

How to use the Pecan Scab Advisor

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photo by Todd Johnson

Introduction:

Pecans are the staple of many American traditions; pies during the holidays, ice cream in the summer and delectable chocolates year round. U.S. fresh/dried pecan 2010-11 exports were valued at \$300.5 million for a total of 157.1 million pounds sold. However, pecans are under attack from pecan scab disease and if unstopped, this fungus can damage a crop and ruin a year of quality yield.

The Oklahoma Mesonet's Agriculture section features a Pecan Scab Advisor that allows pecan growers and industry professionals to track current, seasonal and past pecan scab hour data. The Pecan Scab Advisor is a decision support tool that has been developed to aid growers in proper timing of fungicide applications for pecan scab.

Using weather data from the Oklahoma Mesonet, the pecan scab advisor tracks hours when pecan scab risk is increased. Using these hours and knowing the susceptibility of the pecan variety, the grower can decide whether to spray or not. The threshold for high susceptible pecan varieties is 10 hours, for moderately susceptible varieties 20 scab hours, and for natives and low susceptibility varieties 30 scab hours.

Based on research from pecan orchard sites, the total scab hours during the last 14 days were the critical hours in calculating disease development. The advisor assumes an applied fungicide will protect the crop for two weeks following the application.

Scab Hour:

A scab hour is defined as one hour with relative humidity of 90 percent or higher and an air temperature of 70 degrees Fahrenheit or higher.

Pecan Scab Season:

The Pecan Scab Advisor is operational from March 1 through August 31 and is updated hourly. The forecast data is updated four times a day and is based on forecasts from the National Weather Service.

Scab Hour Thresholds:

Highly Susceptible 10 Scab Hours	Moderately Susceptible 20 Scab Hours	Low Susceptibility (resistant) 30 Scab Hours
Burkett	Caddo	* Native Trees *
Squirrel's Delight	Colby	Barton
Western	Creek	Choctaw
Wichita	Giles	Graking
	Kiowa	Kanza
	Maramec	Lakota
	Mohawk	Mount
	Ocone	Nacono
	Shawnee	Osage
	Pawnee	Peruque
		Stuart



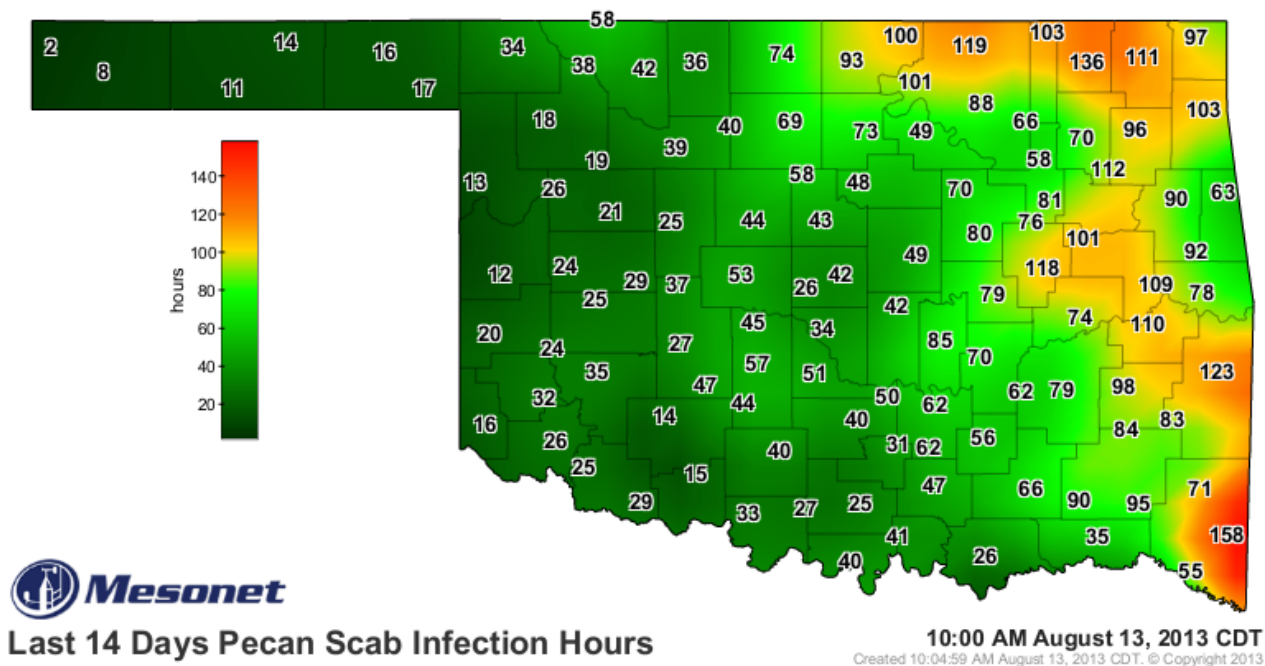
Mesonet



Where to Find Pecan Scab Advisor Products:

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

- Select **"Agriculture"** on the horizontal menu,
- Select **"Horticulture"** from the horizontal sub-menu.
- Click **"Pecan"**



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 Mesonet site of interest, then set scab susceptibility of your pecan variety, and enter **"Start Date"** (beginning of season or last spray date). The advisor will generate a **"SPRAY"** or **"NO SPRAY"** recommendation, as well as display the number of pecan scab 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 pecan scab 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.

