed on the leaves of rice by rolling the leaves and leaving scrapping symptoms which will appear white in colour from distance. The affected leaves will dry and in severe cases plants will wilt. The adult moth activity will be more in the affected fields. Farmers are advised to use less nitrogenous fertilizers when leaffolder incidence occurs. Wherever possible light trap are to be used to attract adult moths. Spraying of azadirachtin 0.03% @ 400 ml/ac is being done in the initial stage of damage. Application of chemical insecticides *viz.*, cartop hydrochloride 50 % SP @ 400 g/ac or chlorpyrifos 20% EC 500 ml/ac can be done.

Infestation by brown planthopper results in burnt up appearance called 'hopper burn'. The nitrogenous fertilizers should be split into 3-4 doses. Spraying resurgence causing and synthetic pyrethroid group of insecticides are to be avoided. Neem oil 3 % can be used @ 6 lit/ac with soap oil or dichlorvos 76 % SC 200 ml/ac or buprofezin 25 % SC @ 320ml/ac or fipronil 5 % SC 400ml/ac or imidacloprid 17.8 % SL 40 ml/ac is to be used. Farmers should be insisted that before spraying chemicals for the management of brown planthopper, water should be drained from the field. The spraying should be done to target the base of the stem portion.

Mealy bug incidence is being recorded in rice in some locations of Cuddalore district. Due to water scarcity the incidence may increase and spread to neighbouring fields. Hence, farmers are advised to spray methyl demeton 25 EC @ 400 ml or phosalone 35 EC @ 600 ml in 200 lit of water for one acre.

Blast and false smut diseases in rice are expected. Hence, farmers are advised to monitor the rice crop for the above diseases. The blast symptoms will appear as spindle-shaped lesions with white to gray-green borders. Farmers are advised to delay application of nitrogenous fertilizer and spray tricyclazole 75 WP @ 200 g/ac or carbendazim 50WP @ 200 g/ac immediately after observing initial infection of the blast disease.

The farmers are advised to use the bioagents for the management of rice diseases 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/ha seedlings), soil application with TNAU Pf 1 liquid formulation (500 ml/ha) and foliar spray with TNAU Pf 1 liquid formulation @ 5ml/lit.

### **Cotton**

In Perambalur and Salem districts leafhopper and whitefly incidence was noticed. Farmers are advised to set up yellow sticky trap @ 5 / acre for monitoring the sucking pests and to spray fish oil rosin soap at the rate of 1 kg in 40 lit of water or spray imidacloprid 200SL at 40 ml / ac. Boll worms incidence

was also noticed. Hence, farmers are advised to set up pheromone trap at the rate of 5 / acre to monitor and kill the adults and need based application of triazophos 40 EC 1000 ml/ac or quinalphos 25 EC @ 800 ml/ac or thiodicarb 75% W.P. @ 400 g/ac.

### **Sesame**

In sesame, leaf spot and powdery mildew is expected during the forthcoming season. Apply sulphur dust @ 10 kg/ac 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.

### **Sugarcane**

Borer pests complex problem when exceeds 10 %, farmers are advised to release the egg parasitoid *Trichogramma* @ 1 cc/ac for six times at 15 days interval.

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 inter node borer and top shoot borer, 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 and mite were noticed in Cuddalore, Vakkipalayam, PN Palayam and Ezhumedu villages of Cuddalore district.

The following management practices are to be adopted 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.

Red rot disease incidence was noticed in Keerapalayam and Kattumannarkoil blocks of Cuddalore district in CoC (SC) 24 and in Nettapakkam Commune of Puducherry UT.

1. Red rot disease incidence was noticed in CoC 24 variety. Ratoon crop in red rot disease infected field may be avoided. In future, planting of CoC 24 variety may be avoided.
2. Wherever the disease is just noticed, the affected clumps should be uprooted and burnt outside.
3. Soil drenching with carbendazim @ 1g/lit of water should be done.
4. The irrigation interval in a red rot affected field must be lengthened. Frequent irrigation hastens the spread of the disease while delayed irrigation (once in 15 days during tillering and growth phases and once in 25 days during maturity phase) restricts the spread of the disease. As far

as possible, avoid the flow of irrigation water from affected to healthy crop.

5. Red rot affected fields should not be allowed for ratooning even if the incidence of the disease is very negligible (below one per cent).
6. If a disease free field is allowed for ratooning (with a red rot susceptible variety) immediately after stubble shaving, the cane furrows should be drenched with carbendazim @ 1 g/litre of water (about 300-400 lit of solution is required for an acre). Ensure that there is sufficient soil moisture in the field at the time of soil drenching and drenching has to be done when the cut ends are fresh. (Soil drenching in dry field and in old stubbles will be of little use).
7. Trashes in red rot affected field (after harvest) to be burnt by spreading it uniformly in the field.
8. The red rot affected field must be crop rotated with rice for one season..
9. Sett treatment with carbendazim before planting (carbendazim 50 WP @ 50 g along with one kg of urea in 100 lit of water per acre for 5 minutes).
10. A close watch may be given in the nurseries and ensure complete freedom from red rot disease before seed cane cutting.
11. If the nursery crop is affected by red rot, (even by 1 per cent), it should be rejected for seed purpose and may be treated as bulk crop.

### **Groundnut**

For groundnut leaf miner incidence, the farmers are advised to monitor the insect using light traps. Farmers can spray malathion 50 EC 500 ml/ac.

The farmers are advised to monitor the red hairy caterpillar using light traps. Collect and destroy gregarious, early instar larvae on leaves. Apply phosalone 35 EC 300 ml/ac or dichlorvos 76 EC 250 ml/ac.

In groundnut, rust and late leaf spot is expected. The farmers are advised to spray carbendazim 250 g + mancozeb @ 400g/ac or chlorothalonil @ 400g/ac to manage rust and leaf spot.

### **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 as an inoculative release.

In coconut leaf blight is expected during the month of November-December. 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.

### **Banana**

In banana, sigatoka leaf spot is expected. 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. Dipping 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 and drench infected plants with 0.1 % carbendazim at 2, 4<sup>th</sup> and 6<sup>th</sup> month after planting are recommended.

### **Tomato**

In tomato early blight incidence is expected. Hence, the farmers are advised to spray mancozeb @ 2 g/ lit of water, twice at weekly interval.

### **Bhendi**

For the management of powdery mildew in bhendi, dusting sulphur @ 10 kg /ac or applying wettable sulphur @ 2 g/lit immediately after noticing the incidence and repeating at 15 days interval are recommended.

### **Onion**

In onion, leaf blotch is expected. The farmers are advised to spray mancozeb @2g /l or copper oxychloride @2.5 g/l for managing the leaf blotch incidence.

### **Turmeric**

In Erode, Coimbatore and Tiruppur districts, turmeric leaf spot incidence was noticed. Hence, the farmers are advised to spray mancozeb @ 400 g/ ac or propiconazole 200 ml/ac twice at weekly interval.

### **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 have to apply carbofuran 3 G 6.8 kg/ac by mixing water with sand to make up a total quantity of 20 kg/ac in the leaf whorls.

Cob borer larvae feed on the silk and developing grains. Setting up of light traps and sex pheromone traps at 5/ac to attract and kill the adults. If needed, farmers have to apply carbaryl 50 WP at 400g /ac.

### **Further contact:**

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