

PLANT PROTECTION

Q 1: What is the management practice of termite and red ant problem?

Ans: Termites and red ants cause infestations in the under ground plant parts like the stems, tubers and roots of the crops. Application of mustard oil cake and neem cake together @ 40 kg/ha at the time of field preparation gives good control of these pests.

Q 2: How the Botrytis blight of tomato can be managed in green houses?

Ans: In the green house grown tomato this is a major problem and the infection is seen in all the above ground plant parts starting from the stem, branches, leaves, flowers and fruit. The disease can be managed by following crop sanitation and application of Bavistin @ 0.1% at 10 days interval.

Q 3: What are the control measures for late blight of tomato and potato?

Ans: The disease is common when the ambient temperature is low with high humidity. Prophylactic as well as curative protection is achieved with alternate spraying of Metalaxyl and Mancozeb @ 0.2% and 0.25% at 10 days interval.

Q 4: How can we control the bacterial speck disease of tomato?

Ans: Small spots are seen all over the leaves of the tomato plant. The disease is managed with bordeaux mixture 1% sprayings at 15 days interval or three sprayings with agrimycine 0.01% at 10 days interval.

Q 5: What are the management practices followed for the control of bacterial wilt of chilli and other solonaceous vegetables?

Ans: Bacterial wilt can be managed by following crop rotation with non host crops, field sanitation, application of bordeaux mixture and/or hot water treatment of the seed at 50°C for 25 minutes. Also seed treatment can be done with streptomycine at 500 ppm for 1 hour.

Q 6: Can you please tell the pest management practices followed against semilooper problem in cabbage?

Ans: Semilooper cause heavy loss by feeding on the cabbage and other cole crops. Hand picking is the best method to control this pest when the population is low. Any neem oil product like osok, nimbicidine, multilineem etc. applied @ 2 ml/l gives good control.

Q 7: What is the control measure of damping-off disease?

Ans: This is the most common disease in nurseries, either seed do not emerge as seedlings from the soil or after the emergence of seedlings topple down at the soil line and die. Soil and seed treatment with any bioformulation of *Trichoderma harzianum* @ 3-5 g/kg of seed or per sqm. area reduces seed and seedling mortality.

Q 8: How the head rot of cauliflower can be controlled?

Ans: Injury to the plant should be avoided to protect against head rot. Sanitation should be maintained.

Q 9: What is the organic control measure of blast disease of rice?

Ans: Resistant varieties should be selected. Botanicals and Bioformulations like fengard, blast off, immuno boom, etc. should be used.

Q 10: The citrus decline is a very serious problem in Sikkim. How it can be minimized ?

Ans: Citrus decline is sometimes due to a single factor or many factors clubbed together. Hence the proper reason is to be sorted out and care taken accordingly. However, here improper care and management is one of the main reasons. Calendar of operations regarding fertilizer/manure application, plant protection measures etc. to be adopted properly.

Q11: How the stem borer in citrus can be controlled?

Ans: The hole in the stem is to be located. A wire with a cotton swab of petrol/kerosene is to be smeared through out the funnel both ways – upward and downward. Once the insect comes out the hole is then plugged with mud.

Q 12: What is the control measure of turmeric blight?

Ans: Blight of turmeric is managed with sprayings of 1% Bordeaux mixture.

Q 13: What is the IPM practice followed for controlling the rhizome rot of ginger.

Ans: Rhizome rot of ginger can be managed by following crop rotation, seed treatment with 1% Bordeaux mixture and subsequent sprayings with 1% Bordeaux mixture regarding at 15 days interval.

Q 14: can you please tell the management of yellow mosaic disease of soybean?

Ans : Use of certified seeds practice weeding and rough out infected plants and control vectors (with organic insecticides).

Q 15: How the green mould in mushroom beds can be managed?

Ans : Green mould attack in mushroom bed is prevented with proper boiling (sterilization) of the paddy straw and by using 3% garlic extract while making the bed.

Q 16: Please highlight the management practices to be followed against the insect pests in mushroom beds.

Ans : The common insect pests of mushroom like the phosid fly and beetles like managed with spraying any neem oil product like Nashak, Osok, Multineem @ 3ml/lit once immediately after opening the bed. Using and in the ventilations and smoke also prevent the adults from laying their eggs on the beds and fruit bodies.

Q 17: When should be mushroom beds opened and watered?

Ans : The mycelial run is usually complete within 15-20 days of spawning, the bed should be opened when white mycelia is seen forming a mat with the straw. Only on the next day of opening, the bed is to be watered and usually watering is done twice in the summer days and only once in winter days.

Q 18: Which spawn is to be used?

Ans : Commercial or planting spawn of the 3rd to 5th generation i.e T₃ – T₅ are considered best. The spawn should not have any blemishes or bacterial islands and should be white in colour.

Q 19: Marketing aspect of mushroom.

Ans : Mushroom has a ready market in this place and higher income can be expected with value addition. Like pickling and drying.

Q 20: What is the cost involved in processing industry of mushroom/

Ans : Sun drying is the best and low cost method of preserving mushrooms for long period . pickling can be done with less cost involvement and on small scale basis initially by farming co-operatives.