



Head smut
(FUNGUS - *Sphacelotheca reiliana*)

- Early symptoms include chlorotic flecks on the leaves and a red colouration on the stem.
- The first clear symptoms are seen at tasseling when the flowers or cobs are completely or partly converted into smut galls.
- Smut galls are covered by a thin membrane that breaks open to expose masses of reddish-brown to black spores



Common maize smut
(FUNGUS- *Ustilago maydis*)

- Characteristic symptoms are the formation of galls or tumours on the cobs, stems, leaves and flowering parts of maize plants
- Galls are one to several centimetres in diameter covered by a whitish-green membrane.
- Inside the galls are powdery black masses of spores



Maize stalk borer
(INSECT – *Busseola fusca*)

- Young plants show lines of small holes in the leaf whorls
- The central leaves die, resulting in a dry, withered 'dead-heart' symptom
- Holes seen in the stem surrounded by frass
- Caterpillars found in stems are smooth dark violet to pinkish white with small dark spots



Maize streak virus
(VIRUS)

- Narrow white to yellowish streaks on the leaves. The streaks form more or less broken lines that run parallel to the mid rib
- Symptoms are seen first on the young leaves
- Plants infected at an early stage become severely stunted, producing undersized, misshapen cobs or no yield at all