PEST MANAGEMENT DECISION GUIDE: GREEN AND YELLOW LIST

Tomato Early Blight - Kenya

Alternaria solani

Brown circular leaf spots on upper part of leaves (Source: Elemson University USDA)

Brown circular rings on the fruits (Source: University of Florida)

Brown leafspots with characteristic ring pattern within. (Source: Phil Taylor, CABI)

Prevention

- Crop rotate with crops e.g. onions, beans, or maize for at least 2 cropping seasons,
- Plant resistant varieties, if available.
- Establish the nursery away from an existing tomato field. Use certified seeds and clean seedlings.
- Plant at recommended spacing- rows (75-100cm)/40-60cm) for good aeration
- Stake and prune indeterminate varieties ti increase air circulation
- Avoid overhead irrigation to minimise the spread of the disease
- Destroy crop debris after harvest
- Disinfect farm tools using approved chlorine based products

Monitoring

- Inspect weekly, especially on the underside of the leaves.
- Look for brown to black circular spots with concentric rings on leaves and fruit usually seen on the older leaves.
- Look for premature fruit fall in severely infected crops.
- Take action if symptoms are seen on a single plant if wet weather is forecast and is the beginning of the season.

Direct Control

- Remove and destroy infected leaves if seen early in the season.
- Use organic vegetable oil as an adjuvant to enhance the performance of mancozeb-based products in direct yellow control options.

Direct Control	Restrictions
• Always use products registered by PCPB for target crops and pests. Link www.pcpb.go.ke	
• Before use, read and follow pesticide product label instructions e.g. PHI, REI, usage and disposal of pesticide waste.	
• Always wear appropriate protective equipment.	
• Spray carbendazim-based products.	• WHO Class U (unlikely to present an acute hazard in normal use), Green band.
• Spray mancozeb-based products.	• WHO Class U (unlikely to present an acute hazard in normal use), Green band.
• Spray copper hydroxide- or copper oxychloride-based products.	• WHO Class II (moderately hazardous), Yellow band.
• Apply Azoxystrobin based products	• WHO Class U (unlikely to present an acute hazard). PHI 7 days
• Apply Chlorothalonil based products	• WHO Class U (unlikely to present an acute hazard). REI 12h, PHI 3 days
• Apply Famoxadone +Oxathiapiprolin based products	• Famoxadone WHO Class U (unlikely to present an acute hazard), Oxathiapiprolin Not classified by WHO. REI 12h, PHI 3 days
• Apply Fluopicolide +Propamocarb hydrochloride based products	• Both WHO Class U (unlikely to present an acute hazard) PHI 3 days
• Apply Fosetyl-aluminium based products	• WHO Class U (unlikely to present an acute hazard). PHI 21 days
• Spray sulphur based products	• WHO Class III (Slightly hazardous). REI 12h, PHI 1 day

Kenya

CREATED/UPDATED: September 2023/March 2025
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