

Managing leaf rust in grapevines

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Grapevine is one of the most important remunerative fruit crops of India which is widely grown in states of Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Haryana and Madhya Pradesh. There are several diseases affecting the crop among which leaf rust is nowadays posing a major threat to its large scale cultivation. Popular and widely grown grape varieties are becoming susceptible to the disease.

Fungal pathogen

Leaf rust disease is caused by a fungal pathogen *Phakopsora euvtis*. Symptoms of the disease initially are brown spots on the upper side of leaves. Corresponding to the spots on the underside of leaves, yellowish-orange mass of powdery spores are formed profusely. Infection spreads rapidly on the leaves causing them to dry and wither. Thus the disease causes premature defoliation of grapevine during growing season which results in poor shoot growth and ultimately reduces the quality and quantity of fruits. Heavy infection during harvest time, which often occurs in warm temperature, causes considerable reduction in yield.

Air borne

Grapevine leaf rust can infect the vines all year round but becomes noticeable during the dry season. The disease is spread through air. Spores are also spread through clothing or by illegal plant introductions. The best method of control is to prevent the onset of the disease by ensuring hygiene requirements before entering the vineyard. Propagation materials must be obtained from reliable sources. Routine spraying should be done at fortnightly intervals with any of the systemic fungicides like tebuconazole, propiconazole or azoxystrobin at the recommended dosages. Varieties like Cabernet sauvignon, Cabernet franc and Beauty seedless are resistant to rust disease while the widely grown cultivars like Thompson seedless, Sonaka and Tas-A-Ganesh are moderately susceptible.

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