False Smut of Rice: Symptoms, Impact, Disease Cycle and Management

Topic	Description
Disease Name	False Smut of Rice
Alternative Names	Pseudosmut, Fake Smut
Causal Pathogen	Ustilaginoidea virens
Transmission Modes	Wind, rainwater, contaminated seeds
Impact on Rice Crops	Reduced yields, compromised grain quality
Symptoms	- Individual rice grains transformed into yellow fruiting bodies
	- Greenish smut balls with velvety texture enclosing floral parts
	- Smut balls grow up to 1 cm in diameter
	- Found between the hulls of rice grains
	- Limited infection in a few grains; others remain healthy
	- Bursting of smut balls with color change (orange, yellowish-green, or greenish-black)
Disease Cycle	- Presence of velvety smut balls on spikelets
	- Transformation of individual rice grains into spore balls
	- Growth of velvety spores enclosing floral parts
	- Limited infection within panicles
	- Chlamydospores and sclerotia formation
	- Role of chlamydospores and ascospores in secondary and primary infections
Management Strategies	- Destruction of infected straw and stubble
	- Planting resistant or tolerant varieties
	- Timing field activities during dry periods
	- Opting for early planting
	- Removal of diseased plants during harvesting
	- Cleaning field bunds and irrigation channels
	- Optimal fertilizer management
	- Regular disease monitoring

Prevention methods:	Products: Izumonas and Izumil (bio Fungicides and Bactericides).
	- Modes of use: seed treatment, seedling treatment, soil application, and foliar application.