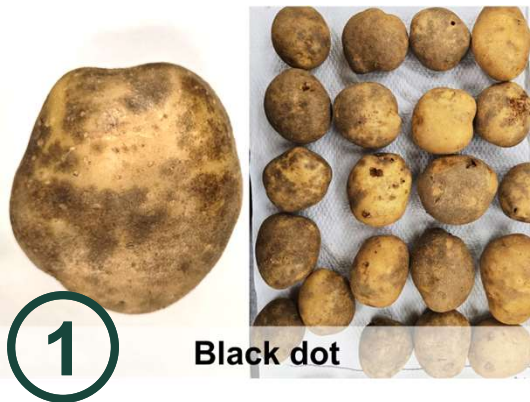
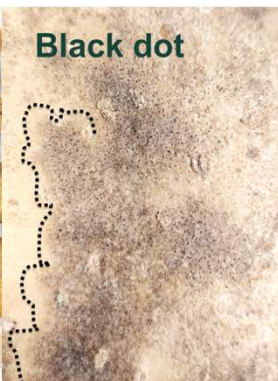


# Rot or Not? (and Other Potato Disease Issues)



Black dot



Black dot

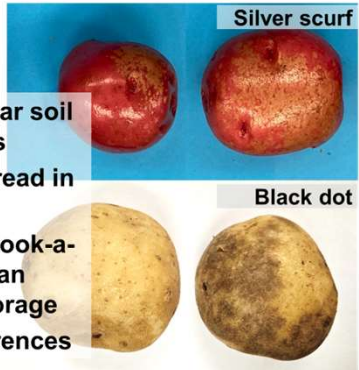


What to look for:

- Darkened color
- Cloudy edges
- Black sclerotia
- Acervuli/setae "black eyelashes"

## Black dot

- Key notes:**
- On stems near soil line to tubers
  - Does **not** spread in storage
  - Silver scurf look-a-like, which can spread in storage
  - Variety differences

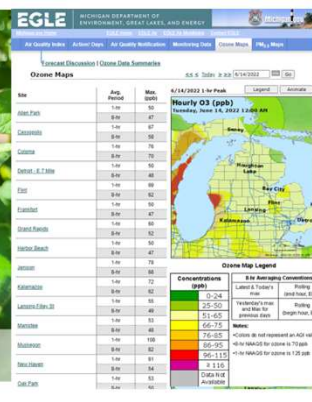


Silver scurf

Black dot



Ozone injury



## Ozone injury

What to look for:

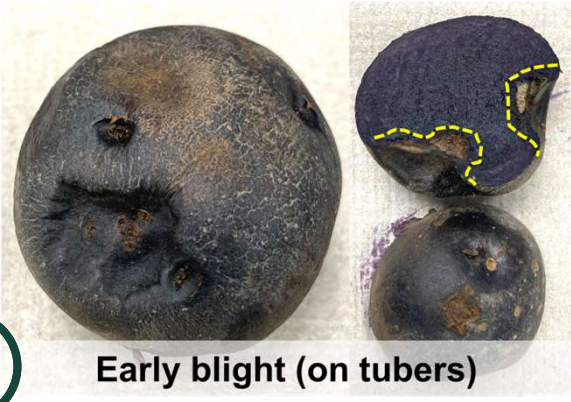
- Pepper spots, sunken necrotic
- Back-side of leaves
- Rapid onset
- Air quality alerts

## Ozone injury

- Key notes:**
- Variety differences
  - Brown spot/early blight look-a-like
  - No concentric rings



Early blight

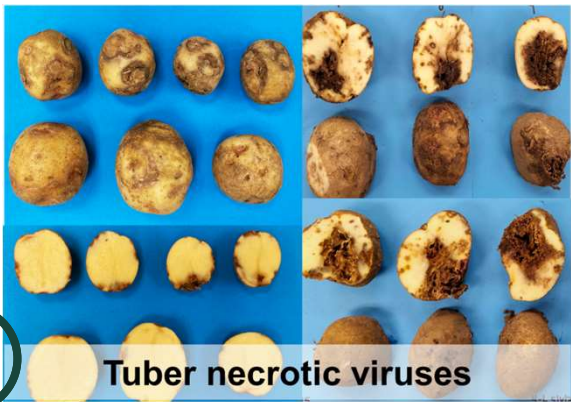


Early blight (on tubers)



## Early blight (on tubers)

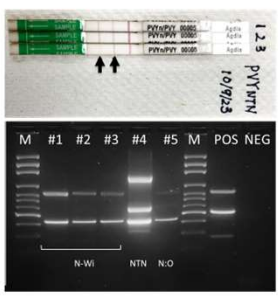
- Key notes:**
- Dark, circular, irregular sunken lesions
  - Decayed tissue leathery or corky
  - May increase tuber dehydration



