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- Blue Mold Found in Georgia

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Blue Mold found in Georgia

Bruce A. Fortnum, Francis P. F. Reay-Jones and Dewitt T. Gooden

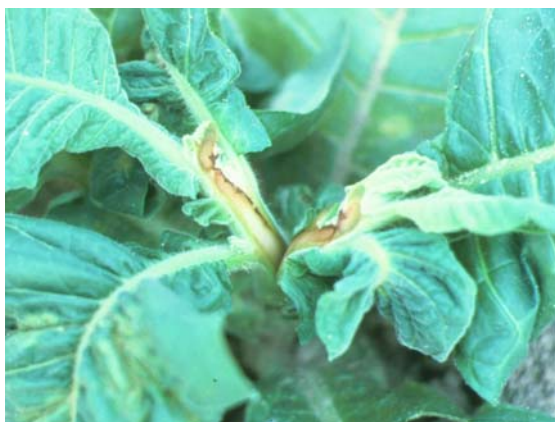


Leaf lesions on field tobacco



Blue mold (*Peronospora tabacina* sporulation on undersurface of leaf)

Tobacco specialist, J. Michael Moore of the University of Georgia has observed actively sporulating blue mold in Georgia tobacco. Blue mold is potentially one of the most destructive diseases of tobacco in the United States. It is caused by a fungus (*Peronospora tabacina*) that produces airborne spores. Disease can spread very quickly, leading to epidemics, if not properly managed. A blue mold epidemic has not occurred in South Carolina since 1980. However, blue mold is favored by cool temperatures (less than 90F) and overcast rainy weather. Recent rain showers coupled with a cooler than average spring make conditions more favorable for the development of blue mold. Under favorable weather conditions this disease can develop rapidly and often can catch a grower unaware. In addition to the foliar blighting of the leaves the plants can become systemically infected (see below). Systemically infected plants are stunted and do not grow normally. If conditions are suitable for transport of spores, fungicides should be applied to prevent an epidemic from occurring. See fungicide recommendations listed below.



Systemic blue mold, vascular necrosis



Systemic blue mold, vascular necrosis



Plant stunting caused by early systemic infection



Foliar symptoms of Blue Mold

Risk for Blue Mold within South Carolina can change rapidly

The potential risk for the transport of viable blue mold spores can be predicted based on weather conditions and prevailing wind patterns. The blue mold early warning system (**North Carolina State University**) provides updates throughout the week on the potential for blue mold disease within the USA. Please check for the likelihood of blue mold occurring within South Carolina and base control applications on the likelihood of disease. At present the risk assessment is low for South Carolina but weather conditions change rapidly. **The present occurrence of blue mold has not been posted on the web. Please examine your tobacco and if potential lesions are observed please report to you county extension agent.**

Blue Mold forecasting system (North Carolina State University)

<http://www.ces.ncsu.edu/depts/pp/bluemold/forecasts/b080318.php?month=03&year=08>

Ridomil has generally given good control of blue mold when used as a preplant soil incorporation treatment. However, **if a Ridomil G insensitive strain occurs in South Carolina other control options should be considered.** Acrobat has received a label for blue mold control but should be used in combination with another fungicide such as Dithane DF or Manzate (Dupont Manzate Pro-Stick Fungicide). Actigard 50 WG received a label for blue mold control but should only be applied to tobacco 12 inches in height or greater.

Ridomil Gold.

Rates of 0.5-1 pt/A Ridomil Gold per acre should be used at or before transplanting.

If necessary, an additional 0.5 pt can be used at layby, if no more than 1 pt/A was used at planting. Growers should be reminded that the Ridomil label does not allow foliar applications. Soil-applied Ridomil gives better control for longer periods of time and reduces the threat of resistant spores building up. The amount of Ridomil Gold used will depend on control necessary for black shank.

FIELD BLUE MOLD CONTROL

SOIL TREATMENTS	RATE	REMARKS
Ridomil Gold	0.5-1 pt/A	Broadcast and incorporate 2-4 inches at or before transplanting. An additional 0.5 pt/A may be used at layby if no more than 1 pt/A was applied at planting. REI = 48 hr.
FOLIAR TREATMENTS*	RATE	REMARKS
Mancozeb (Dithane DF)	1.5 - 2.0 lb/ 100 gal	Use only in the field if there is a threat of Ridomil-insensitive blue mold. Mix 1.5 -2.0 lb per 100 gallons of water, spray foliage weekly for complete coverage up to a maximum of 100 gallons per acre. Do not spray after appearance of first button or within 21 days of harvest, whichever is earlier. REI = 24 hr
Manzate (Dupont Manzate Pro-stick Fungicide)	1.5 - 2.0 lb/ 100 gal	Use in the field if there is a threat of Ridomil-insensitive blue mold. Mix 1.5 to 2.0 pounds per 100 gallons of water, spray foliage weekly for complete coverage up to a maximum of 100 gallons per acre. Discontinue sprays when the threat of blue mold no longer exists. In flue-cured, do not spray after appearance of first button or within 21 days of harvest, whichever is earlier.
Acrobat 50 WP	2-7 oz /A	Use only in the field if there is a threat of Ridomil-insensitive blue mold. Mix 2-7 oz per 10-100 gallons of water depending on crop size. Consult label for spray concentration. Spray foliage every 5-7 days for complete coverage. Do not exceed 32 oz/A per season. Begin application when the Blue Mold advisory states that conditions favor development of blue mold, and before the onset of disease. Consult the label for specific application information. LABEL MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF FUNGICIDE APPLICATION. Do not spray after appearance of first button or within 21 days of harvest, whichever is earlier. REI = 24 hr. Do not use Acrobat alone. Use in combination with other fungicides labeled for blue mold control except mefenoxam or metalaxyl.
Actigard 50 WG	0.5 oz/A	Begin application after plants reach a height of 12 inches. Apply on a preventative schedule when blue mold threatens. Another registered blue mold product should be used prior to 12 inches for early season control and after the final application if conditions are conducive for disease. Make up to 3 applications on a 10-day schedule. Apply in a minimum of 20 gals./A. Application of Actigard may result in leaf yellowing. This cosmetic yellowing normally disappears after final application. REI = 12 hr.
Quadris Flowable	.0-12.0 oz/A	Quadris application should begin prior to disease development or at first indication that blue mold is in the area. Do Not apply Quadris as a curative application. If blue mold is present in the field, initiate application with Acrobat MZ prior to Quadris application. Apply on a 7-14 day interval with shorter intervals under conditions conducive to disease development. For ground application apply Quadris in sufficient water volume for adequate coverage and canopy penetration. Do not tank mix with Thiodan. Check label for potential crop injury. REI = 4 hours

REI = REENTRY INTERVAL

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