

¹ **Introduction to the White Rust of Crucifers:**

White rust or white blisters disease is one of the common diseases of crucifer crops. It is worldwide in distribution occurring in all the areas wherever crop is cultivated. Both wild and cultivated varieties are attacked.

The disease affects a large number of crucifer crops of economic importance like Mustard, Cress, Rape, Radish, Cabbage, Cauliflower, turnip etc. In India the disease is reported on Mustard, Rape, *Eruca sativa*, turnip, Cauliflower and *Cleome viscosa*.

Symptoms of White Rust Disease:

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The disease affects all the aerial parts of the plant, the roots are not attacked. Symptoms may appear as a result of two types of infection: Local and Systemic.

In case of local infection, isolated spots or pustules appear on leaves or stems or inflorescence. The pustules are of variable size, measuring 1 -2 mm in diameter and are raised shiny white areas.

These may arise in close proximity and coalesce to form large irregular patches. Usually, the pustules appear in circular or concentric arrangement with one or two central areas. The host epidermis ruptures exposing

white powdery mass consisting of spores of the fungus. Pustules occurring on leaves are usually confined to the lower surface only.

In systemic infections, young stems and inflorescence are infected. The fungus becomes systemic in these parts and the affected tissues are stimulated to various types of deformities. The most prominent is Hypertrophy of the affected parts. Due to Hypertrophy and Hyperplasia of floral parts, these show swellings and distortion.

The peduncle and pedicel may become enormously thickened upto 12-15 times, the normal diameter. Floral parts become fleshy, swollen, green or violet in colour, the stamens falling off early