

Dr. Rachana Shalini

Department of Botany

Class : Deg. I (Subs.)

Chapter : Fungi - Albugo

Topic : General characters of Albugo candida

Lecture No. - 38

Date : 6/08/2020

Albugo candida or Cystopus :

• Systematic position or classification :

- Division : Mycota
- Sub-division : Eumycotina
- Class : Oomycetes
- Order : Peronosporales
- Family : Albuginaceae
- Genus : Albugo
- Species : candida

• Occurrence :

Albugo candida is an obligate parasite on land plant. It causes a disease "white rust or blister rust" in several annual crucifers such as Brassica campestris, Raphanus sativus etc.

• Sign and Symptoms :

The disease appears in the form of shiny, white, smooth raised irregular patches on the leaves and stems.

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The patches gradually turn powdery. The disease also cause deformation of flowers and fruits of the host. Sometimes, the fungus attack may cause swelling and distortion of stem particularly in young plants.

Infection takes place through the stomata.

• Mycelium :

Mycelium of Albugo is well developed and consists of aseptate, coenocytic hyphae. The hyphae live and ramify in the intercellular spaces of the host tissue. Hyphal wall contain cellulose. Hyphal protoplasm is granular and vacuolate in the older parts. It contain numerous nuclei, oil globules and glycogen.

• Haustorium :

Within the congenial host, the mycelium of Albugo candida spreads intercellularly, producing intercellular haustoria in the mesophyll cells of the host. Haustoria arises as lateral outgrowth at the sites, where the hyphal wall is tightly appressed.

Haustoria are small, button-like spherical structures connected by hypha and consists of two parts, stalk and haustorial head.

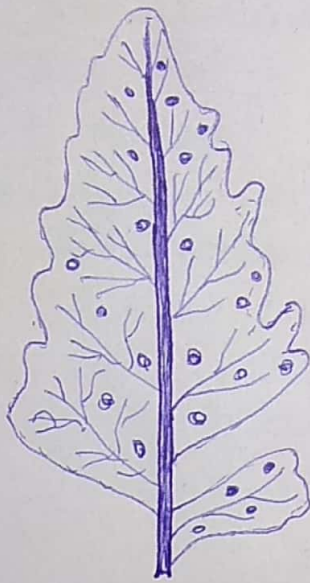


Fig: Infected leaf of Brassica campestris

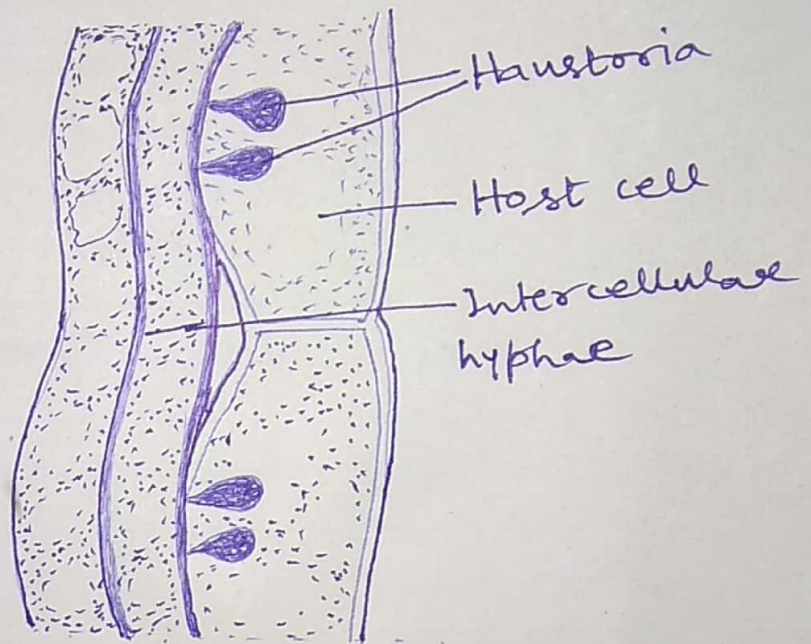
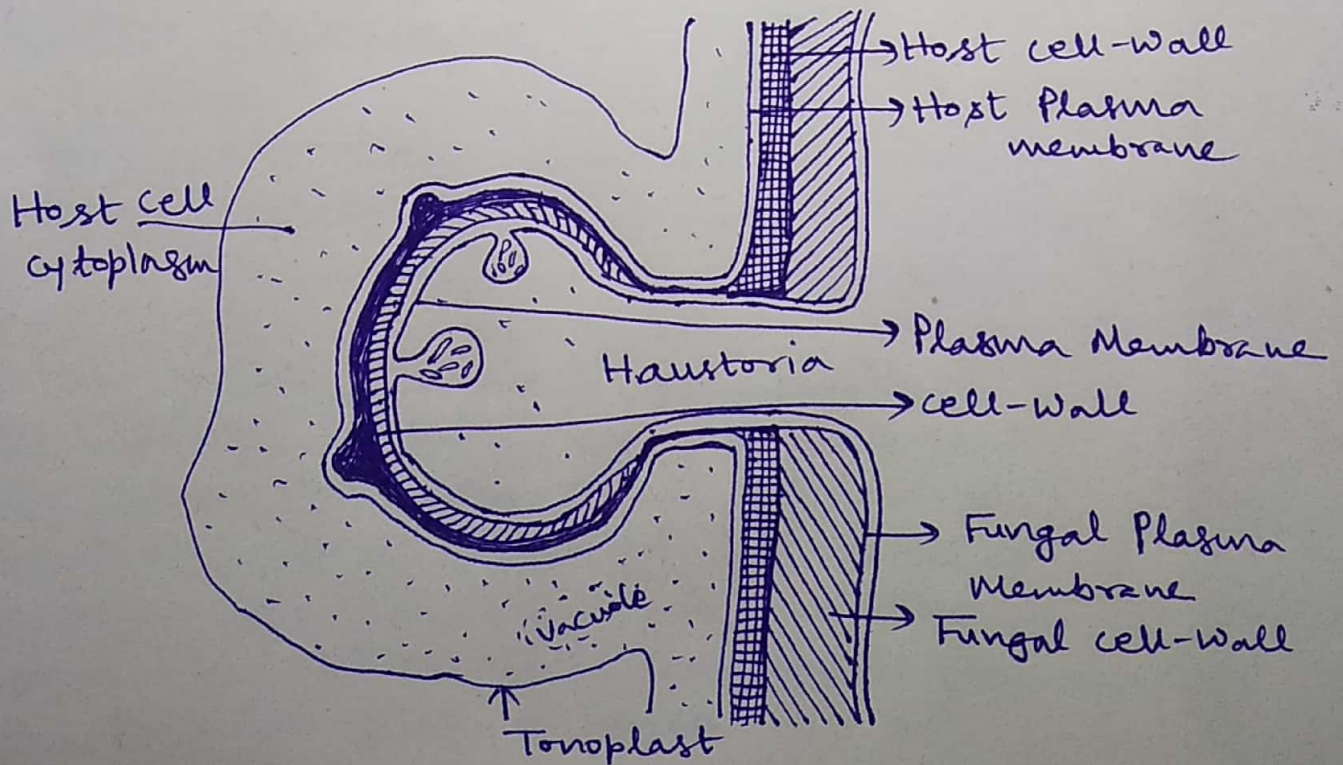


Fig: Diagrammatic section of host stem showing a portion of mycelium bearing haustoria



(Fig: Diagrammatic ultrastructure of Haustoria)