



## Management of diseases of peas, lentils and chickpeas - Diseases of seeds, seedlings, and roots

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Diseases of seeds, seedlings and roots:  
**Pythium**



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# Pythium

**Causal pathogens:** *Pythium* spp.  
(oomycete; “water mold”)

## **Conditions that favor infection:**

- Soil moisture: **high**
- Soil temperatures: wide range of soil temperatures, but low to moderate soil temperatures are very high risk

## **Symptoms:**

- **Seed decay** and **damping-off**, resulting in poor stand establishment.

# Pythium

## **Susceptibility:**

- Chickpeas >> lentils, field peas
  - Chickpeas are highly susceptible.
  - Lentils and field peas, while also susceptible, are less susceptible than chickpeas.

## **Seed treatments:**

- Very effective.
- Pythium causes losses early in crop development when the concentration of active ingredient in affected tissues is high.

# Pythium

## Seed treatment:

- **metalaxyl** (Allegiance FL, Sebring 480, etc.)
- **mefenoxam** (Apron XL)
  - Chemical structure and efficacy are very similar
  - Low application rate often utilized
  - Use high application rate in high-risk situations
- **ethaboxam** (Intego Solo).
  - Registered on chickpeas and lentils, not field peas
  - On lentils, 0.3 fl oz/cwt application rate recommended
  - Best used with metalaxyl or mefenoxam