PEST FORECAST FOR THE MONTH OF JANUARY 2017

Rice

In rice growing tracks leaffolder and stemborer incidence are expected. Hence, farmers are advised to spray neem seed kernel extract 5% along with sticking agent 2.5 ml/lit and also set up light traps (2.5/ha) to monitor the pest population. If needed spray any one of the following insecticides: phosphamidon 40SL 562 ml/ha or profenofos 50EC 1000 ml/ha.

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 @ 500 g/ha or carbendazim 50 WP @ 500 g/ha immediately after observing initial infection of the blast disease. 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.

Sugarcane

Borer pests complex problem when exceeds 10 %, farmers are advised to release the egg parasitoid *Trichogramma* @ 2.5 cc/ha 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^{th} and 7^{th} month after planting. Propping should be done to avoid the incidence of borer complex.

The incidence of whitefly and mite were noticed in 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^{th} and 7^{th} month after planting.
3. Judicious application of nitrogenous fertilizers.

Red rot

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 @ 2.5 g/litre of water (about 1000 lit of solution is required for a ha). 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 @ 125 g along with 2.5 kg of urea in 250 lit of water per ha 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.

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.

Sesame

In sesame, leaf spot and powdery mildew 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.

Groundnut

In groundnut, leaf miner incidence was sporadically recorded. Hence, the farmers are advised to monitor the insect using light traps. If normal rains were not received, there is a possibility of pest to cross ETL level and if needed farmers can spray neem seed kernel extract @ 5% along with sticking agent @ 2.5 ml/lit 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

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 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.

Maize

Sporadic incidence of stem borer was noticed in maize. Farmers are adviced to monitor the adult moths by setting up light traps and if needed farmers have to apply carbofuran 3 G 17 kg/ha by mixing water with sand to make up a total quantity of 50 kg/ha in the leaf whorls.

Gourds

Fruit fly damage is observed in snake and bitter gourds. setting of pheromone traps (12/ha) and application of either malathion or dimethoate @ 2ml/lit are recommended.

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 7th month after planting. Drench infected plants with 0.1 % carbendazim at 2, 4th and 6th month after planting.

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 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.

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.

Onion

In onion, leaf blotch and basal rot is expected. 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.

Turmeric

In Erode, Coimbatore and Tiruppur districts, turmeric leaf spot incidence was noticed. Hence, the farmers are advised to spray mancozeb @ 1 kg/ha or propiconazole @ 500 ml/ha twice at weekly interval.