

Dr. Rachana Shalini

Deptt. of Botany

class : Deg. I (Subs.)

chapter : Fungi - Albugo

Topic : Life-cycle of *Albugo candida* (continued)

Lecture No. - 55

Date : 20/08/2020

Life-cycle of *Albugo candida* (Contd.):

Sexual Reproduction in *Albugo*:

- It is oogamous.
- The male sex organ is called Antheridium and the female is oogonium.
- Antheridia and oogonia are produced near each other in the intercellular space of host tissue towards the end of the growing season.
- The sex organ arise on male and female hyphae. The development of sex organs within the host tissue is externally indicated by hypertrophy and distortion in shape of the particular organ.

Oogonium:

It is arises as a globular enlargement of the tip of female hyphae. The swelling is multinucleate. when oogonium advances towards maturity, its cytoplasm after meiotic division becomes differentiated into two distinct regions.

- To form the female gametangia or oogonium, a hyphae swells at the tip and becomes spherical.

(9)

- A septum appears at the base.
- The oogonium is multi-nucleate and its cytoplasm becomes differentiated into two distinct zones, a central zone called the ooplasm, which is the egg or oosphere and a peripheral zone called the periplasm.
- The central zone is a dense mass of cytoplasm with an egg-nucleus, (other nuclei of this zone usually degenerate), while the peripheral zone is lighter and multi-nucleate.

### Antheridium:

- To form the female gametangium or antheridium, a hypha close to the oogonium swells at the tip and becomes more or less club-shaped. It is cut-off at the base by a septum. The antheridium is multinucleate, but only one is functional.

==

(continued ----)