

PEST AND DISEASE FORECASTING FOR THE MONTH OF DECEMBER 2015

Special forecast for coastal district rice farmers:

During depression formation in coastal, districts if continuous cloudy weather without sun for more than 3 or 4 days and if high humidity prevailed, there is a possibility for blast incidence. Rice farmers growing high yielding varieties should watch for the incidence of blast. To manage this disease farmers are advised to spray 0.1% tricyclazole immediately after the appearance of disease and if necessary a second spray can be given after 10 days.

For managing bacterial leaf blight incidence farmers can spray copper hydroxide 101 @ 2.5g/litre of water. Nitrogen must be applied in minimum of three splits.

For managing brown spot incidence, farmers are advised to spray mancozeb (2.0 g/lit) 2 times at 10-15 days intervals first on 40 DAP and second on 55 DAP.

General pest management in rice

Rice leaffolder

Due to continuous rain and cloudy weather 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 scarring 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 can be used to attract adult moths. Spraying of azadirachtin 0.03% @ 400 ml/ac can be 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.

Brown planthopper

This sucking pest is a serious problem in the areas where drainage problem is more. The insects multiply rapidly and suck the sap from the base of the plants. The field become burnt up appearance and typical damage symptom in the plants called 'hopper burn' will be noticed. The nitrogenous fertilizers can be split into 3-4 doses. Avoid spraying / using resurgence causing and synthetic pyrethroid group of insecticides. The botanical compound 3 % neem oil can be used @ 6 lit/ac with soap oil. The insecticides dichlorvos 76 % SC 200 ml/ac or buprofezin 25 % SC @ 325ml/ac or fipronil 5 % SC 400ml/ac or imidacloprid 17.8 % SL 40 ml/ac can 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.

Yellow stem borer

Caterpillar bore into central shoot of paddy seedling and tiller, causes drying of the central shoot known as "dead heart". Plants could be easily pulled by hand. In grown up plant whole panicle becomes chaffy and white colour known as "white ear". Farmers are advised to release egg parasitoid, *Trichogramma japonicum* for the management of the rice yellow stem borer. Spraying azadirachtin 0.03% @ 400 ml/ac or cartop hydrochloride 50 % SP @ 400 g/ac or chlorpyrifos 20% EC 500 ml/ac or fipronil 5 % SC 400ml/ac can be used.

Earhead bug

Nymphs and adults suck the sap from the grains during milky stage and grains become chaffy with brown coloured spots. Avoid rationing. Spraying neem seed kernel extract @ 5 % or malathion 50 EC @ 200 ml/ac can be done.

Caseworm

This pest is a serious problem in the areas where drainage problem is more. Caterpillars feed on green tissues of the leaves and leaves become whitish papery. Larvae make tubular cases by cutting the apical portion of leaves and the tubular cases will be seen attached to the tillers and floating on the water. To manage caseworm, mix kerosene to the standing water. Then dislodge the cases by passing a rope and drain the water. Collect the cases and destroy. The insecticides Carbaryl 10% DP 10 kg/ac or Phenthoate 50% EC 400 ml/ac can be used.

Cotton

For bollworm incidence farmers are advised to set up pheromone trap @ 5/acre to attract and monitor the adult moth. If needed, farmers can spray chlorpyrifos 20 EC 800 ml/ac (or) phosalone 35 EC 600 ml/ac.

For sucking pest management jassid farmers are advised to monitor the pest population using the yellow sticky traps @ 5/ac and spray imidacloprid 200SL at 40 ml / ac, if needed.

Root rot: Spot drenching with carbendazim 0.1%

Sugarcane

For borer pests complex problem farmers are advised to release the egg parasitoid *Trichogramma* @ 1 cc/ac for six times at 15 days interval.

Groundnut

Leaf miner

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.

Red hairy caterpillar

The farmers are advised to monitor the insect 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.

Tobacco caterpillar

The farmers are advised to monitor the insect using light traps. Collect and destroy gregarious, early instar larvae on leaves. Apply dichlorvos 76 WSC 300 ml/ac or Diflubenzuron 25 WP 150g/ac.

If root rot was noticed, the farmers are advised to drench the soil with 0.1% carbendazim. For tikka leaf spot incidence farmers are advised to spray carbendazim (1 g/l) or mancozeb (2 g/l) or chlorothalonil (2 ml /l) at initial incidence and 15 days later.

Maize

Stemborer

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 can mix Carbofuran 3 G 6.8 kg/ac with sand to make up a total quantity of 20 kg/ac and apply in the leaf whorls.

Cob borer

Larvae feed on the silk and developing grains. Set up of light traps to monitor the adults. Set up sex pheromone traps at 5/ac to attract and kill the adults. If needed, farmers can spray carbaryl 50 WP at 400g /ac.

Downy mildew: Spray metalaxyl 500 g or mancozeb 1 kg/ha

Leaf blight: Spray mancozeb 2 g/lit 20 DAS.

Greengram / Blackgram

Whitefly

Yellow mosaic virus is a serious problem in these crops. To suppress the vector causing the disease, dimethoate 20 EC – 200 ml / ac or methyl demeton 25 EC – 200 ml / ac can be used.

Pod borers

Dropping of flowers and young pods will be seen. Spray azadirachtin 0.03% @ 400 ml/ac or Emamectin benzoate 5% SG 88 g/ac or Indoxacarb 15.8% SC 133 ml/ac or NSKE 5% twice followed by triazophos 0.05% or Neem oil 2%.

Pod bugs

Shedding of green pods, pods with black spots and with shriveled grains inside will be seen. Spray azadirachtin 0.03% @ 400 ml/ac or Dimethoate 30% EC 500 ml/ac or Emamectin benzoate 5% SG 88 g/ac or Indoxacarb 15.8% SC 133 ml/ac or NSKE 5% twice followed by triazophos 0.05% or Neem oil 2%.

Powdery Mildew: Powdery mildew could be controlled by two sprays of Carbendazim (0.1%) or wettable sulphur 2500g/ha immediately after the disease appearance and the second dose 15 days later effectively manage the disease.

Root rot: Spot drenching with carbendazim 0.1%

Gingelly

Powdery Mildew: Powdery mildew could be controlled by two sprays of Carbendazim (0.1%) or wettable sulphur 2500 g/ha immediately after the disease appearance and the second dose 15 days later effectively manage the disease.

Root rot: Spot drenching with carbendazim 0.1%

Tomato

For tomato leaf blight incidence management farmers are advised to spray mancozeb @ 2 g/ lit of water, twice at weekly interval.

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.

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

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