

What it does

Bakanae is a seedborne fungal disease, caused by the fungus *Fusarium moniliformae*.

The fungus infects plants through the roots or crowns. It then grows systemically within the plant.

Infected plants are abnormally tall with pale, thin leaves, produce fewer tillers, and produce only partially filled or empty grains.

Why and where it occurs

The disease occurs most frequently when infested seeds (i.e. seeds covered in fungal spores) are used, but also can occur when the pathogen is present on plant material or in the soil. It spreads through wind or water that carry the fungal spores from one plant to another.

Bakanae can also be transmitted during farm operations such as harvesting infected plants allowing fungal spores to spread to the healthy seeds, and soaking seeds in water that contains the fungus.

How to identify

- Check the seedbed for unhealthy looking seedlings. Infected seedlings have lesions on roots, and can die before transplanting or immediately after.
- Check for abnormal plants. Infected plants are several inches taller than normal plants. They are also thin, with yellowish green leaves and pale green leaves.
- Check for white cottony growth at the base or on the lower portion of the infected plants.
- Check for roots growing from above-ground nodes on the stem.

However, not all infected plants exhibit the visible bakanae symptoms, sometimes they may be stunted or appear normal.

How to manage

- Use clean seeds (e.g., resistant seed).
- Use salt water to separate lightweight, infected seeds during soaking.
- Use fungicides as seed treatments.
- Spray carbendazim 50% WP@ 1.5g/L or, carbendazim 12% + mancozeb 63% WP @1.5g/L of water at boot leaf stage.

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Infected plants are taller than normal plants



Bakanae disease in the field