

## 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, obclavate, 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*

