Late blight of tomato

Phytophthora infestans

Symptoms on leaves (Yonghao Li, The Connecticut Agricultural Experiment Station, Bugwood.org)

Symptoms on stem (Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org)

Symptoms on fruit (Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org)

Prevention

- Do not cultivate tomato in the same field the year after potato or tomato cultivation because tomato blight fungus remains in the soil for several years
- Volunteer plants (e.g. potato and chilli) should be removed from the garden prior to planting
- Recommended spacing should be maintained.
- Avoid overhead watering to prevent splashing so that the leaves do not remain wet.

Monitoring

- Symptoms often first appear on the lower, older leaves as light-green water-soaked spots or as dark brown patches without a yellow border.
- Very soon after this, white fungal growth forms around the edges of the patches on the undersides of leaves. This is the most characteristic feature of Late Blight.
- Stems develop dark brown patches without yellow edges; the plant does not wilt initially.
- Fruit remains hard and develops brown patches but the skin of the fruit is not damaged.

Direct Control

- Remove and destroy affected crops at the end of the season
- If only one or two leaves are seen with the disease, carefully remove them with a knife and seal in a plastic bag. This will not prevent the spread but it will slow it down.
- Stop irrigation in the infected field.

Direct Control | Restrictions

- You should spray as soon as the disease is seen.
- Use protective clothes and mask during spraying

Direct Control	Restrictions
• Spray a fungicide containing mancozeb (eg. Indofil, Ditane M-45) @ 2g/L of water as preventive measure.	• Mancozeb: WHO class U, unlikely to present acute hazard in normal use; FRAC M 03.
• Spray a fungicide containing Fenamidone + Mancozeb (e.g. Secure), Metalaxyl (e.g. Ridomil gold), Dimethomorph or Cymoxanil, along with Mancozeb or Maneb, at the first sign of blight, then at 7-10 day intervals or after rain.	• Fenamidone: WHO class III, FRAC 11; Mancozeb: WHO class U, FRAC M 03; Metalaxyl: WHO class II, FRAC 4; Dimethomorph: WHO class III, FRAC 40; Cymoxanil: WHO class II, FRAC 27; Maneb: WHO class U, FRAC M 03.

Bangladesh

CREATED/UPDATED: April 2016; updated October 2020
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