

(revision date:6/3/2014)

## ***Onions, Garlic: Neck rot***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

Neck rot is a fungal disease which can affect onions and related species. Infection typically occurs in the field, but symptoms often do not appear until bulbs are in storage. The fungus infects the neck tissue and may also attack the bulb via wounds. Affected tissues appear water-soaked and yellow. The disease progresses from the neck down the bulb, with a gray mold forming on the infected portions in humid conditions. Hard, black fungal structures may be present, especially around the neck. Infected bulbs decay into a soft mass. White onions are particularly susceptible to damage, although yellow and red varieties may also be affected. The fungus can overwinter in infected plant debris.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Plant disease-free materials.
- ~ Rotate crops. Do not plant onions and related species in the same locations each year.
- ~ Do not overwater. Wet conditions favor disease, particularly prior to harvest.
- ~ Do not overfertilize. Excess nitrogen results in delayed maturing of plants and greater susceptibility to disease.
- ~ Allow tops to mature before harvest.
- ~ Cure bulbs 6-10 days prior to storage.
- ~ Minimize bruising and injury during harvest.
- ~ Store bulbs in cool, dry, well-ventilated locations.
- ~ Remove diseased plants. Do not compost diseased materials.

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

None recommended

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### Images



~ Caption: Onion neck rot symptoms  
~ Photo by: L.J. du Toit



~ Caption: Fruiting structures on neck rot-  
infected onion bulbs  
~ Photo by: L.J. du Toit



~ Caption: Fruiting structures on neck rot-  
infected onion  
~ Photo by: D.A. Johnson