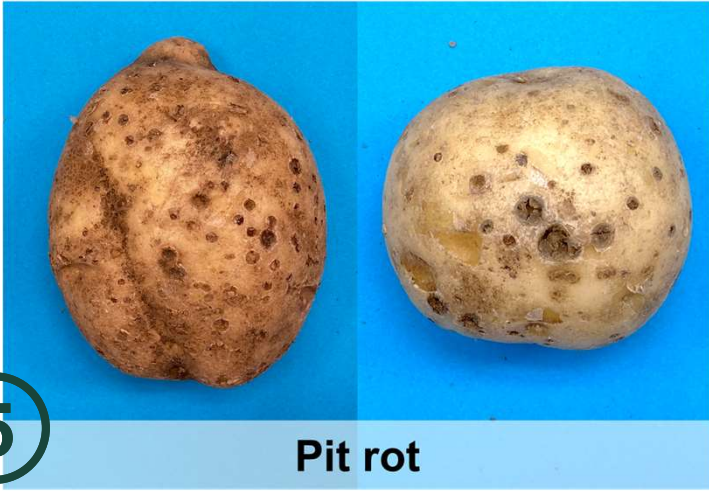
Tuber necrotic viruses

## Tuber necrotic viruses

- Key notes:**
- Potato virus Y (PVY) strains
  - Potato mop top virus (PMTV) – vectored by powdery scab
  - Tobacco rattle virus (TRV)
  - Immunostrip, ELISA, PCR, qPCR



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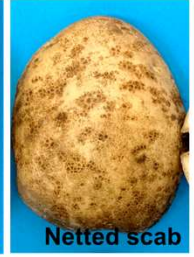
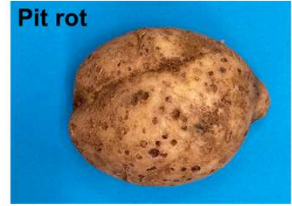


Pit rot

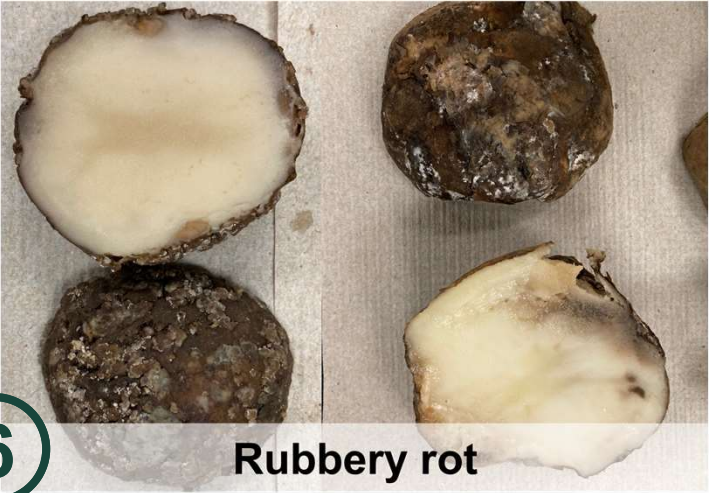
### Pit rot

**Key notes:**

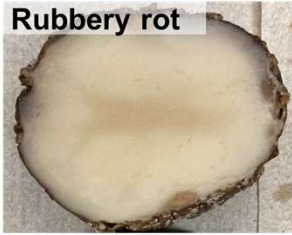
- Sunken, necrotic lenticel pits
- Restricted growth
- Defect of poor ventilation, high CO<sub>2</sub> and low O<sub>2</sub> or bacterial infection



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Rubbery rot



### Rubbery rot

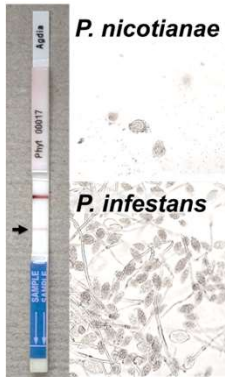
**Key notes:**

- Grayish, brown discoloration
- Sweet odor
- Spongy texture
- White, wart-like growth on exterior
- Pythium leak look-a-like

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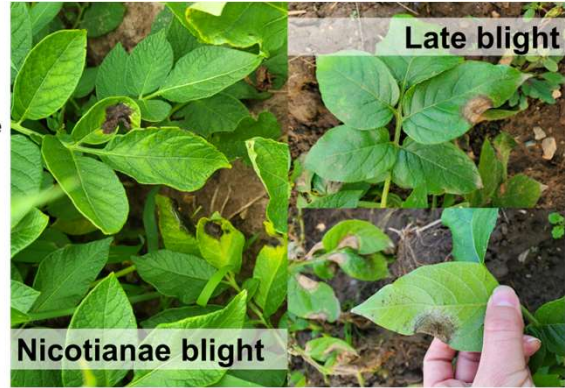
Nicotiana blight



### Nicotiana blight

**What to look for:**

- Late blight look-a-like
- Minimal sporulation
- Slow spread in field
- *Phytophthora nicotianae* sporangia
- *Phytophthora* detection + species identification



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Powdery mildew

### Powdery mildew

**What to look for:**

- Powdery white sporulation on leaf surface
- Necrosis on reverse
- Chains of oblong conidia
- Greenhouse sample, warmer temps and moderate humidity

