Chilli Collar Rot

Recognize the problem
Chilli collar rot is one of the most important diseases of chillies. It is caused by a fungus-like organism. At first, the stem of the plant near the ground becomes rotten. At the fruiting stage of the crop, the whole plant wilts and dies. At the start of attack, the leaves show small dark green spots which become larger and lose their colour. The fruits have dark wet spots on which a white growth can be seen. Fruits shrink but remain attached to the plant.

Background
The causal organism occurs in soils and also survives on infested seeds of chillies. Infection is more likely on young plants, when the ground is too wet and when the weather is warm and wet. This disease develops in low areas after heavy rains or irrigation and then quickly spreads throughout the field. It can also attack tomato, eggplant, squash, watermelon, cucumber and some common weeds.

Management
Cultural Control:
- Grow resistant varieties, e.g. Gola Peshawari and Tatapuri
- Remove infected plants from the field by uprooting and burning them. Be careful not to lose seeds as you transport the plants.
- Plant the crop on ridges so that the water cannot touch the stem
- Practise crop rotation with fodders and cereal crops for three years
- Do not sow the crop in poorly drained soils
- Remove the weeds throughout the planting season of the crop
- Select fields that are well isolated from infested fields for sowing
- Use healthy seeds purchased from registered companies

Chemical Control:
- Always treat seed with fungicide e.g. thiophanate methyl @ 2g per kg of seed if last season’s crop was affected
- At the appearance of disease, protect the fruit by spraying with a recommended fungicide e.g. mancozeb + metalaxyl, fosetyl aluminium, mancozeb + oxadixyl or metiram Do not eat and smoke during the spray. Wash hands, eyes and exposed parts of the body after the spray.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

The recommendations in this factsheet are relevant to: Pakistan

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