Onion

Pink Root

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Identification and Life Cycle

Pink root is caused by a soil-borne fungus, *Phoma terrestris*, which affects yield by reduced bulb size and aggravated losses from other diseases such as Fusarium basal rot. The fungus can survive for many years in a field, even in the absence of a host. There are reports of the pink root pathogen infecting roots of field corn. The pathogen can be spread within and between fields by cultivation equipment and irrigation water. Infection is favored by high soil temperatures (80°F).

Plant Response and Damage

Infected roots have a typical pink color, which turns to red, then purple, and finally brown to black. Severe infection may reduce the root system mass, and cause stressed leaf tips to turn yellow or tan and wilt. Yield losses of 20% or greater are possible when susceptible varieties are grown on infested soils.

Management Approaches

Biological Control

Biological controls have not been developed for pink root.

Cultural Control

Practice a four-year or longer rotation to non-hosts such as small grains. Plant transplants and seed free of the pathogen in well-prepared seedbeds with adequate drainage. Avoid aggravating plant stresses such as soil compaction, root pruning during cultivation, and moisture extremes. Resistant varieties have been developed and should be planted in fields with a history of the disease. Avoid reuse of irrigation water, as the pathogen is readily moved in water.

Chemical Control

Chemical controls are most effective when combined with sound cultural practices. Fields can be quickly infested following fumigation.
**Product List for Pink Root:**

<table>
<thead>
<tr>
<th>Pesticide</th>
<th>Product per acre</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telone II</td>
<td>9-15 gal</td>
<td>Restricted use; Preplant application, aerate 7-14 days.</td>
</tr>
<tr>
<td>Telone C-17</td>
<td>10-17 gal</td>
<td>Restricted use; Preplant application, aerate 7-14 days.</td>
</tr>
<tr>
<td>Vapam</td>
<td>40-100 gal</td>
<td>Restricted use; Preplant application, aerate 7 days.</td>
</tr>
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Categories: Onion, Disease, Pink Root

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