

(revision date:4/30/2013)

## ***Common Diseases: Dead roots***

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

### ***Biology***

A plant showing symptoms of off-color, stunting, wilting, and death may be suffering from a root problem. Dead and discolored roots result from factors such as fungal root rot disease, excessive moisture, excessive salts (fertilizer), cold damage, or lack of oxygen. It may be difficult to determine whether roots are dead or alive. Comparing the roots from a healthy plant with those of the problem plant is helpful.

### ***Management Options***

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

- ~ Protect plants against cold damage. Do not leave plants in containers outside during freezing weather.
- ~ Provide adequate drainage and do not overwater.
- ~ Do not overfertilize.

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

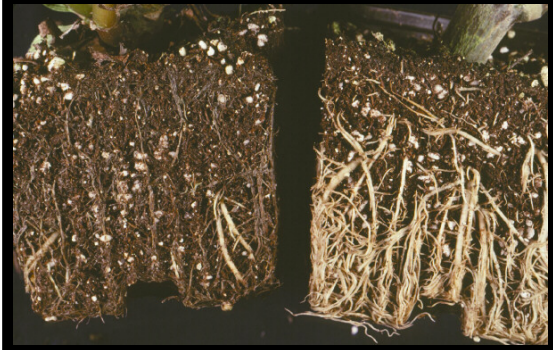
#### **Chemical Management**

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

None recommended

*Common Diseases: Dead roots*

*Images*



*~ Caption: Diseased roots and healthy roots  
~ Photo by: R.S. Byther*



*~ Caption: Phytophthora root rot on cedar  
~ Photo by: R.S. Byther*



*~ Caption: Phytophthora root rot infecting trunk  
~ Photo by: R.S. Byther*