

TIMELY INFORMATION

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Fungicide Use On Oats In Alabama

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Oats are widely planted, particularly in South Alabama, as a winter cover, forage, and for seed. Diseases such as barley yellow dwarf virus, crown rust, Septoria leaf blotch, and possibly Drechslera (Helminthosporium) leaf spot can have a devastating impact on oat yield. Of these diseases, crown rust is most likely to cause the greatest yield losses in Alabama. While planting resistant cultivars is the preferred method of avoiding damaging disease outbreaks, the most widely planted oat cultivars are sensitive to rust and other leaf diseases. A description of oat diseases can be seen in ANR-631, 'Oat Diseases in Alabama' (<http://www.aces.edu/dept/grain/OatDIS.php>).

Recently, oat producers have increasingly expressed interest in using fungicides on their oats to boost crop yield and grain quality. Unlike wheat, the potential benefits of fungicide use on oats have not been investigated. In addition, data concerning the effectiveness of the few registered fungicides in controlling crown rust and other leaf blotch/spot diseases of oats is lacking. However, the effectiveness of registered fungicides on oats should be mirrored by their performance against similar diseases on wheat.

As is the case with wheat, the routine use of fungicides on oats is not recommended. To cover fungicide and application costs, oats targeted for fungicide treatment should have a uniform stand with few skips, show little if any damage from barley yellow dwarf, and have a minimum yield potential of 40 bu/A. While oat cropping frequency has little impact on crown rust severity, the risk of damaging Septoria leaf blotch and Drechslera leaf spot outbreaks is probably higher in field previously cropped to oats. Producers are most likely to get a good return on their fungicide investment from oats being grown for seed. On disease-susceptible wheat varieties, fungicide treatments also have increased seed test weights. Previously, wheat yield response to fungicide inputs has been much higher in the Alabama's Gulf Coast Counties than in any other part of the state.

Producers are advised to check several sites in each of their oat fields when the crop joints and again as the flag leaf unfurls for symptoms of crown rust and leaf spot/blotch. Damaging diseases usually first appear on the older, lower leaves before rapidly moving up to the plant canopy to the flag leaf. Timely scouting is critical to deciding when and where to apply costly fungicides.

Uniform coverage of the upper leaves is critical to controlling rust and other diseases of oat with fungicides. For aerial applications, a minimum of 5 gallons of water per acre along with a non-ionic surfactant tank-mix partner is needed to get good coverage. The spray volume for ground applications should range from 10 to 15 gallons per acre. With Stratego, Tilt 3.6E, PropiMax, or Bumper 41EC make the first application when the flag leaf on at least 50% of the plants have already unfurled. Should weather patterns continue to favor disease spread and considerable damage has already been seen, an application of Stratego can be made two weeks later at full head extension.

Table 1. Fungicides registered for the control of rust and leaf spot diseases of oats.

Fungicide	Application Rate	Comments
Stratego	7 fl oz/A	For control of Septoria leaf blotch and crown rust control on oats: Make first application when conditions favor disease and follow as needed to control disease with second application 14 days later. <i>Note: Do not harvest for hay if oats have received a total of 14 fl oz/A of Stratego per season. Seed from Stratego-treated oats can be fed to livestock.</i>
Tilt 3.6E	4 fl oz/A	For crown rust, Septoria leaf blotch, and leaf spot control on oats: Make one application between the time that the flag leaf starts to emerge until the flag leaf has fully unfurled. Note: <i>Tilt-treated oat forage may be grazed, and oat forage and hay may be fed to livestock.</i>
Bumper 41EC	4 fl oz/A	For crown rust, Septoria leaf blotch, and leaf spot control on oats: Make one application between the time that the flag leaf starts to emerge until the flag leaf has fully unfurled. Note: <i>Treated oat forage may be grazed, and oat forage and hay may be fed to livestock.</i>
PropiMax	4 fl oz	For crown rust, Septoria leaf blotch, and leaf spot control on oats: Make one application between the time that the flag leaf starts to emerge until the flag leaf has fully unfurled. Note: <i>Treated oat forage may be grazed, and oat forage and hay may be fed to livestock.</i>