**Sunflower Alternaria leaf spot: *Alternaria helianthi* Hansf.**

This disease commonly occurs in all varieties and it rapidly spread during the rainy season. This disease has been reported from different parts of the world including India. Alternaria leaf blight is known to cause more than 80 per cent of yield loss under severe epiphytotic conditions.

**Etiology**

Causal organism: *Alternaria helianthi* Hansf.

The conidiophores are cylindrical, scattered or gregarious, pale grey yellow, straight or curved, geniculate, simple or branched, up to 5 septate, 25-80 x 8-11µ. The conidia are cylindrical to long ellipsoid, straight or slightly curved pale grey yellow to pale brown.

**Disease cycle**

Disease occurs when spores land on leaves or stems, germinate in the presence of free moisture, and directly penetrate and infect the plant. Plants are most susceptible to infection beginning at flowering and continuing through maturity. Plant stress also predisposes plants to the disease. Spores are readily disseminated in and among fields by splashing irrigation water, wind, and perhaps insects. The pathogen survives between sunflower crops in and on infested crop debris, as a pathogen of safflower and cocklebur, and on seed.

**Symptoms**

- Symptoms appear on leaves, petioles, stem, sepals and petals.
- Symptoms appear as dark brown irregular leaf spots with very dark border and grey centre.
- Spots first appear on lower leaves, later spread to middle and upper leaves.
- At later stages spots may be formed on petioles, stem and ray florets.
- In later stages the leaf lesions may coalesce causing the leaf to wither.
Epidemiology

Wet, warm weather promotes Alternaria disease growth. Regions prone to high humidity and warmer temperatures are susceptible to this disease. Fields that are planted early are susceptible to more severe losses from the affects of the disease than those planted later. Disease development is favoured by 25-27°C temperatures with at least 12 hours of wet foliage.