agweather connection

OH NUTS!

Preventing Pecan Scab

In early May, Oklahoma's pecan growers start scouting orchards for pecan scab. If left untreated, this fungal disease can potentially devastate an entire pecan crop. In an effort to prevent pecan scab, many growers treat their orchards before any symptoms become noticeable.

"In Oklahoma, pecan growers will begin fungicide treatments in late April or early May. Depending on the weather, disease symptoms can appear on leaves in May," said Damon Smith, OSU Assistant Professor and State Extension Specialist of Horticulture Pathology. "These May observations are leaf lesions. Fruit damage will become apparent in late June or early July."

Agweather now offers an improved tool to track pecan scab hours, a term given to time periods when the development of pecan scab is likely. The advisor features accumulated pecan scab hours, local and statewide information, localized pecan scab hour forecasts, a spray decision advisor and comparisons between past years' pecan scab hours.

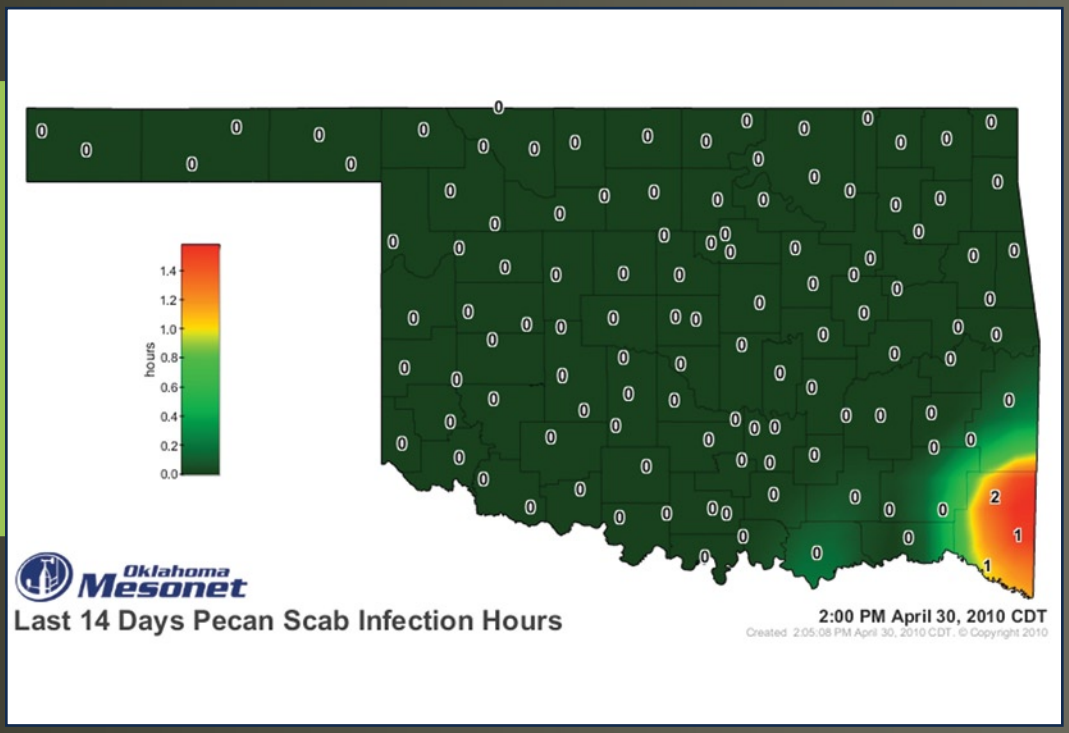
"The Pecan Scab Advisor aids the grower in deciding when fungicides should be applied," said Smith. "A shining feature is the ability to offer a 3-day forecast. This gives growers a better chance to apply fungicides preventively. It is almost like having a crystal ball to see when favorable periods for disease development might occur."

The Pecan Scab Advisor offers growers a reliable tool to accurately predict pecan scab, said Smith. "This results in better timing of fungicide applications. Better timing equates to improved control of pecan scab and a direct savings to growers by eliminating unnecessary sprays," said Smith.

It is important to remember that the Pecan Scab Advisor does not replace the best judgment of the grower.

