

How to Use Agweather's Peanut Leaf Spot Advisor

article revised October 2009

Introduction:

You can get a jump on early peanut leaf spot infection by turning to the Peanut Leaf Spot Advisor on the Mesonet Agweather Web site, <http://agweather.mesonet.org>. The Agweather 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 Agweather Peanut Leaf Spot Advisor.

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

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 Agweather 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, Folicur 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.



Oklahoma
Mesonet

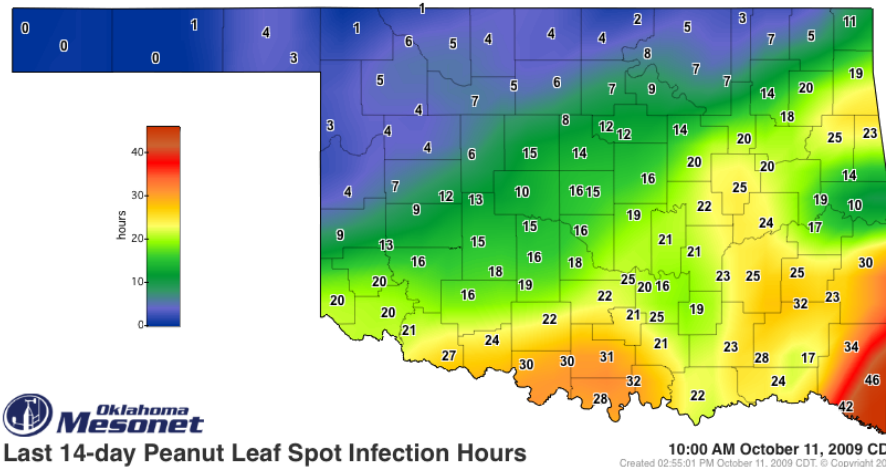
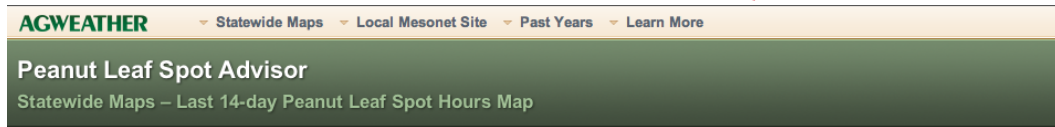


Where to Find Peanut Leaf Spot Advisor Products:

Start at <http://agweather.mesonet.org>.

- Select "**Crop**" on the horizontal menu,
- Select "**Peanut**" from the left vertical menu.
- Click "**New Peanut Leaf Spot Advisory**"

Horizontal Selection Bar



Statewide Maps:

- Under the "**Statewide Maps**" tab on the advisory horizontal selection bar, you will be able to view the "**Last 14 Days Leaf Spot Hours Map,**" as well as a "**Season-long Leaf Spot Hours Map.**"

Local Mesonet Site:

Peanut Leaf Spot Spray Advisor

- To see site-specific information, click "**Local Mesonet Site**" from the horizontal selection bar. then select "**Leaf Spot Advisor**" from the drop down menu.
- Choose the nearest Mesonet site, then enter the "**peanut plant date**", as well as the "**date of the last fungicide application**" (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.
- Under the "**Local Mesonet Site**" tab you can also view a site-specific "**14-day and Forecast Leaf Spot Hours Graph.**"

Past Years:

The "**Past Years**" tab gives you access to leaf spot comparison graphs and comparison tables for last year, two years ago, and the 15-year average.

Learn More:

Explore the "**Learn More**" tab where you will find resources on how to use the peanut leaf spot advisor, advisor specifications, peanut crop and leaf spot disease overviews, as well as additional reference data.

Our story

In 1982, Oklahoma scientists recognized the need for a statewide weather network.

At OSU, agricultural scientists wanted to upgrade weather instruments at their research sites. Their goal was to expand the use of weather data in agricultural applications.

Meanwhile, scientists from OU and the Oklahoma Climatological Survey were helping to plan and implement a flood-warning system for Tulsa.

OSU and OU joined forces in 1987 when they

realized that one statewide weather network would help both universities achieve their missions.

No other state or nation is known to have a network that boasts the capabilities of the Oklahoma Mesonet.

Agweather is one Web site that features data from the Oklahoma Mesonet. Agweather provides weather-related products for agriculture and natural resources.



Agweather can be found at <http://agweather.mesonet.org/>.

Agweather
LOCAL. RELIABLE. FREE.



Oklahoma Mesonet

