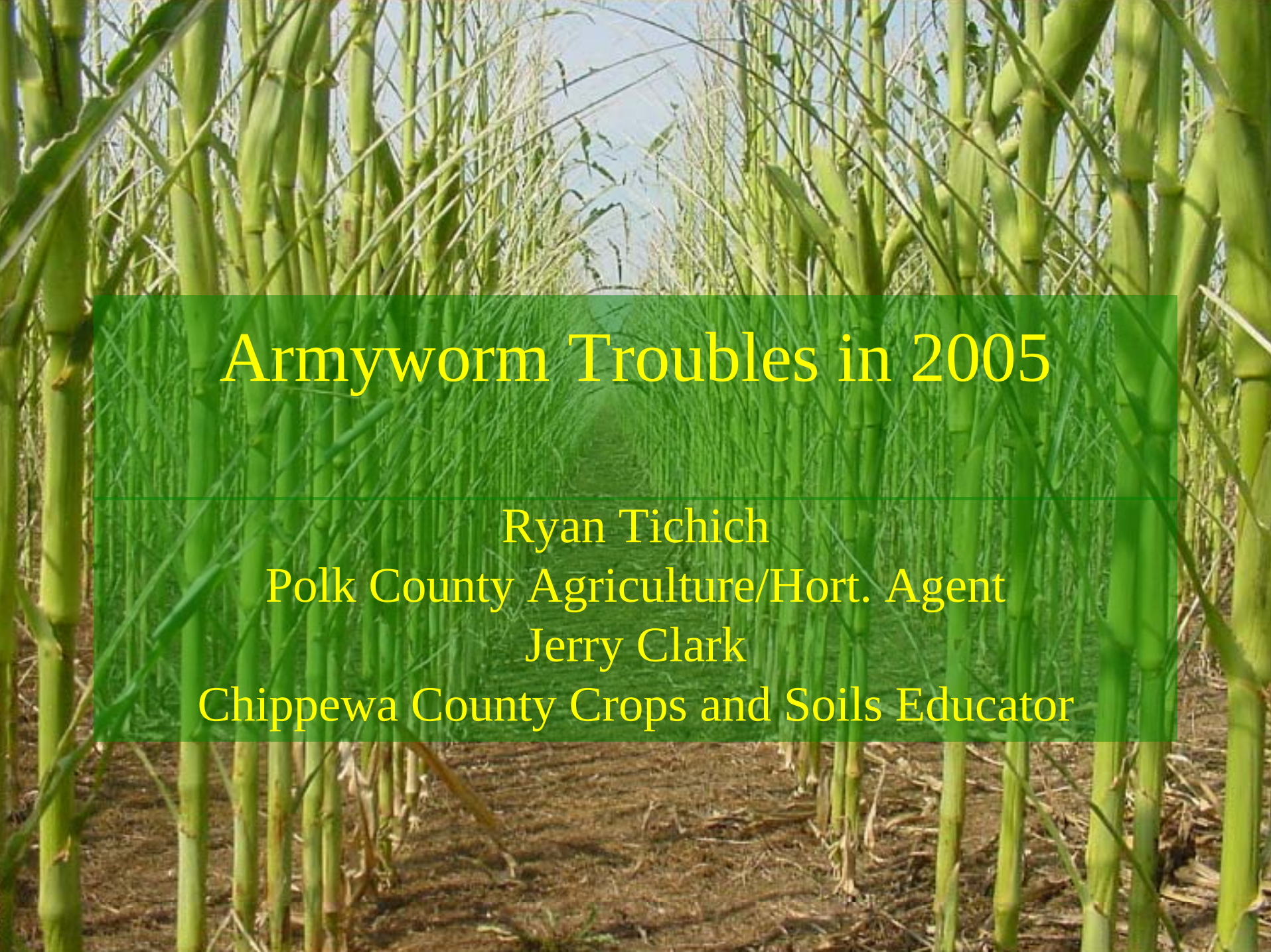


Armyworm Troubles in 2005

Ryan Tichich
Polk County Agriculture/Hort. Agent
Jerry Clark
Chippewa County Crops and Soils Educator

Armyworm 2005

- What caused the outbreak in Northwestern WI?
- Back ground info on Armyworm.
- Armyworm management.

Problem Distribution in 2005

Counties Affected:

- Polk
- St. Croix
- Pepin
- Jackson
- Dunn
- Barron
- Burnett
- Washburn
- Sawyer
- Rusk
- Monroe
- Crawford
- Chippewa
- Pierce
- Marathon
- Juneau

Armyworm 2005

- **Armyworm -** Moths have grown increasingly active in the last week, and black light trap catches indicate that adult populations may be moderate to high near Janesville, Mazomanie and Marshfield (22-25 moths). The potential exists for localized outbreaks, especially in grassy corn fields.

Wisconsin Pest Bulletin Volume 50 Number 11 Date 06/24/2005

Armyworm 2005

- In general, very low numbers of larvae and injured corn plants are being found throughout the south…When high numbers of large armyworm larvae move into cornfields to feed, the results can be rather alarming…Grassy or weedy fields, or fields adjacent to small grains or hay fields, are most susceptible to attack.
-

Wisconsin Pest Bulletin Volume 50 Number 13 Date 07/08/2005

Chronology of reports

- Reports in Polk County on 7/22 (Tichich, UWEX).
- Juneau County on 7/26 (Saxe, UWEX).
- St. Croix, Jackson, Pepin, Chippewa, Dunn on 7/26 (Oberlin, Crop Consultant).
- Burnett, Washburn and Sawyer on 7/27 (Schoessow, UWEX).

