FACTSHEETS FOR FARMERS

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Control of soil moisture for Green ear disease of pearl Millet

Recognize the problem

Pearl Millet is used generally as fodder in rain fed areas. Green ear disease is caused by a germ called a fungus.

The symptoms of the disease cause the plant to become dwarf-like and develop excess tillers. The plant also develops pale, broad streaking which extends from the base to the tip of the leaf.

In severe attacks, the leaves may be shredded and the fungus can be seen as white spots on the leaf surface, near the base of the leaves.

The infected plants generally do not form ears but if they do, the ears are malformed and green. This is due to the growth of leafy structures which can later become brown and dry.

Severely infected plants produce 'green ear' as disease transforms the floral parts into leafy structures. (Photo by Rikhab Raj-Bhansali, CAZRI, Bugwood)

Typical symptoms of systemic downy mildew. (Photo by Rob Williams/CAB International)

Background

The pathogen remains alive for up to 10 years on plant debris in the soil.The fungus is more active in humid or moist conditions. A warm, wet day will favour the spread and attack of the disease. Flooded land will also favour the spread of the disease. Dry and cool conditions are unfavourable for the survival of the pathogen. Exposure to sunlight will kill the disease quicker.

Management

- Avoid sowing crops in low lying areas which are more liable to flooding
- Do not irrigate the field too much to create water logged conditions
- Deeply plough the fields to 20cm to expose the infected soil and plant debris to sunlight for 7-10 days before sowing the new crop

Scientific name(s) > ***Sclerospora graminicola***

The recommendations in this factsheet are relevant to: Pakistan

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