

Forewarning:

Root rot disease of mulberry can be controlled with *Navinya*

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Root rot, due to its epidemic nature and potential to kill the plants, is a dangerous disease of mulberry. It is widely distributed in almost all the sericultural areas and mainly caused by the fungus *Rhizoctonia bataticola* (= *Macrophomina phaseolina*) and other microbes such as *Fusarium solani*, *F. oxysporum*, *Botryodiplodia theobromae* etc. The disease is very serious in mulberry growing areas of southern India. The disease occurs throughout the year in all types of soils especially when the soil moisture and organic matter are low. About 15 % loss is estimated due to the disease.

Symptoms:

The disease appears in patches of the mulberry garden. Sudden withering of plants and leaves are the initial symptoms. The leaves then start falling off from the bottom of the branches.



Above ground symptoms of root rot (yellowing/withering of leaves)

The root starts decaying due to the fungal infection. Just below the root epidermis black fungal mycelia and spores are seen. The severely affected plants loose its adherence to the soil and hence can easily be uprooted. The entire root system gets decayed and plants die.



Below ground symptoms of root rot (rotting of the roots)

The disease occurs in soils of high temperature (28 - 34°C), low moisture (below 40 %) and low organic matter. The disease spreads primarily through contaminated soil, farm implements and irrigation. The secondary source of infestation is through diseased saplings, irrigation and cultivation practices.

Control

The disease can be controlled effectively by application of *Navinya* a target specific plant based formulation (herbal; 80% & Chemicals 20%) developed by CSRTI, Mysore.

Method of application: Prune off the dried shoots of infected plants above 15-30 cm from the ground. Make a shallow ring around stump by remove a little soil. Pour 1 litre *Navinya* solution made by mixing 10 g *Navinya* in 1 litre water (i.e. 1 kg *Navinya* in 100 liter water). The stump should be completely drenched while applying *Navinya* solution. Treat the surrounding mulberry plants also to prevent disease spread.

Precautions to be taken:

- i. Do not irrigate the treated mulberry plants during the first 4-5 days.
- ii. Remove the dead mulberry plants and burn and expose the soil to sunlight.
- iii. Plant the new saplings after dipping their roots in 0.2 % *Navinya* solution for 30 minutes before planting.

Note: The *Navinya* is available with M/s. Nandi Agro vet, Bangalore, Karnataka (Mob: 9449016259).