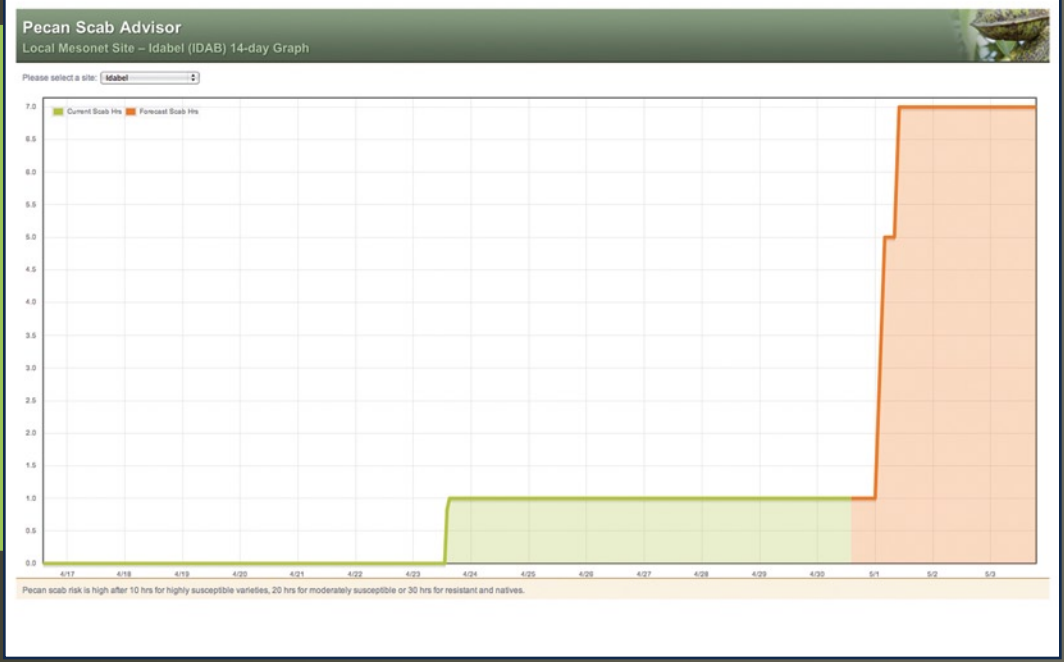
Seasonal Pecan Scab

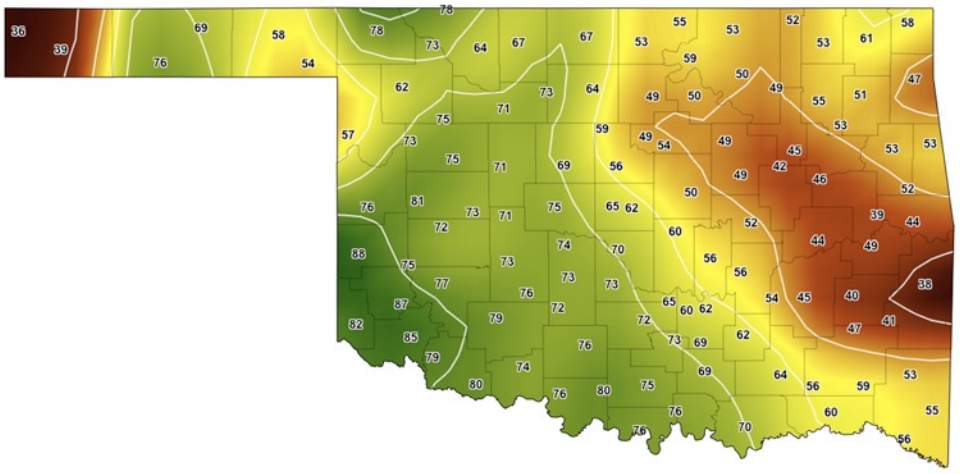
- Start at http://agweather.mesonet.org
- Click "Horticulture" from the horizontal menu
- Select "PECAN" from the left menu
- Pick "Pecan Scab" from the left menu
- Roll over "Statewide Maps" on the horizontal menu just above the map picture
- Choose "Season-long Scab Hours Map"
- This map shows the statewide accumulated pecan scab hours since March 1



