

# Karnal Bunt

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**In News:** *Tilletia indica* that causes Karnal bunt (KB) disease in wheat is one such fungal pathogen of high quarantine importance restricting the free global trade of wheat besides the loss of grain yield as well as quality.

## Karnal bunt

- Karnal bunt (also called partial bunt) is caused by the fungus *Tilletia indica* which infects grains at flowering.
- It reduces grain quality through the production of masses of powdery spores that discolour the grain and grain products.
- It is recognised by a fishy smell which taints the grain.
- The name comes from the city in India, Karnal, where the disease was first identified.
- Unlike other bunt diseases, only some grains are affected on each wheat ear.
- The fungus would be almost impossible to eradicate once here since its spores can persist in soil for up to four years and they can be carried over long distances by wind.

**Features:** A fungal disease that causes broken hollow (bunted) grain, powdery masses of dark spores, and a strong fishy odour

**Where it's from:** India originally, but now also Afghanistan, Brazil, India, Iran, Iraq, Mexico, Nepal, Pakistan, South Africa and United States

**How it spreads:** Spores spread easily on infected wheat seeds, soil, agricultural products, clothing, machinery and on

the wind

**At risk:** Wheat, durum wheat, triticale