PEST FORECAST FOR THE MONTH OF JANUARY 2018

Rice

Brown planthopper incidence was noticed severe form in different blocks of Nagapattinam, Thiruvarur and Thanjavore districts. The cool night temperature after the north east monsoon rains induced BPH population in the rice growing areas. The variety BPT 5204 grown in the farmers' field suffered severely. Most of the crops are panicle development stage and maturity stage. However, the crops in the panicle initiation stage can be saved by following proper management tactics. Reduce nitrogenous fertilizers and follow split doses. Application of dichlorvos 76SC 250 ml/ac or imidacloprid 17.8SL 60 ml/ac or buprofezin 25% EC @ 350ml/ac or fipronil 5% SC @ 400ml/ac can be recommended. Before spraying drain excess water, allow thin film of water in the field and spray should be directed to the base of the plants for effective control. The prevailing climate is conducive for BPH incidence in other rice growing areas also. Army worm and stem borer incidence was recorded in Thovalai block of Kanyakumari district. Stem borer and leaffolder were prevalent in several other areas in rice crop. These insects can be managed with spraying of chlorpyriphos 20EC 500ml/ac or cartap hydrochloride 50SP 400 g/ac or chlorantraniliprole 18.5SC 60 ml/ac.

Pulses

In blackgram and greengram, powdery mildew, leaf spot and yellow mosaic are expected in all pulse growing districts. The farmers are advised to spray propiconazole 500 ml/ha at initiation of the disease and 10 days later for the management of powdery mildew. For leaf spot, spraying carbendazim 500 g/ha or mancozeb 1000g /ha at initiation of the disease and 10 days later is recommended. Besides, placing 15 nos of yellow sticky traps /ha and spraying dimethoate 30 EC or methyl demeton 25 EC @ 2 ml/l along with neem oil @ 2 ml/l of water are recommended for the management of virus diseases.

COTTON

Leafhopper and whitefly incidence was noticed in cotton fields. Farmers are advised to set up yellow sticky trap @ 12 / 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. Pink bollworm incidence was minor and noticed in some areas. Crops are at harvesting stage and the pink bollworm infestation may continue through stubbles remained in the field. After harvest, the field may be ploughed or cut the stems and burn immediately. Also, farmers are advised to set up pheromone trap at the rate of 12. / ha to monitor and kill the adults if necessary 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 is recommended.

The farmers are advised to spray mancozeb 2g/litre at 15 days interval for the management of *Alternaria* leaf blight.

Sunflower

The farmers are advised to spray difenoconazole (0.05%) 250 ml/ha for the management of powdery mildew disease is expected in Coimbatore and Karur districts.

Banana

In banana, sigatoka leaf spot may occur in Coimbatore, Erode, Kanyakumari,Trichy, Tirunelveli Theni and in all banana growing districts. The farmers are advised to spray carbendazim @ 0.1 % or propiconazole @ 0.1 % or mancozeb @ 0.25 % along with teepol (1 ml/litre) 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^{th} month after planting. Drench infected plants with 0.1 % carbendazim at 2, 4^{th} and 6^{th} month after planting should be followed.

Papaya

For the management of Papaya ring spot virus 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^{rd} and 7th month to sustain yield of infected plants.

Vegetables

Chilli

Powdery mildew disease occurrence was noticed in chilli/capsicum growing areas. For the management of this disease spray wettable sulphur 0.25% or dinocap 0.05%

Tomato

Early leaf blight disease is predominant in tomato growing areas. For the management of this disease, remove and destroy the infected crop debris. Spray the crop with chlorothalonil (2g/l) or mancozeb (2g/l) or propineb (2g/l) or copper hydroxide (2g/l) or metiram (2g/l) at fortnight intervals for effective disease control.

Bacterial leaf spot is another important disease prevalent throughout the tomato growing areas. Spraying with a combination of copper and organic fungicides in a regular preventative spray program at 5 to 10 day intervals or spraying with Agrimycin-100 (100 ppm) or copper hydroxide (2g/l) at fortnight intervals for effective disease control.

Onion

Purple blotch disease is predominant in onion growing areas. For the management of this disease, remove and destroy the infected crop debris. The field should be well drained. Three foliar sprayings with copper oxychloride 0.25 % or chlorothalonil 0.2 % or mancozeb 0.2 %.

Coconut

Adopt IPM strategies for the management of coconut rugose spiralling white fly. Setting up of yellow sticky traps @ 5 per acre at 5-6 feet height for monitoring the incidence; spraying of neem oil @ 3% or NSKE @ 0.2% along with a sticker such as Sandovit @ 2 ml/lit; conserve *Encarsia* parasitoids and also it can be obtained from CRS, Aliyarnagar and *Chrysoperla* from Dept. of Entomology, TNAU, Coimbatore. Farmers are advised to avoid use of insecticides for the management of RSW.

The following remedial measures to be taken for leaf spot control, root feeding of carbendazim 2 g or hexaconazole @ 2 ml + 100 ml water (3 times at 3 months interval)

and application of 200g *Pseudomonas fluorescens* along with 50 kg of FYM+ 5 kg of Neemcake/ palm/ year.

Crossandra

In crossandra, root lesion nematodes and root knot nematodes may occur in Madurai, Dindigul, Coimbatore, Salem, Thiruvannamalai and Tiruchirapalli districts. The nematode 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 @ 400kg/ha and also *Pseudomonas fluorescens* or *Trichoderma viride* @ 2.5kg/ha mixed with 100 kg FYM.

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