

Brown Rust



The rust disease of sugarcane is caused by *Puccinia melanocephala* H. & P. Syd. Since its serious outbreak in 1950 on Co475 in Maharashtra, it has become a limiting factor in releasing the suitable sugar cane variety. Subsequently, it was noted on Co678, Co775 and Co853. Due to reoccurrence of rust, Co475 had to be withdrawn from the general cultivation in Maharashtra State even though, it was high yielder, high sugared and good ratooning ability variety.

Symptoms

- The earliest symptoms of common rust on the leaves are small, elongated yellowish spots which are visible on both the surfaces. These spots increase in size, mainly in length, and turn red-brown to brown in color. A narrow, pale yellow-green halo develops around the lesions.
- When the common rust is severe, numerous lesions occur on individual leaves giving them an overall brown or rusty appearance. These lesions coalesce to form large, irregular necrotic areas which usually result in premature death of the leaf. In such cases, the number of live leaves per plant can be seriously reduced, while in very susceptible varieties there may be fewer stalks per stool and reduced diameter and length of the stalks.
- Affected crops take on a distinctive rusty to brown color, as disease intensity builds up. The discoloration of these crops is readily seen from a distance. Rust can also cause wilting, some leaf tip death and accelerated death of leaves.



Transmission

The rust pathogen is transmitted by wind and water splash of the uredinospores.

Management

- ❖ Use of the disease resistant varieties.
- ❖ Follow the long furrow or pair row method of planting.
- ❖ Removal of affected and dried leaves and destruction by burning.
- ❖ Foliar application of Propineb 0.2 % or Mancozeb 0.3 %, 2 to 3 times at an interval of 10 to 12 days immediately after the disease appear.
- ❖ Avoid growing susceptible varieties in areas with low soil pH, high levels of P and K nutrients.