Eileen Cullen, Wisconsin Crop Manager, Volume 12 Number 21
Date 07/28/2005

Armyworm 2005

- Damage has become increasingly widespread in the past two weeks. Weedy fields are still very much subject to attack, especially in northern Wisconsin counties.
- Third generation moth activity was reported at a New Richmond area trap on 8/26.

Wisconsin Pest Bulletin Volume 50 Number 17 Date 08/05/2005
Wisconsin Pest Bulletin Volume 50 Number 20 Date 08/28/2005


07/28/2005


07/28/2005


08/10/2005


08/10/2005

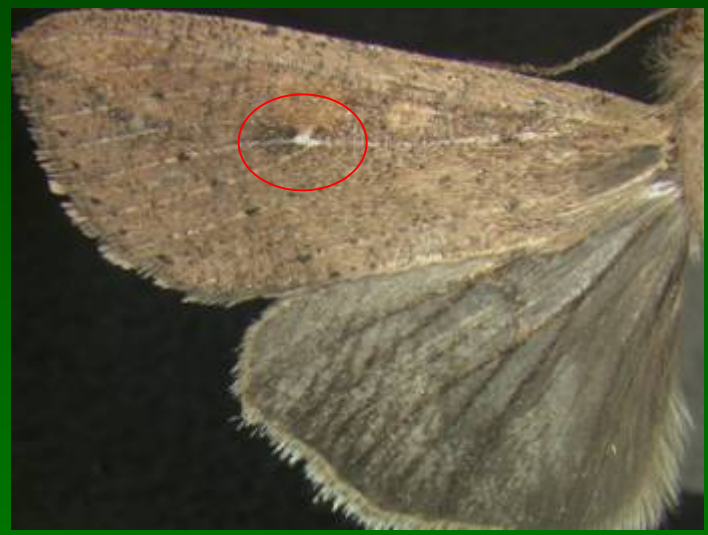

08/10/2005

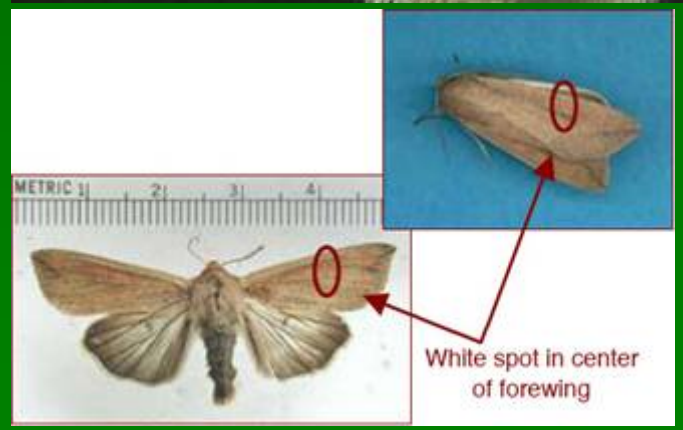
Why the Outbreak?

- Poor grassy weed control?
- Wet spring
  Dry summer.
- Heavy adult immigration.

Biological Description

- Outbreaks tend to be more severe following cold, wet spring weather.
- Sand colored moths have a wing span of 1.5 inches.
- Forewing: sand-colored with numerous black dots and a single white dot in the center





Biological Description

Larvae:

- Brownish green and hairless.
- Alternate dark and light stripes down their backs and get up to 2” long.
- Sharply tapered at tail end.
- Head is pale brown with dark musings.
- Armyworm is often confused with the variegated cutworm.

Host Range

- Armyworms attack all grasses.
- Crops most frequently affected:
  - Wheat
  - Oats
  - Corn
  - Rye
  - Grassy alfalfa and pasture
- Legumes less frequently affected – occurs when armyworms are under stress.

Life Cycle

- Most moths are immigrants from south
  - Appear in late April or early May
- Immediately mate and lay eggs on grasses in rows or clusters.
- 7 to 10 days later the larvae hatch and begin feeding.

Life Cycle

- Larvae feed for 3 to 4 weeks then pupate for an additional 2 weeks.
- 3 generations each lasting 5 to 6 weeks.
  - 1st is small
  - 2nd does the damage
  - 3rd is parasitized

Damage/Symptoms

- Larvae tend to feed at night.
- Hide in the soil or under foliage during the day.
- Typically infestations are at their worst in corn in July.
  - Particularly those fields with poor early season grass control.
- Damage can be patchy or sometimes uniform, especially when armyworms migrate *en masse*.
- Damage below the ears not as detrimental as above the ear.

Scouting Procedure

<u>Timely detection is critical!</u>

- Check 5 sets of 20 plants at random.
- Repeat in several locations in the field.
- >2 armyworms ¾ inch or smaller on 25% of plants.
- 1 worm on 75% of plants.


When this big?
Past
threshold?

Integrated Control

Natural/Biological Control

- Braconid wasps and tachinid flies, various ground beetles, birds, toads, skunks, and domestic fowl are biocontrol agents.

Cultural Control

- Weed control – especially early season grasses.
- Late weed control can drive populations to crops.
- Avoid planting susceptible crops in wet areas.

Integrated Control

Chemical

- Several products are available for managing army worm including: Ambush, Asana, Baythroid, Capture, Decis, Disipline, Lorsban, Mustang Max, Penncap, Pounce, Sevin, Tracer and Warrior.
- Follow label directions for use, rates, methods of application, etc.
- Challenges to getting good coverage?

Poor Control?

Armyworms

or

Weeds

Summary

- Localized damage.
- Many reasons?
  - Adult populations
  - Weed control
  - Weather
- Scouting is critical.
- Crop Manager can provide heads up.