

Corn Disease and Insect Management: Disease

Northern Corn Leaf Blight

Helminthosporium turcicum

This disease is present across the country in all Maize growing areas where high humidity and low temperatures prevail during the crop growing season.

Symptoms

An early symptom, easily recognisable, are slightly oval, water-soaked, small spots produced on the leaves. These grow into elongated, spindle-shaped necrotic lesions . They appear first on the lower leaves and continue increasing in size and number as the plant develops, until a complete "burning" of the foliage is conspicuous. There is a higher incidence of the disease during flowering.

Control Measures

Spray Captaf 50 WP @ 450-900gm/acre or Zebtane 75 WP @ 300-600gm/acre whenever disease symptoms appear.



Southern Corn Leaf Blight

Drechslera maydis

This disease occurs during the kharif season in most of Northern India (Punjab, Western U.P., Himachal and J&K) and also in Bihar.

Symptoms

Infected leaves develop tan, generally parallel sided lesions, limited by veins. Race-T of this fungus also causes infection of cobs, grains and leaf sheaths.

Control Measures

Spray Dithane M-45 (0.3% solutions) during disease incidence.



Sorghum Downy Mildew

Peronosclerospora sorghi

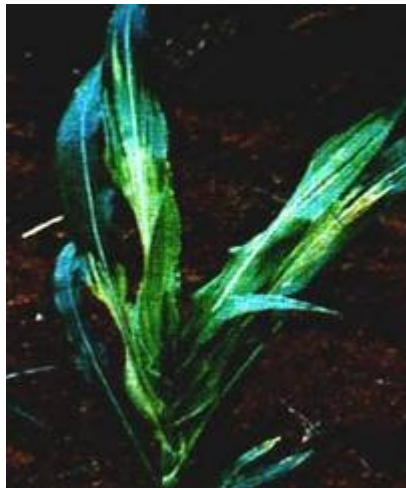
This disease is most prevalent in Karnataka (Bangalore, Kolar, Mandya and Hassan districts).

Symptoms

Symptom expression is greatly affected by plant age, species of the pathogen and environment. Usually, there is chlorotic striping of leaves and leaf sheaths, and dwarfing. Downy Mildew becomes conspicuous after development of a "downy growth" on or under leaf surfaces. This condition is the result of conidia formation, which commonly occurs in early morning.

Control Measures

The best control measure is seed treatment with Apron 1.5 gm/kilo of seed. Spray Ridomil @ 500 gm/acre 20 days after sowing.



Bacterial Stalk Rot

Erwinia chrysanthemi

This disease is severe in isolated fields across the corn growing regions.

Symptoms

Leads to softening of basal or occasionally upper internodes of the stem. Infected plants wilt and topple over. They emit a fermenting odour.

Control Measures

Draining excess water and burning of diseased plants keep the incidence of the disease at a low level.



Charcoal Rot

Macrophomina phaseolina

This disease is most prevalent in Northern India and Southern Peninsular.

Symptoms

Charcoal rot affects stalks and roots. The infected stalks turn grayish exhibiting minute black fruiting bodies scattered throughout the disintegrated pith. The fruiting bodies may also be found on the roots. This disease commonly occurs in light, dry soils and relatively high temperature is favorable for its development.

Control Measures

Maintaining high soil moisture during dry periods after tasseling and growing resistant varieties check the losses due to this disease.



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Sources and Links

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