


CONTROL OF SWEET CORN INSECT PESTS

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Sweet corn pests

- Corn ear worm
- European corn borer
- Cutworms
- Corn root worms
- Flea beetles
- Seed and root maggots
- Corn leaf aphid
- Stink bugs


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Corn earworm

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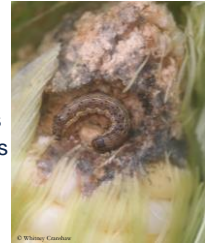
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Corn earworm

- Overwinter as pupae
- Migration of adults
- Lay eggs on silks
- 2 to 4 generations per year
- Late season damage



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Corn earworm control

- Variety choice
- Planting date
 - Early and midseason
- Pheromone traps
 - Spray every 5 days
 - 1-10 moths/night
 - Spray every 2 days
 - 100 moths/night
- Lay eggs on corn silks
- Must be controlled by directing sprays at the silks so larvae will immediately contact the insecticide after hatching

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Corn earworm

- Insecticides
 - Biopesticide (Bt)
 - **Pyrethroids** (Ambush, Asana, Baythroid, Capture, Mustang Maxx, Permethrin, Tundra, Warrior II)
 - **Spinosyns** (Entrust, Radiant)
 - **Sevin**
 - **Dual action** (Besiege)

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European corn borer

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European corn borer

- Overwinters as an adult
- Adult emergence late May and June
- 22 days to reach full grown caterpillar
- Two generations per year

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European corn borer damage

- Kernel damage
- Stalk tunneling

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European corn borer monitoring

- Late whorl stage
 - Black light traps
 - Field observations
- Insecticides sprays
 - Biopesticide (Bt)
 - Pyrethroids (Ambush, Baythroid, Capture, Mustang Maxx, Permethrin, Tundra, Warrior II)
 - Ryanoid (Coragen)
 - Spinosyns (Entrust, Radiant)
 - Sevin
 - Dual action (Besiege)

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Cutworms

- Early season pests
- Overwinter as eggs or larvae
- Cut plants

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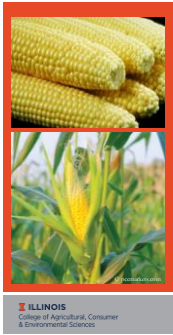
Cutworms

- Fall and spring tillage
- Weed control before planting
- Barriers around plants

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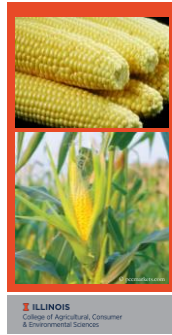


Cutworm control with insecticides

- Biopesticide (Bt)
- **Pyrethroids** (Ambush, Asana, Baythroid, Capture, Force, Mustang Maxx, Permethrin, Tundra, Warrior II)
- **Ryanoid** (Coragen)
- **Spinosyns** (Blackhawk, Entrust, Radiant)
- **Diamides** (Exirel, Harvanta, Verimark)
- Sevin
- Dual action (Besiege)

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Corn rootworm beetles



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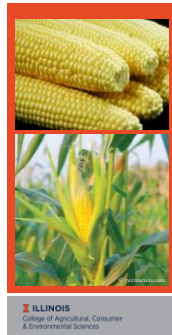
Corn rootworm beetles

- Overwinter as eggs
- Larvae of two species feed on corn roots **ONLY**
- One generation per year
- Crop rotation
- Monitoring
 - Sticky traps



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Corn rootworm beetles

- Insecticides
 - Pyrethroids (Ambush, Asana, Baythroid, Capture, Mustang Maxx, Permethrin, Tundra, Warrior II)
 - Sevin
 - Dual action (Besiege)

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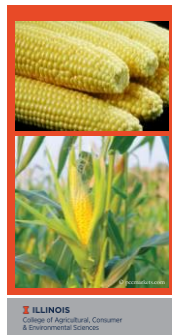


Corn rootworm larvae

- Insecticides
 - Pyrethroids (Brigade, Capture, Force, Warrior II)
 - Sevin
 - Dual action (Aztec, Ethos)

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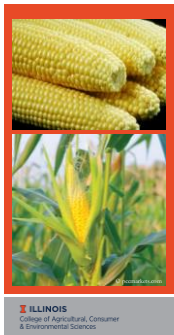


