

Crops Bulletin

August 27, 2009
Issue 37



Prepared by
Paul Kassel
Extension Field
Agronomist

*Serving Clay, Buena
Vista, Dickinson,
Emmet, Kossuth, and
Palo Alto Counties*

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

Soybean aphids. Continue to check for soybean aphids. Aphids will continue to damage soybeans until the early R6 stage.

Soybeans grow very few leaves after the R5 stage. Therefore, aphids will be scattered throughout the plant – and are more difficult to count. Also, aphids will be smaller and will have less green color. However, these yellowish aphids will reproduce and damage soybeans.

Soybean growth stages and days until maturity.

<i>Stage</i>	<i>description</i>	<i>days until mature.</i>
R4	full size pod at top 4 nodes	42 days.
R5	seed is 1/8 long in pod at top 4 nodes	33 days.
R6	seed fills the pod cavity in the pod at top 4 nodes	18 days.

The R5.5 stage is where the plant reaches its maximum dry weight accumulation. Therefore, the soybean plants needs to be protected through the R5 stage (such as from aphid damage) to maximize yield potential. Treating soybeans for aphids through the early R6 stage may provide an extra level of aphid protection.

Sudden death syndrome. Sudden death syndrome (SDS) is present in some fields. Brown stem rot (BSR) and SDS can look similar.

	<i>BSR</i>	<i>SDS</i>
Foliar symptoms	sometimes	yes
Leaf drop, petiole attached	no	yes
Pith turns brown	yes	no
Root rot	no	yes

More on SDS.

- Soybean cyst nematode (SCN) makes both diseases worse – especially SDS.
- Crop rotation away from soybean will help manage BSR but not SDS.
- SDS can survive for several years in the soil.
- Foliar symptoms (interveinal chlorosis) occur when the leaf area between the leaf veins turn brown.
- Earlier planting dates and wet cool conditions favor the development of SDS.
- SCN resistant varieties will help reduce SDS.

Prepared by Paul Kassel, Extension Field Agronomist
Phone: (712) 262-2264, Email: kassel@iastate.edu