

# Michigan Blueberry Facts

MICHIGAN STATE  
UNIVERSITY



## Blueberry Fruit Rot Identification Guide

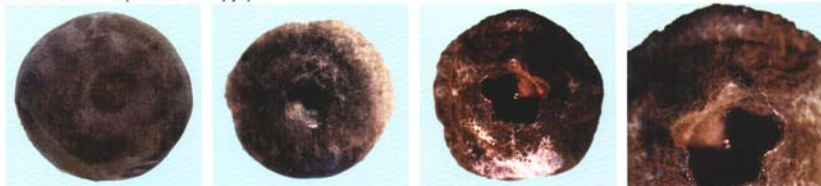
Phillip Wharton and Annemiek Schilder  
Dept. of Plant Pathology, Michigan State University

### Anthracnose rot (*Colletotrichum acutatum*)



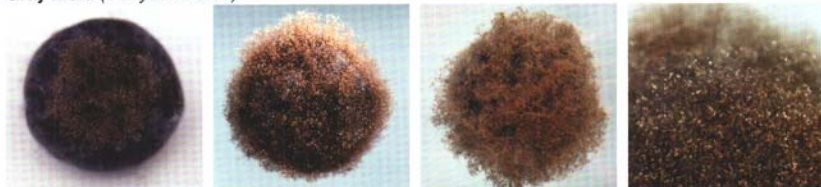
A major postharvest rot of blueberries in Michigan, characterized by wet, orange spore masses. Symptoms may develop rapidly (2 to 4 days) when fruit is stored at room temperature.

### Alternaria rot (*Alternaria* spp.)



A common postharvest rot of blueberries in Michigan, characterized by greenish gray mycelium and dark olive-green spores. Fungal growth often starts at the stem scar and can completely engulf the berry.

### Gray Mold (*Botrytis cinerea*)



A less common postharvest rot of blueberries in Michigan, characterized by fast-growing, tan to gray, fluffy mycelium and tan spore masses on brown stalks. It can be distinguished from Alternaria rot, because the mycelial growth is less dense and more gray than green.

**Phomopsis rot** (*Phomopsis vaccinii*)



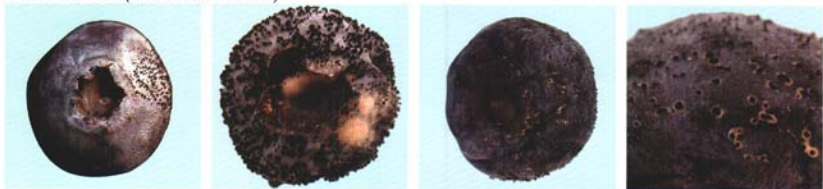
Occurs mainly in fruit harvested from fields with Phomopsis twig blight and is characterized by cream-colored spore droplets oozing out of pimple-like fruiting bodies. When dry, the droplets may appear light yellow.

**Mummy berry** (*Monilinia vaccinii-corymbosi*)



Though not considered a fruit rot, this is a major disease of blueberries in Michigan, characterized by shriveled, white to purplish gray berries. Inside, the fungus has replaced fruit tissue to form a hard, black sclerotium.

**Pestalotia rot** (*Pestalotia vaccinii*)



A sporadic postharvest rot characterized by black, inky spore masses that may be accompanied by creamy white mycelium.

**Hainesia rot** (*Hainesia lythri*)



A sporadic postharvest rot characterized by dark pink to maroon, button-shaped spore masses. As spore masses dry, they turn dark brown to black and develop an indentation in the center.

### Yeast rot (*Aureobasidium pullulans*)



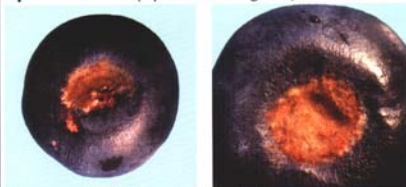
A sporadic postharvest rot characterized by a rapid collapse and wet or slimy appearance of the berry. Yeast growth may be apparent as black, shiny bumps and white or pinkish slime.

### Aspergillus rot (*Aspergillus* spp.)



A rare postharvest rot characterized by chocolate-brown, powdery spore masses at the ends of thin, white stalks.

### Epicoccum rot (*Epicoccum nigrum*)



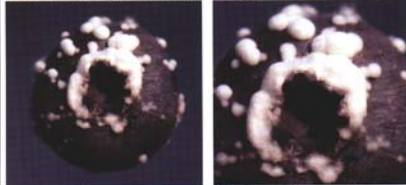
Uncommon in Michigan; characterized by growth of a dense, orange-yellow mycelium, usually at the stem scar.

### Rhizopus rot (*Rhizopus stolonifer*)



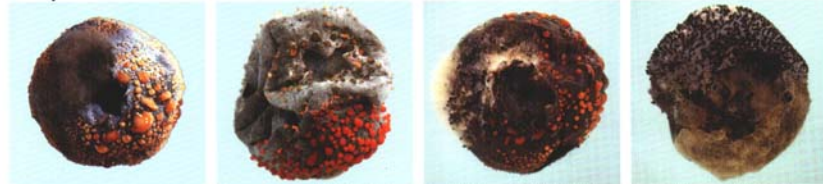
A rare fruit rot that causes berries to collapse quickly. Round, dark gray spore masses are borne on hair-like stalks.

### White Mold (*Trichoderma* spp.)



A rare postharvest rot characterized by white mycelium resembling cotton balls growing on the blueberry surface.

### Multiple Infections



*Alternaria* and *Colletotrichum*   *Phomopsis* and *Colletotrichum*   *Pestalotia* and *Colletotrichum*   *Pestalotia* and *Alternaria*

For more information please visit: <http://www.blueberryfacts.org>.

This publication is part of the Michigan Blueberry Facts series of bulletins on blueberry health management. The blueberry facts team consists of: Phillip Wharton, Annemiek Schilder, Rufus Isaacs, John Wise, Eric Hanson, Mark Longstroth and Carlos Garcia-Salazar. Funding for this publication was provided by Project GREEN, MSU Extension and the Michigan Agricultural Experiment Station.

MICHIGAN STATE  
UNIVERSITY  
EXTENSION



MSU is an affirmative-action equal-opportunity institution. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status, or family status. ■ Issued in furtherance of Extension work in agriculture and home economics, acts of May 8 and June 20, 1914, in cooperation with the U.S. Department of Agriculture. Margaret A. Bethel, Extension director, Michigan State University, E. Lansing, MI 48824. ■ Text information and images in this publication are the property of MSU Extension and the authors, and are protected by copyright. Copying of any material in this bulletin is prohibited, except for non-commercial educational purposes, such as teaching, scholarship, research, criticism, and commentary. ■ Unless otherwise noted, users who wish to copy and/or print text and images from this bulletin for such uses may do so without MSU's express permission, provided that they comply with the following conditions. They must cite the author and source of the content, and none of the content may be altered or modified. ■ Unauthorized commercial publication or exploitation of text or images of this bulletin is specifically prohibited. Anyone wishing to use this bulletin or any of the images for commercial use, publication, or any purpose other than fair use as defined by law must request and receive prior written permission from the authors or Michigan State University. © 2003 Michigan State University. All Rights Reserved.