# **Virginia Cooperative Extension**

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## The Peanut Southern Corn Rootworm Advisory

## What's the Risk of Southern Corn Rootworm in Your Fields?

The southern corn rootworm (SCR) has long been considered a major pest of peanuts in North Carolina and Virginia. However, researchers and Extension faculty at Virginia Tech and NC State have determined through more than 400 commercial field trials that the majority of peanut fields do not need to be treated. They have developed and tested a simple-to-use advisory that identifies those fields not at risk for pod damage or economic loss. The Southern Corn Rootworm Advisory can save you time and money as well as help you use insecticides more efficiently.

## Advantages of the Advisory

The advisory is designed to help you know in two minutes whether you need to treat for southern corn rootworm.

- Save treatment time.
- Save input costs.
- Save your equipment from unnecessary wear and tear.
- Avoid spider mite infestations.
- Keep money in your pocket.

### Are Your Peanuts at Risk from Southern Corn Rootworm Damage?

To use the Advisory, identify the variable under each major heading that best describes your peanut field. Add the points to determine a total score for that field. This calculation should be done for each of your fields. Examples of soil insect damage to peanuts



Wireworms



White grub



Lesser cornstalk borer



Southern corn rootworm damage



Southern corn rootworm



Southern corn rootworm



Cutworm damage



Cricket



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#### **Two-minute SCR Field Advisory Score**

| SOIL TEXTURE                   |    | Your Score |
|--------------------------------|----|------------|
| Loamy sand                     | 5  |            |
| Fine-loamy sand                | 10 |            |
| Loam                           | 15 |            |
| DRAINAGE CLASS                 |    |            |
| Well drained                   | 5  |            |
| Moderately well drained        | 10 |            |
| Somewhat poorly drained        | 50 |            |
| Poorly drained                 | 20 |            |
| FIELD HISTORY OF               |    |            |
| ROOTWORM DAMAGE*               |    |            |
| None                           | 0  |            |
| Low                            | 5  |            |
| Moderate                       | 10 |            |
| High                           | 15 |            |
| *If unknown, assume "moderate" |    |            |
| PLANTING DATE                  |    |            |
| Before April 25                | 5  |            |
| April 25 - May15               | 10 |            |
| After May 15                   | 15 |            |
| CULTIVAR RESISTANCE            |    |            |
| NC6                            | 5  |            |
| VA 98R                         | 10 |            |
| NC10C, NC12C, NC7, NC9,        | 10 |            |
| NC-V11, VA93B, runners,        |    |            |
| other varieties                | 20 |            |
|                                |    |            |
| TOTAL SCORE                    |    |            |

#### Advisory Treatment Recommendations

#### Score of 50 or less = Low-risk Field

- Do not treat for southern corn rootworm.
- Congratulations! You saved as much as \$15/acre on this field!
- Scout for leafhoppers and, if needed, treat with foliar spray.

#### Score Between 55 and 65 = Moderate-risk Field

- Rootworm damage MAY not reach economically damaging levels.
- Treatment decision should consider weather conditions and land-lease requirements.
- Consider treating low areas of fields.
- In wet years, treating before rain (even in late July) may prevent severe pod damage.
- Scout for leafhoppers and, if needed, treat with foliar spray.

#### Score of 70 or higher = High-risk Field

- Treat all high-risk fields for southern corn rootworm.
- Treat all irrigated fields.
- Scout for spider mites.

SO ... if your fields are NOT at risk, don't waste your money on unnecessary treatments. BUT ... if your fields ARE at risk, you'll know that treating to protect pod quality is a good investment.

## Can You Trust the Advisory?

YES. University research was conducted on 436 commercial peanut fields in North Carolina and Virginia from 1989 to 2001.

Farmers who followed the recommendations of the SCR Advisory were protected from economic damage 98.5% of the time.

Even in the wettest years, the Advisory accurately predicted which fields did or did not need treatment.

## The SCR Advisory Was Tested Near You

"More than a decade of research and on-farm tests demonstrate that only a small percentage of the peanut acreage now treated actually needs treatment for southern corn rootworm annually." Dr. Rick Brandenburg, NCSU Extension entomologist.

Commercial Peanut Counties Where the

| Advisory Was Tested |               |  |
|---------------------|---------------|--|
| NORTH CAROLINA      | VIRGINIA      |  |
| Bertie              | Dinwiddie     |  |
| Bladen              | Greensville   |  |
| Chowan              | Isle of Wight |  |
| Edgecombe           | Prince George |  |
| Gates               | Suffolk       |  |
| Halifax             | Surry         |  |
| Hertford            | i i           |  |
| Martin              |               |  |
| Northampton         |               |  |
| Perquimans          | +2            |  |
| Pitt                |               |  |
| Washington          | F             |  |
|                     |               |  |

#### Do Your Fields Really Need Treatment? SCR Facts

### SCR FACIS

- Eggs and small rootworms cannot survive dry soil conditions.
- Irrigation and wet weather make rootworm problems worse.
- Treatment late in the season following significant rainfall may be too late to effectively prevent rootworm injury. Late-season treatments may also encourage spider mite breakouts.
- Rapid growth after rain can cause short splits or creases to occur in the outer pod wall which can be confused with SCR damage.
- High loam content in the soil increases the risk of pod damage.
- Poor drainage and high soil moisture content increase the risk of pod damage.
- Late planting date and delayed rate of peanut pod maturity increase the risk of pod damage.
- Treating only the high-risk fields will save you time and money.
- University research shows that the majority of commercial peanut fields that are treated for southern corn rootworm DO NOT NEED TO BE TREATED.

# Here's What Extension is Saying

"To continue growing peanuts profitably, farmers have to find ways to reduce production costs. One way to do this is to use the Rootworm Advisory to find out which fields don't need to be treated for this pest, saving the cost of the treatment without reducing yield or quality."

-Marjorie Rayburn, North Carolina Area Specialized Extension Agent

"Using tools like the Rootworm Advisory allows us to become more prescriptive; it takes more knowledge but there are more potential savings. You are doing what you have to do when you have to do it based on field information."

-Dr. Ames Herbert, Jr., Virginia Cooperative Extension entomologist and Virginia IPM Coordinator

## **Increase Your Bottom Line**

Will I really save a significant amount of money?

Complete the following chart.

#### Money Saved by Eliminating Unnecessary Treatments

x

# YOUR CURRENT ANNUAL SCR TREATMENT COST:

Cost of treatment/acre: \$15

Number of acres treated:

Total cost of treatment:

#### TREATMENT COST FOR FIELDS WITH ADVISORY SCORES OF 55 OR MORE

Cost of treatment/acre: \$15

Number of medium/high-risk acres treated: x

Subtract cost for risk acres:

#### MONEY IN YOUR POCKET

## Here's What Farmers are Saying

"... We used the Advisory and we had one of the best yielding crops we ever had. ... We just felt like that (using the Advisory) was a cost-saving thing we could implement. And whatever that cost was (became) money in our pocket and not going to somebody else."

-Virginia peanut farmer

"The Advisory is helpful. ... I messed with (the Advisory) a little bit with field history and just experience with the land-that's what helps me make my decision."

-North Carolina peanut farmer



## For More Information

To use the SCR Advisory, contact your county Extension agent or go online to http://ipm.ncsu.edu/scr

