Onion

Enterobacter Bulb Decay

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Identification and Life Cycle

Bulb decay is caused by the bacterium *Enterobacter cloacae*. This disease was first reported in Colorado in 2000, but may occur in other onion producing regions of the High Plains. Little is known about the life cycle of the pathogen, but disease appears to be favored by high temperatures (90 to 100°F or higher) near harvest. The bacterium is a common soil inhabitant and is found in the digestive tracts of human and animals.

Plant Response and Damage

Bulb decay symptoms are generally absent in the field, but appear after one to three months in storage. Internal scales have a light to dark brown discoloration and decay; externally bulbs appear healthy. Yield losses of 1 to 5% have been reported.

Management Approaches

Biological Control

Biological control strategies have not been developed for bulb decay.

Cultural Control

Cultural control strategies are unknown, but practices that reduce the incidence of other bacterial bulb rots may reduce bulb decay as well. High manure application rates (greater than 25 tons per acre) appear to increase the incidence of bulb decay in Colorado.

Chemical Control

The effect of copper bactericides or other pesticides on disease control is unknown.
Categories: Onion, Disease, Enterobacter Bulb Decay

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