Corn flea beetles



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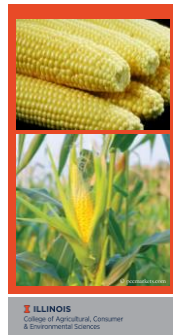


Corn flea beetles

- Overwinters as an adult
- Emerge in spring
- Larvae feed on roots of grass plants for two weeks
- Generation time is about one month
- 2-3 generations



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Corn flea beetles

- Leaf damage
- **Stewart's wilt**
 - Tasselling
 - Drought
 - Early stage



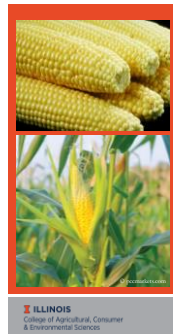
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Flea beetle control

- Scouting
- Threshold
 - 6 beetles per 100 plants
- Insecticides
 - Seed treatments
 - Pyrethroids (Ambush, Asana, Baythroid, Capture, Mustang Maxx, Permethrin, Tundra, Warrior II)
 - Sevin
 - Dual action (Besiege)

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Seed and root maggots

- Overwinter as pupae
- Lay eggs in early spring
- 3-5 generations per year
- Life cycle of as little as 21 days



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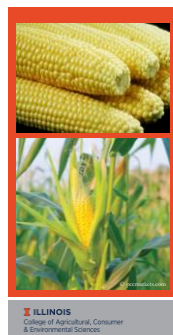


Damage from seed and root maggots

- Corn seed damage
- Reduced stands
- Weak seedlings
- Can cover most of a field



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Sampling for seed and root maggots

- Dig in soil where plants didn't emerge
- Check seed for injury and maggots
- 2 linear row feet in each of 5 areas



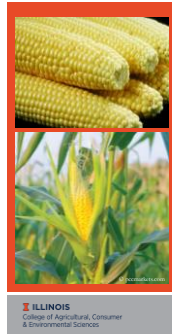
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Control of seed and root maggots

- No rescue treatments
- Replanting
- Insecticides
 - Seed treatments
 - Neonicotinoids
 - Spinosad
 - Abamectin
 - Pyrethroids (Brigade, Capture, Force, Mustang Maxx, Permethrin, Tundra)
 - Dual action (Aztec, Ethos)

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Corn leaf aphid



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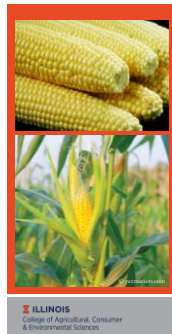


Corn leaf aphid

- Colonies on tassels
 - Produce honeydew
- Adults migrate from the south
- Live birth
- Pests in late June through August
- 9 generations a year



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Corn leaf aphid monitoring

- Before tasseling
 - In each of 5 areas of the field, select 4 plants
 - Count in 20 whorls per area
 - Consider insecticides if 50% of plants have 50 aphids per plant

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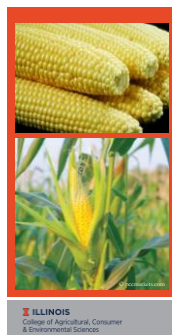


Aphid control

- Natural enemies are recommended



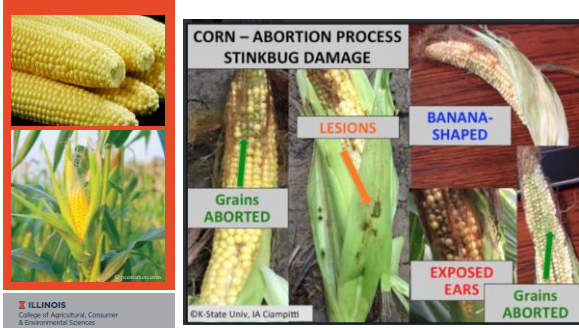
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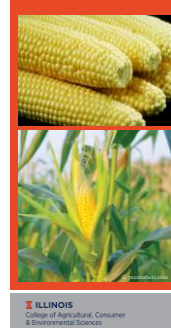
Stink bugs



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Stink bug control

- Insecticides
 - Pyrethroids (Baythroid, Brigade, Capture, Tundra, Warrior II)
 - Dual action (Besiege, Hero)



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Contact Information

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