

Wilt Disease

Causal organism: *Fusarium moniliforme* and *Sephalosporium sacchari*

Wilt Disease on Sugarcane



Wilt disease is one of the most important diseases affecting sugarcane in India. Wilt is reported to be endemic in most of the sugarcane growing states.

Symptomatology

- The disease symptoms appear during the monsoon and post monsoon periods, affected plants, either singly or in small groups, displays conspicuous stunting and unthrift appearance. This is followed by yellowing and / or withering of crown leaves.
- The midrib of all leaves in a crown generally turns yellow, while the leaf lamina may remain green.
- Towards the fag end of the crop growth, the cane become light and hollow and dry.
- On splitting up on the affected canes, at the early stage of the infection, the diffused purple or muddy red color is seen as a conical patches on each node just above the growth rind. Occasionally, above the badly affected internodes are seen one or 2 red stripes, (vascular strands) that pass from one internodes to another.
- In severe cases, the spindle shaped cavities, tapering towards the nodes; develop in each intern ode because of general recession and rapid desiccation of tissues. Sometimes cavities also develops in the nodal tissues, this makes the canes tubular.
- In severe cases, affected stools withered and dry away.



Transmission

The wilt pathogens are transmitted through soil, seed pieces, wind, rain and irrigation water.

Control

Adopting one or more of the following measures can minimize the disease incidence.

- Seed treatment with MHAT (54°C for 150 minutes), followed by seed dipping for 10 to 15 minutes in 0.1% carbendazim (Bavistin) solution.
 - Association of root borer with wilt pathogen was commonly observed. Cane injury by bores provides means of wilt infection and also the pathogen spreads through irrigation water, wind, soil, rain and setts.
 - Treatment of sets with fungi-toxicants before planting. (0.1% Bavistin or 0.1% Bayleton – 100 gm of fungicide in 100 Lit. of water, sett dipping for 10 to 15 min.)
 - Crop rotation.
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