



<http://www.entm.purdue.edu/Entomology/ext/targets/newslett.htm>

June 25, 2004 - No. 15

In This Issue

Insects, Mites, and Nematodes

- Western Corn Rootworm Beetles Emerging
- Corn Earworm Activity
- Black Light Trap Catch Report

Agronomy Tips

- Flooding and Very Wet Soil Conditions Equals Soybean Re-Plant

Weather Update

- Weather information is unavailable this week.

Insects, Mites, and Nematodes

Western Corn Rootworm Beetles Emerging - (John Obermeyer and Larry Bledsoe)

- Western corn rootworm beetles emerging in southern Indiana
- Beetles should not be a concern until fields are pollinating
- Isolated pollinating fields could be a "trap crop" for beetles

Frankie Lam, Southwest Indiana Pest Management Specialist, observed western corn rootworm beetles in a Knox County field on Monday, June 21. This was expected as pupae in the soil are being found in west central Indiana. Generally the first beetles to emerge are males, female emergence begins a few days later. Once the females emerge, feed, and mate, they may disperse to other fields. Beetle emergence, mating, and egg laying will continue through most of the summer.

After emerging, beetles will begin to feed on corn leaves if pollen is not available. This leaf feeding damage can look dramatic in small areas of a field, but is usually



Male (left) and female (right) western corn rootworm beetles

of no economic importance. This year's replanting of wet areas will cause some fields to pollinate much later than most. These fields will act as "magnets" for the beetles and need to be watched for silk clipping. If beetles are

present and feeding on corn silks, an insecticide application should be considered only if 50% of the silks are being cut off to less than 1/2 inch before 50% pollination has taken place. Note, this threshold is NOT based on beetles per plant.



Rootworm beetle corn leaf feeding

Corn Earworm Activity – (John Obermeyer and Rick Foster)

Our black light trap counts of corn earworm moths have been fairly low, but some pest managers in the Midwest are reporting significant moth activity. This could indicate that high-value, host crops are vulnerable to earworm attack earlier than normal. An example would be early market sweet corn that is now or soon to be pollinating.

Pest managers need to carefully monitor their corn earworm pheromone and/or black light traps to determine moth numbers. The proper strategy for managing earworms is to apply insecticides to fresh, green silks when moths are flying. Two or three applications of approved insecticides spaced 4 to 5 days apart will usually provide adequate control. Experience has shown that more applications at lower rates provide better control than fewer applications at higher rates, even when the same total volume of insecticide is used.



Corn earworm moth



Black Light Trap Catch Report - (John Obermeyer)

County/Cooperator	6/9/04 - 6/14/04							6/9/04 - 6/14/04						
	VC	BCW	ECB	SWCB	CEW	FAW	AW	VC	BCW	ECB	SWCB	CEW	FAW	AW
Dubois/SIPAC							1							3
Jennings/SEPAC			1				4			1				12
Knox/SWPAC		1	15				8			19		3		25
LaPorte/Pinney Ag Center			90				7		1	28				18
Lawrence/Feldun Ag Center					2		2					2		20
Randolph/Davis Ag Center			4				1			7				25
Tippecanoe/TPAC Ag Center														
Vermillion/Hutson														
Whitley/NEPAC			64				7							

VC = Variegated Cutworm, BCW = Black Cutworm, ECB = European Corn Borer, SWCB = Southwestern Corn Borer, CEW = Corn Earworm, FAW = Fall Armyworm, AW = Armyworm

Agronomy Tips

Flooding and Very Wet Soil Conditions Equals Soybean Re-Planting - (Ellsworth P. Christmas)

- Continued rains with flooding equate to soybean re-planting.
- The date is approaching to consider changing to an earlier maturity group of soybean for re-plant.

June rainfall reported across west-central Indiana as of June 21 has been in the range of 6 to 12 inches. These very heavy rains resulted in significant flooding of river and stream bottoms with the resulting death of most of the corn and soybean planted in these low areas. In addition, some upland areas experienced significant ponding, for more than two days, which also resulted in crop loss.

