

Apple - Apple Scab

- **Soil:** Prefers well-drained loamy soil with a pH of 5.8-6.5. Avoid wet conditions as waterlogged soils promote fungal growth.
 - **Weather:** Cool, wet weather encourages the spread of apple scab. Regular rainfall increases humidity, creating ideal conditions for fungal spores to germinate.
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Apple - Black Rot

- **Soil:** Deep, fertile soil with good drainage is necessary. Avoid soils with poor air circulation.
 - **Weather:** Warm, humid conditions promote black rot. Prolonged leaf wetness increases infection risk; prune for better air movement.
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Apple - Cedar Apple Rust

- **Soil:** Sandy or clay-loam soil with a pH of 5.5-6.5. Good drainage is critical to prevent stress.
 - **Weather:** Requires warm, humid conditions for spores to thrive. Reduce humidity around trees by improving air circulation.
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Apple - Healthy

- **Soil:** Fertile, well-drained loam with a pH of 6.0-7.0. Regular organic matter additions help maintain health.
 - **Weather:** Apples grow best in cool climates with moderate rainfall and minimal frost risk during flowering.
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Blueberry - Healthy

- **Soil:** Acidic soil (pH 4.5-5.5) with good drainage is essential. Mulching helps retain moisture and maintain acidity.
 - **Weather:** Thrives in moderate climates with consistent rainfall. Protect from late frosts during flowering.
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Cherry (incl. sour) - Powdery Mildew

- **Soil:** Fertile, well-drained loamy soil with good nutrient content. Avoid high nitrogen fertilizers.
 - **Weather:** Warm, dry days followed by cool, humid nights increase mildew risk. Avoid overhead irrigation.
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Cherry (incl. sour) - Healthy

- **Soil:** Deep loamy soil with a pH of 6.0-6.8 and good fertility. Maintain a steady moisture supply without waterlogging.
 - **Weather:** Requires moderate climates with cool winters and warm summers. Protect from heavy rainfall during flowering.
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Corn (maize) - Cercospora Leaf Spot/Gray Leaf Spot

- **Soil:** Loamy or silty soil with balanced nutrients and good drainage. Avoid compaction for proper root growth.
 - **Weather:** Warm, humid conditions with prolonged leaf wetness are favorable for disease spread.
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Corn (maize) - Common Rust

- **Soil:** Well-drained, fertile soil with a slightly acidic to neutral pH (5.8-7.0).
 - **Weather:** Cool, moist weather fosters rust development. Dry weather reduces infection risk.
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Corn (maize) - Northern Leaf Blight

- **Soil:** Loamy, fertile soil with balanced organic content. Avoid waterlogged conditions.
 - **Weather:** Cool, humid weather with long periods of leaf wetness is ideal for spore germination.
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Corn (maize) - Healthy

- **Soil:** Prefers fertile, well-draining loam or silt-loam with a pH of 5.5-7.0. Add compost to improve structure.
 - **Weather:** Grows well in warm climates with sufficient sunlight and moderate rainfall.
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Grape - Black Rot

- **Soil:** Fertile, well-drained soil with moderate moisture retention. Avoid standing water.
 - **Weather:** Warm, wet weather encourages black rot. Reduce humidity by pruning vines.
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Grape - Esca (Black Measles)

- **Soil:** Deep, well-drained soil enriched with organic matter. Avoid overly wet conditions.
 - **Weather:** Dry conditions reduce Esca risks, but warm climates are susceptible if proper drainage isn't maintained.
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Grape - Healthy

- **Soil:** Fertile, sandy loam or clay-loam soil with a pH of 6.0-6.5. Ensure good aeration for healthy roots.
 - **Weather:** Requires warm, sunny days and cool nights for optimal growth.
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Orange - Huanglongbing (Citrus Greening)

- **Soil:** Sandy, well-drained soil with balanced fertility. Avoid high salt content in soil.
 - **Weather:** Warm climates with frequent rainfall can spread greening through infected psyllids.
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Peach - Bacterial Spot

- **Soil:** Fertile, sandy loam soil with pH 6.0-7.0 and good drainage. Avoid saline soils.
 - **Weather:** Warm, wet conditions favor bacterial infections. Reduce humidity by pruning.
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Peach - Healthy

- **Soil:** Fertile, well-draining loamy soil with a pH of 6.0-7.0. Organic mulches can help retain moisture.
 - **Weather:** Thrives in warm climates with adequate sunlight and low humidity during flowering.
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Pepper Bell - Bacterial Spot

- **Soil:** Well-drained loamy soil with balanced nutrients. Avoid waterlogged conditions.
 - **Weather:** Bacterial spot spreads in warm, wet weather. Use drip irrigation to reduce leaf wetness.
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Pepper Bell - Healthy

- **Soil:** Fertile, well-draining soil with a pH of 6.0-7.0. Maintain moderate moisture levels.
 - **Weather:** Grows best in warm climates with steady rainfall and minimal temperature fluctuations.
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Potato - Early Blight

- **Soil:** Loose, sandy loam with good drainage and a pH of 5.0-6.0. Avoid excessive nitrogen to reduce foliage growth.
 - **Weather:** Warm, humid conditions with occasional rain increase risk. Remove infected debris.
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Potato - Late Blight

- **Soil:** Well-drained soil with balanced nutrients. Avoid planting in fields with poor drainage.
 - **Weather:** Cool, wet weather with frequent rain promotes late blight spread.
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Potato - Healthy

- **Soil:** Loose, sandy loam soil with good aeration and drainage, pH 5.0-5.5.
- **Weather:** Prefers cool climates with consistent moisture. Avoid excessive heat during tuber formation.

