

## Management of *Exobasidium vaccinii* and Mummy Berry in Rabbiteye Blueberries

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### History of *Exobasidium*

- Azalea leaf gall caused by *Exobasidium*
- Occurs sporadically on highbush BBs
- Reports are rare on rabbiteye BBs in SE US
- Recent outbreaks on few farms in MS

## Significance of Exobasidium

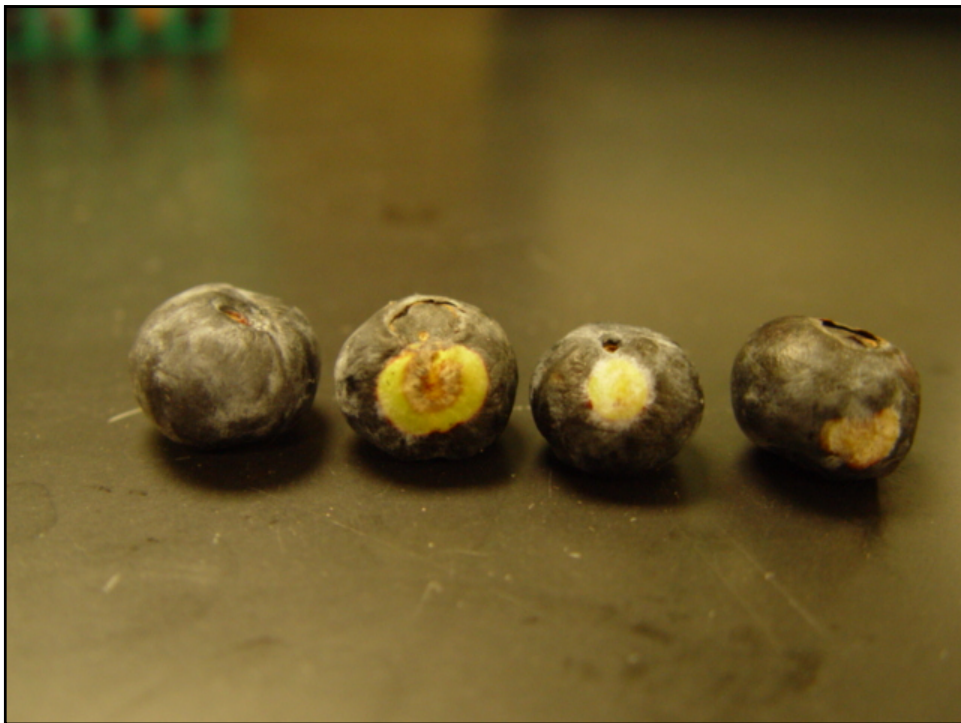
- Causes leaf disease in highbush BBs in north
- Rarely reported on fruit
- Fungus is systemic in plant
- No cure with chemicals

## Symptoms

- Cream to pale yellow circular spots on leaves
- Spots develop white, felt-like spore layer on undersides of leaves
- Spots turn brown to black with age
- Pale yellow, slightly raised, leathery spots form on the side of infected fruit







Influence of fungicides on incidence of Exobasidium leaf and fruit infection on rabbiteye blueberries, 2009.

Treatment	Leaf Infection (%) <sup>x</sup>	Fruit Infection (%) <sup>y</sup>
Pristine	1.0 d <sup>z</sup>	5.0 c
Elevate	7.2 cd	6.2 bc
Indar	12.0 bc	10.0 bc
Switch	12.0 bc	8.2 bc
Prophyt	11.0 bc	7.2 bc
Serenade	16.0 ab	11.0 ab
Prophyt + Serenade	9.2 bc	8.0 bc
Phostrol	13.0 bc	14.0 ab
K-Phite	21.0 a	22.0 a
Untreated Control	16.0 ab	15.0 ab
LSD (0.05)	7.43	8.81

<sup>x</sup> Percentage leaf infection was visually estimated on each of five treated plants.

<sup>y</sup> Percentage fruit infection was visually estimated on approximately 100 fruit on each of five plants.

<sup>z</sup> Means in a column followed by the same letter are not significantly different according to Fisher's Protected Least Significant Difference Test (P=0.05).

## Summary

- First fungicide trial on Exobasidium in SE US (GA work recently)
- Pristine and Elevate reduced leaf infection
- GA work supports this observation in one case
- Only Pristine reduced fruit infection

## Significant Observations

- Highest incidence observed on Premier
- Locations with Exobasidium have similar geographic aspects:
  - Near a source of water: river, creek, or pond
  - Each residing in a low-lying area with trees surrounding the farm

## Recommendations for Managing Exobasidium at This Time

- New plantings located on hillsides with plenty of air flow; avoid low-lying areas
- Remove infected plants at first symptom expression (GA work suggests a new species of Exobasidium, but has been here all along)
- Spray fungicides to protect healthy plant tissue (GA work suggests early sprays are best)







**Apothecia form at early bloom**



**Shoot Strike**





## Fungicides Recommended:

- Indar
- Quadris
- Abound
- Pristine
- Serenade (Organic)
- Captan/Elevate (Botrytis)

## Current Recommendations For Early Season Diseases of BB's

**If either mummy berry or Exobasidium disease is historically present, treating with timely mummy berry fungicides should help with Exobasidium control**

**More work must be done to understand Exobasidium disease development and management**

# Questions ??

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