

How to Use the Sclerotinia Advisory

Sclerotinia advisories account for conditions favorable for Sclerotinia blight. They do not account for field history. **Fields with no history of disease do not need to be sprayed** unless a new outbreak is confirmed.

There are two advisories for each location (highlighted below).

Use the advisory for **row index = 2 if rows are within 6" of touching**

Use the advisory for **row index = 3 if rows are touching**

Sprays normally are not needed if rows are more than 6" apart

The Sclerotinia advisory looks at environment over the last five days to calculate the risk of Sclerotinia development. Below is an example of the advisory output for one location.

```
July 10, 2020 PEANUT SCLEROTINIA ADVISORY FOR LEWS
Peanut Belt Research Station (Lewiston, NC)
For 2020-07-05: MI=1, TI=1, EI=1
MI from 5-day rain
For 2020-07-06: MI=1, TI=1, EI=1
MI from 10-day rain
For 2020-07-07: MI=1, TI=1, EI=1
MI from RH, MI from 10-day rain
For 2020-07-08: MI=1, TI=2, EI=2
MI from RH, MI from 5-day rain, MI from 10-day rain
For 2020-07-09: MI=1, TI=1, EI=1
MI from RH, MI from 5-day rain, MI from 10-day rain
Row Index = 2 (rows within 6" of closing)
setDate = 2020-07-02 07:00:00
Five Day Index = 36
Last Effective Spray Date = 2020-06-19
Advisory: spray today
Disease level: MODERATE
Growing degree days (base 56) since LESD = 490.3
Growing degree days (base 56) since May 1 = 1089.3
Records count: 192 out of 193
Most recent db ob to 8am EDT: 2020-07-10 07:00:00
```

```
July 10, 2020 PEANUT SCLEROTINIA ADVISORY FOR LEWS
Peanut Belt Research Station (Lewiston, NC)
For 2020-07-05: MI=1, TI=1, EI=1
MI from 5-day rain
For 2020-07-06: MI=1, TI=1, EI=1
MI from 10-day rain
For 2020-07-07: MI=1, TI=1, EI=1
MI from RH, MI from 10-day rain
For 2020-07-08: MI=1, TI=2, EI=2
MI from RH, MI from 5-day rain, MI from 10-day rain
For 2020-07-09: MI=1, TI=1, EI=1
MI from RH, MI from 5-day rain, MI from 10-day rain
Row Index = 3 (rows closed)
setDate = 2020-07-02 07:00:00
Five Day Index = 54
Last Effective Spray Date = 2020-06-19
Advisory: spray today
Disease level: HIGH
Growing degree days (base 56) since LESD = 490.3
Growing degree days (base 56) since May 1 = 1089.3
Records count: 192 out of 193
Most recent db ob to 8am EDT: 2020-07-10 07:00:00
```

Four daily Sclerotinia index values shown in the advisory: Moisture (MI), Temperature (TI), Environmental (EI) and Row Index.

Moisture index (MI)

MI = 1 moisture is favorable for disease. MI = 0 moisture is not favorable for disease.

Moisture = 1 on a given day if:

Relative humidity (RH) was 95% or higher for at least 8 consecutive hours; or

Location received one-half inch of rain in the past 5 days; or

Location received 1 inch of rain in the last 10 days.

Moisture = 0 otherwise

If your rainfall history is different, the advisory may not apply to you

Temperature index (TI) The risk of Sclerotinia blight is highest at temperatures below 72°F. Risk decreases as temperatures increase:

TI = 0 if the day's 24-hour average temperature was more than 82°F

TI = 1 if 77 to 82°F

TI = 2 if 72 to 77°F

TI = 3 if 72°F or lower

Environmental index (EI) has a daily value between 0 and 3

$$EI = MI * TI$$

Row index is based on canopy width:

Row index = 2 for rows within 6" of touching

Row index = 3 for rows touching

Density index (not shown in the advisory output) assumes that the soil under the canopy is at least 95% shaded. It has a constant value of 3.

The daily index value = Environmental index * row index * density index

The daily index value ranges from 0 to 27

Five-day index = Adds up the 5 most recent daily index values. A spray is advised if the total is more than 32.

Last effective spray date (LESD) – A spray is assumed to be effective for 21 days. **You do not need to spray if you have sprayed since the LESD.**

Advisory – if the advisory is “**spray today**” conditions are favorable for Sclerotinia blight. A spray could be necessary if a Sclerotinia fungicide has not been applied in the last 21 days. If the advisory is “**do not spray today**” a spray is not required.

Disease level - the five-day index is used to rate the disease hazard as LOW (<32), MODERATE (32-47), HIGH (48-98), or VERY HIGH (≥99).

Growing degree days - for peanuts (base 56) since the LESD and since May 1.

Records count - number of hourly weather observations out of total possible observations. The advisory may not be reliable if there are several missing records.

Most recent hourly observation – should be 7:00:00 (7 a.m.) on today's date.