Delayed planting or re-planting has less effect on the yield of soybeans than on corn. Unlike corn, which requires a certain number of growing degree days to mature, soybeans are sensitive to day length and as the day length shortens later in the growing season, maturity speeds up. As a general rule of thumb, for each three days planting is delayed, after May 20, harvest is delayed one day. Below is a comparison of the yield reduction experienced by corn and soybeans as planting is delayed.

As yield levels of soybeans have increased over the past ten years or so, the percentage yield loss has

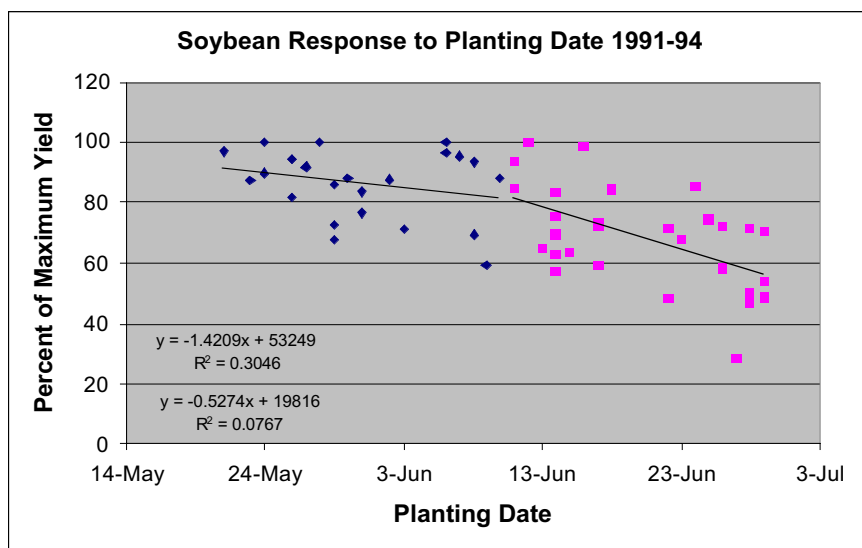
	May 21	May 26	May 31	June 5	June 10	June 30
Corn	5%	8%	13%	19%	25%	
Soybeans	0	2%	4%	7%	10%	38%

increased slightly. For example, data from a recent study, given in the graph below, indicates that the reductions in yield for May 20 and June 10 are about 0.5% per day. Yield losses for the period from June 11 to June 30 are about 1.4 percent per day for each day of delay after June 10.

We are approaching the date when consideration should be given to changing maturity groups. It is advisable to stay with a full-season variety of soybeans for your particular area until about June 15 in the northern one-fourth of Indiana, June 20-25 for the central one half of Indiana and June 25 in southern Indiana one-fourth of the state. Full season soybeans will almost always give a higher yield than shorter season varieties for a given geographic area even when planting is modestly late.

Once these dates have been reached, producers should move from a full season variety of soybeans to a mid season variety for their respective area. This will equate to a change of one-half maturity group assuming that a full season variety is being grown. Additionally, seeding rates should be increased by 15 to 25 percent to promote shading and taller plants to increase podding height and nodes per acre.

A commonly used rule of thumb for a cutoff date to stop planting soybeans is 90 days prior to the first 32 degree frost for a given area within the state. Using a 25% probability, or one in four years of a 32 degree or lower temperature, the magical date for the Bluffton area in northeastern Indiana is June 30, while in the Lafayette area it is July 5. Soybean planting should cease in most of the southern half of Indiana by July 10 except for the southwest corner where planting can occur up to July 15.



If there are questions or problems, contact the Extension Entomology Office at (765) 494-8761. Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

DISCLAIMER

It is the policy of the Purdue University Cooperative Extension Service, David C. Petritz, Director, that all persons shall have equal opportunity and access to the programs and facilities without regard to race, color, sex, religion, national origin, age, marital status, parental status, sexual orientation, or disability. Purdue University is an Affirmative Action employer. This material may be available in alternative formats
1-888-EXT-INFO (398-4636)