

How to use the Peanut Leaf Spot Advisor

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Introduction:

You can get a jump on early peanut leaf spot infection by turning to the Peanut Leaf Spot Advisor on the Mesonet Agriculture website, www.mesonet.org. The Mesonet Peanut Leaf Spot Advisor is an online weather-based management tool that identifies times when the risk of peanut leaf spot infection is high. This advisory is based on the accumulation of "leaf spot hours," periods when air temperature and humidity conditions are favorable for disease development.

Using weather data from the Oklahoma Mesonet, the advisory calculates the number of "leaf spot hours" that have occurred from either 30 days after planting or ten days after the last fungicide application. If the number of "leaf spot hours" equals or exceeds 36 hours, the peanuts are at risk and the advisory recommends applying a fungicide.

The Oklahoma Mesonet, in cooperation with scientists and professionals from Oklahoma State University and the University of Oklahoma, has developed and maintains operation of the Mesonet Peanut Leaf Spot Advisor.

The Mesonet Peanut Leaf Spot Advisor is a weather-based tool that provides pest management guidance. It does not replace the best judgment of the grower in making pest control decisions.

Leaf Spot Hour:

A leaf spot hour is defined as one hour with relative humidity greater than or equal to 90% and temperatures between 60.5 and 86 degrees Fahrenheit.

Peanut Leaf Spot Season:

The Mesonet Peanut Leaf Spot Advisor runs from May 1 through October 31 and is updated hourly. Each hour, Mesonet data replaces forecast data. The forecast data is updated four times a day.

Things to Know:

The Peanut Leaf Spot Spray Advisor shows the accumulation of leaf spot hours over the last 14 days and an 84-hour forecast of leaf spot hours.

Peanut producers should revert to a 14-day spray schedule if:

- a field cannot be sprayed within 3 days of the advisory's spray recommendation;
- a highly effective fungicide, such as Bravo, Follicur or Tilt/Bravo, is NOT being used;
- levels of early peanut leaf spot exceed 25% infection (leaflets with spots or defoliated);
- late leaf spot or web blotch are identified.



Symptoms of early leaf spot on the upper leaf surface are circular, dark brown spots typically surrounded by a yellow border.



Symptoms of late leaf spot on the upper leaf surface are circular, dark brown to black spots that typically have a faint or no yellow border.



Mesonet



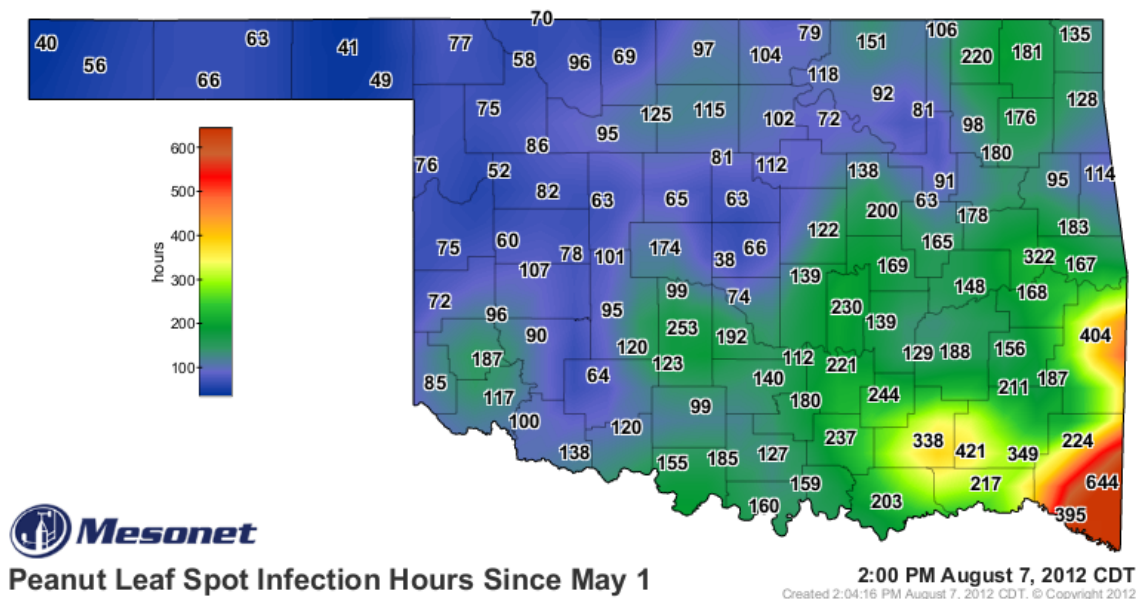
Where to Find Peanut Leaf Spot Advisor Products:

Start at www.mesonet.org.

-Select "**Agriculture**" on the top menu,

-From the sub-menu at the top, scroll over "**Crop**" and select "**Peanut**" from the drop down menu..

-You will then be directed to the "**Peanut Leaf Spot Advisor**"



Statewide Maps:

- Under the "**Statewide Maps**" selection, you will be able to view the "**Last 14 Days Map**," as well as a "**Season Long Map**."

Local Mesonet Site:

- To see site-specific information, click "**Local Mesonet Site**."
- Under the "**Local Mesonet Site**" tab you can select to view a site-specific "**Last 14 days and Forecast Hours Graph**," a "**Season Long Hours Table**," and a "**Forecast Hours Table**"

Spray Decision Advisor:

- Choose the nearest Mesonet site, then enter the "**Planting Date**," as well as the "**Date of Last Spray**" (if one has occurred). The advisor will generate a "**SPRAY**" or "**NO SPRAY**" recommendation, as well as display the number of leaf spot hours that have occurred from 30 days after planting or 10 days after the last fungicide application, whichever is later.

Past Years:

- The "**Past Years**" selection gives you access to leaf spot comparison graphs and tables.

Our Story

The Oklahoma Mesonet is a world-class network of environmental monitoring stations. The network was designed and implemented by scientists at the University of Oklahoma (OU) and at Oklahoma State University (OSU).

The Oklahoma Mesonet consists of 120 automated stations covering Oklahoma. There is at least one Mesonet station in each of Oklahoma's 77 counties.

At each site, the environment is measured by a set of instruments located on or near a 10-meter-tall tower. The measurements are packaged into "observations" every 5 minutes, then the observations are transmitted to a central facility every 5 minutes, 24 hours per day year-round.

For help with this or other Mesonet products, please call 405-325-3231, or email us at operator@mesonet.org.