Forecasted Pecan Scab

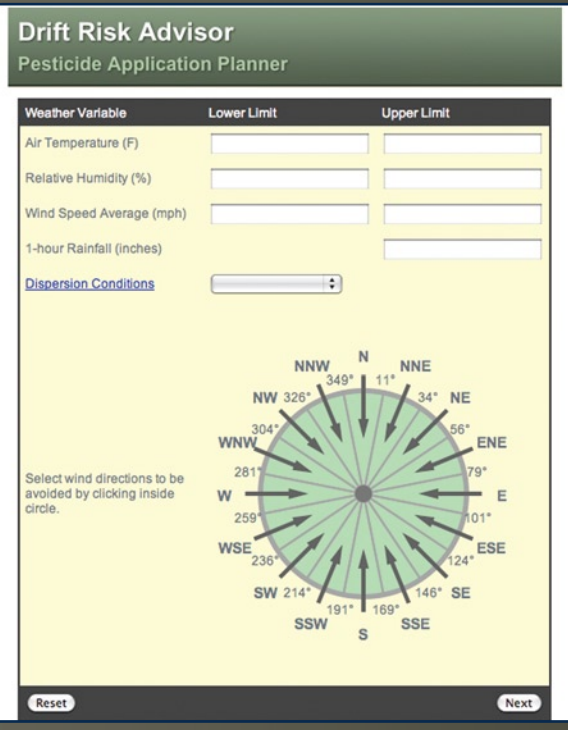
- Start at http://agweather.mesonet.org
- Click "Horticulture" from the horizontal menu
- Select "PECAN" from the left menu
- Pick "Pecan Scab" from the left menu
- Roll over "Local Mesonet Site" on the horizontal menu just above the map picture
- Choose "Last 14-day and Forecast Scab Hours Graph"
- This graph shows localized pecan scab hours for the last two weeks and also the forecasted pecan scab hours for the next three days





Relative Humidity

- Start at http://agweather.mesonet.org
- Click "Weather" from the horizontal menu
- Then choose "HUMIDITY" from the left menu
- Select "Current Humidity"
- A pecan scab hour is a time period when the development of pecan scab is likely. This happens when the temperature is at or above 70˚F and the relative humidity is at or above 90 percent



Drift Risk Advisor

- Start at http://agweather.mesonet.org
- Click "Horticulture" from the horizontal menu
- Select "PECAN" from the left menu
- Choose "Drift Risk Advisor" from the left menu, under the sub-heading "PEST CONTROL"

Optimize fungicide applications

To help pecan growers optimize fungicide applications, Agweather offers the Drift Risk Advisor. Although the advisor was originally created to reduce the risk of herbicide and insecticide drift, pecan growers can use the tool to maximize their fungicide application and reduce costs.

"The drift risk advisor is a tool to help growers determine potential spray times using weather forecasts," said Randy Taylor, OSU Extension Ag Engineer.

One of the most important factors when applying fungicides to pecan trees is wind speed. As wind speed increases, growers will have trouble keeping their spray column intact.

"The big thing is that growers are using sprayers to shoot fungicides up to the top of the trees," said Albert Sutherland, OSU Mesonet Agriculture Coordinator. "Higher wind speeds can cut the height of their vertical spray column. With the Drift Risk Advisor, growers can find times when wind speeds are lower. They can do a more efficient job, get better coverage and use less fungicide, ultimately saving money."

In addition to wind speed and wind direction, the Drift Risk Advisor takes into account air temperature, relative humidity, dispersion conditions and 1-hour rainfall. The Drift Risk Advisor allows the grower to enter lower limits and upper limits, but growers are not required to enter conditions for all of the weather variables.

The new tool is easy to use and straightforward, said Sutherland. After a few inputs, the applicator has an 84-hour forecast table that shows when weather variables fall within or outside of the desired values.

"The important thing to know about this tool is that it is based on a forecast. The user must specify the conditions that are acceptable for spraying," said Taylor. "Changing these conditions could change the results for the advisor. Also the forecast can potentially change. The user should be aware of the actual conditions when they are applying products."

To get to the Drift Risk Advisor, click here. To learn more about using the Drift Risk Advisor in pecan fungicide applications, e-mail Agweather.

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Agweather is a product of the Oklahoma Mesonet, a joint program between OSU and OU