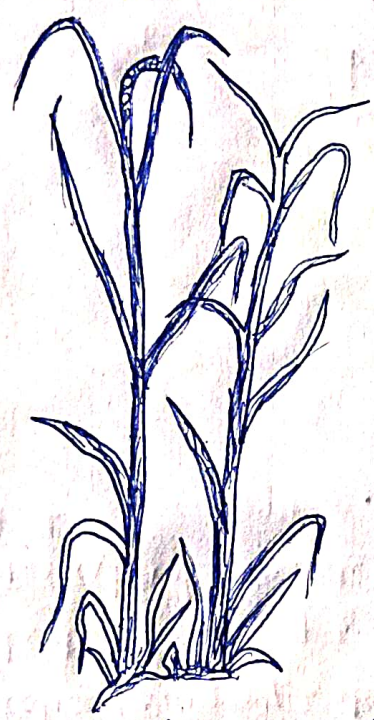


**Question** → Describe the smut of sugar?

**Ans** → pathogen: *Ustilago scitaminea*.

**Systematic position:**  
 class - Basidiomycetes  
 order - Ustilaginales  
 family - Ustilaginaceae.  
 genus = *Ustilago*  
 species = *scitaminea*.

**Distribution** → This disease has been reported from several sugarcane growing countries such as West India, Italy, Cuba, Mauritius, Java, Philippines, South Africa and Australia. In India, the disease is found chiefly in the north, but occurs practically wherever cane is cultivated.



Fig! - Smut of sugar-cane showing symptoms of the disease.

**Symptom** → The affected are characterized by the production from the growing apex of a long whip like dusky, black, shoots, often several feet in length and so much curved on itself. The whip like part of cane is slender, flexible and devoid of leaves.

**The pathogen:** - The whip smut of sugarcane is caused by *Ustilago scitaminea*. The tissues of the cane below the whip smut itself contains the intercellular mycelium. The hyphae are found in dense masses towards the surface of the spore bearing shoot where the spores are formed.

**Nature and occurrence of the disease:** -

The disease is seed as well as soil born, it can be transmitted through sets cut from diseased plants containing mycelium as well as through spores that are the soil.

**Control measures:** -

(1) **Regueing:** - The smutted whips should be collected carefully in the sterilized bags and burnt outside the field.

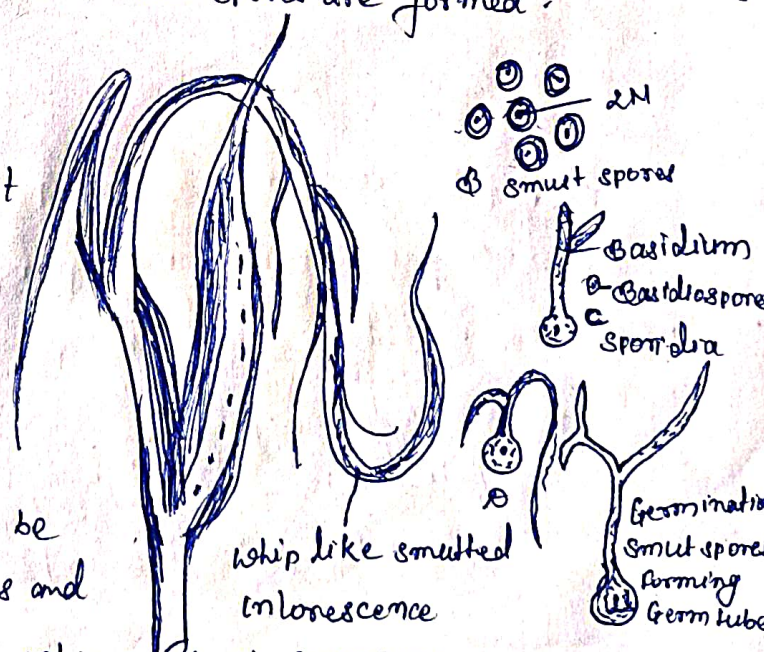


Fig: - Whip smut of sugarcane.