Study on alternaria leaf blight/ grey leaf spot of mustard

Symptoms:

- 1. All the green parts of the plants are attacked.
- 2. In early stage, disease appear as small dark brown to grey dot like spot on leaf, which expand rapidly to form circular lesions. Spots usually occur on older leaves.
- 3. The mature spots are characterized by concentric ring with purple or black border
- 4. Later on, several spots coalesce and ultimately the leaves become blighted.
- 5. The spots on stem, pods and petioles are more or less round with dark brown to black dot like.
- 6. The infected seeds are shriveled.

Causal Organism:

Alternaria brassicicola A. brassicae

Pathogenic characters:

Mycelia: Mycelia are well developed, branched, septate and hyaline at first, latterly brown to olivaceous brown.

Conidiophores: Conidiophores are septate, dark, simple, rather short or elongate, typically bearing a simple or branched chain of conidia, geniculated or occasionally geniculated.

Conidia: Conidia are dark, muriform, rostrate, oblclavate, pale olive or very pale olive or grayish olive in color.

In case of conidia of *Alternaria brassicicola*: mostly in chains of up to 20 or more, straight, attenuate into a short beak at the tip and usually basal cell is rounded. The beak is about one-eighth the length of the conidium.

In case of conidia of *A. brassicae*: mostly solitary (occasionally chains of up to 4) straight or slightly curved, attenuate into a long beak at the tip. The beak is about one-third the length of the conidium.

Taxonomic position:

Kingdom: Fungi

Division: Deuteromycota Class: Hyphomycetes Order: Moniliales

Family: Dematiaceae Genus: Alternaria

Species: Alternaria brassicae A. brassicicola



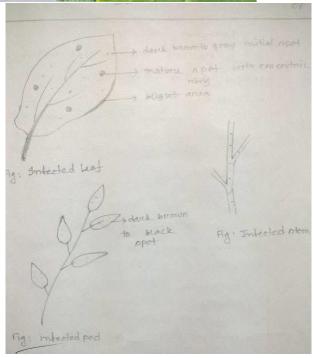


fig: observed conidia under microscope

Alterenaria breassicieda

