

USTILAGO TRITICI

Preparation of Slide:

- (i) Take the ear of wheat and tap it gently on a paper, then put the material of smut spores (chlamydospores) on the slide.
- (ii) Add few drops of glycerine, and cover it with cover slip and examine under microscope.

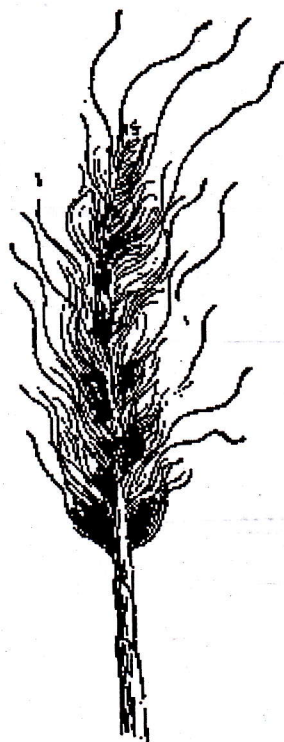


Fig. 16: *Ustilago* sp.
Covered Smut of Wheat

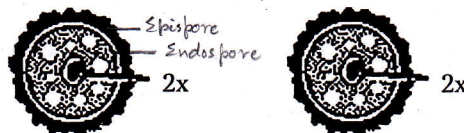


Fig. 17: Chlamydospores
of *Ustilago*

Characters:

1. *Ustilago* cause wheat smut disease, produces smut spores, called chlamydospores.
2. The mycelium of *ustilago* is monokaryotic i.e. each cell contains single nucleus.
3. The smut spores are black, round or oval in shape.
4. The spores contain single nucleus.
5. The spore consists of two layers, outer layer is thick and rough (spiny), called epispore (exospore).
6. Inner layer is smooth, called endospore. *unimucated spores (chlamydomonas)*