Rice False Smut

Recognize the problem
Outbreaks of false smut generally occur during periods of high humidity. Normally only a few grains in a panicle are affected and the attack usually takes place when the grains are mature. The fungus transforms individual rice grains into large spherical balls containing spores. These spore balls are initially orange, then change to yellowish-green and turn greenish-black when mature. In most cases, not all spikelets of a panicle are affected, but spikelet’s neighbouring smut balls are often unfilled.

Background
The disease can occur in areas with high relative humidity (>90%) and temperature ranging from 25-35°C. Rain and high humidity, and soils with high nitrogen content also favor disease development. Wind can spread the fungal spores from plant to plant. False smut is visible only after panicle initiations. It can also infect the plant during flowering stage.

Management
- Keep the field clean.
- Remove infected seeds, panicles, and plant debris after harvest.
- Cultivate unflooded rice (e.g. furrow irrigation) to reduce the disease.
- Where possible, perform conservation tillage.
- Use moderate rates of nitrogen.
- Use certified seeds. (get from reliable suppliers)
- Treat seeds at 52°C for 10 min.
- For fields with high incidence of false smut spray or dust with recommended fungicides a few days before heading.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Ustilaginoidea virens*

The recommendations in this factsheet are relevant to: Cambodia

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