

Video Transcript: [How to Diagnose Onion Bacterial Bulb Rots](#)

Bulb-rotting bacteria enter the bulb through the neck.

Bacterial bulb rot may affect a single scale, several scales, only the outer scales, only the inner scales, or the whole bulb.

Rotten tissue looks water-soaked.

Rotten tissue may be light brown, dark brown, or yellowish-green.

In red onions, rot may be pink or blue-green.

Rotten bulb tissue can be mushy or macerated.

To check for bulb rot, squeeze the neck area. A soft or squishy bulb could be rotten. Liquid may exude from the neck of rotten bulbs. Sprouting can also cause bulbs to feel soft. Cut bulb in half to check for rot.

Bacterial bulb rot is often stinky. Rot can smell sour or vinegary. Rot can also smell putrid!

When rot starts from the bottom of the bulb, it is usually a secondary infection. Bacterial rot can follow Fusarium basal rot from the bottom. Brown corky rot on the basal plate is typical of Fusarium basal rot. Fluffy white mold is an external sign of Fusarium basal rot.

Bacterial Rot Look-Alikes:

- Botrytis neck rot is caused by a fungus. It usually moves uniformly through the scales. Look for fuzzy white growth and black sclerotia between scales. Externally, look for fuzzy gray sporulation and black sclerotia.
- Black mold is a fungus that can cause internal decay. On the outside of bulbs, black mold causes tiny black spores along veins near the neck.
- Blue mold is another fungus that may cause internal decay. On the outside of bulbs, look for greenish fuzzy growth.
- Internal dry scale extends into the bulb and may resemble rot. Dry scale is not associated with odor, maceration or sliminess.
- Translucent scale may be caused by harvest during wet conditions, high drying temperatures, or bruising. It causes grayish water-soaking in the outer 1 to 3 scales only. It does not cause odor or sliminess. Translucent scale can be invaded by bacteria, and then it turns brown.

Credits:

United States Department of Agriculture (USDA) , National Institute of Food and Agriculture (NIFA)

Stop the Rot USDA-NIFA Project 2019-51181-30013

Video by Cornell Cooperative Extension, Cornell Vegetable Program