

Pest Facts and Impact on Crop

- There are several species, primarily in the genus *Sphenophorus*: bluegrass billbug, maize billbug (black), southern corn billbug (brown or gray), clay-colored billbug (tan and cream striped)
- Importance relatively minor but increasing in no-till or other heavy cover rotations
- No significant natural enemies known
- Host range is primarily larger grasses, sedges and rushes
- Small corn plants may be killed or misshapen by adult feeding
- Plants to V6 leaf stage may tiller and be deformed
- Severe infestations have reduced yields up to 40%
- Damage is most severe in yellow nutsedge-infested fields or along border rows with this weed



Yellow nutsedge is recognized as a major host

Favorable Conditions

- Poorly drained, organic soils
- Corn-after-corn fields
- No-till corn fields
- Fields infested with yellow nutsedge or grassy perennials with a heavy corm or rootstock

Distribution

- Billbugs that sometime feed on corn exist across the United States but are more of a problem in the Southeast and the southern Corn Belt

Common Billbug Species



Southern corn billbug



Clay-colored billbug



Bluegrass billbug*



Maize billbug

Pest ID

Key Characteristics

- All billbugs have their mouthparts at the end of a "snout" or "bill" from which they get their name



Related / Look-Alike Species

- Damage can be easily confused with that of wireworm, cutworm, seedcorn maggot, stink bug and seedcorn beetle. See *Crop Focus on Wireworm*.

*Photo of bluegrass billbug by Jeff Hahn, University of Minnesota

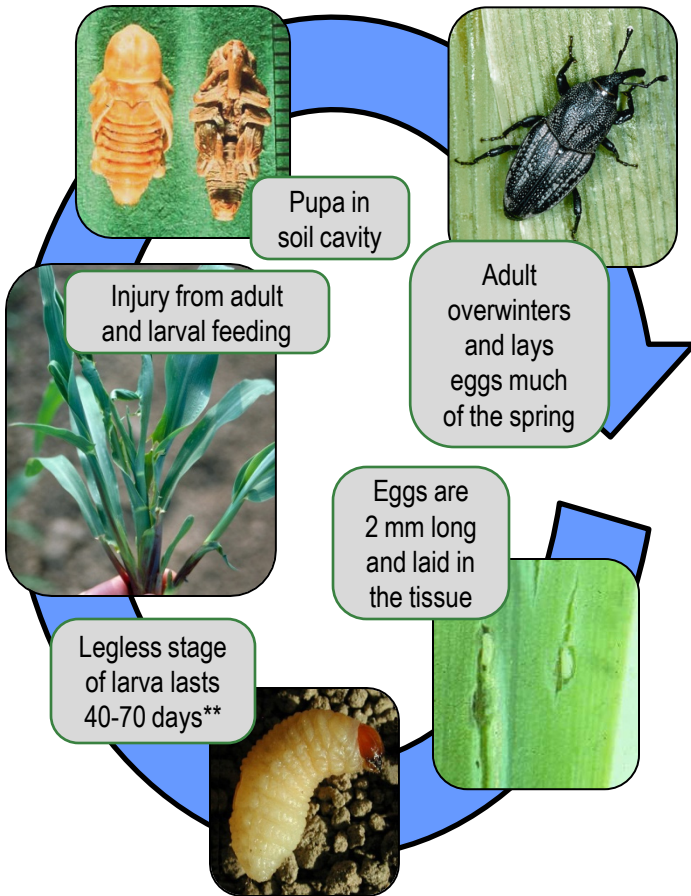


PIONEER
A DUPONT BUSINESS

Pioneer Agronomy Sciences ®, TM, SM Trademarks and service marks of Pioneer Hi-Bred. © 2010, PHIL

Life Cycle

(One Generation Yearly)



- Adults often leave fields in the fall and overwinter in protected areas around cornfields
- Adults crawl, or rarely fly, back into the field; they may play dead when disturbed

Pest Symptoms/Injury ID

- Leaves twisted and fail to uncurl
- Rows of oval holes in whorl leaves
- Small plants may be killed
- Excessive tillers on surviving plants
- Injury often more severe in border rows
- Corn susceptible to injury to the V6 leaf stage
- Larvae will tunnel into the base of the plant



Best Management Practices

Transgenic offerings are not available for this pest.

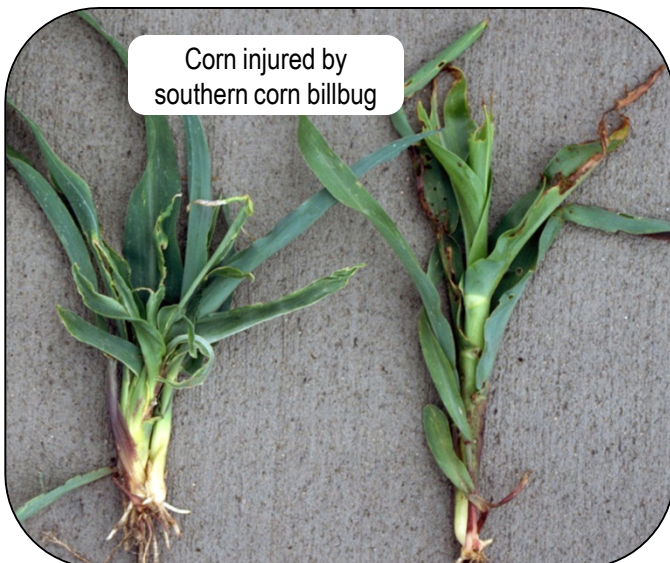
Cultural Controls:

- Crop rotation with a non-grass crop
- Early planting with good fertility to grow the seedling rapidly past the susceptible stages
- Plant strong emerging and fast-growing hybrids
- Control yellow nutsedge and other weeds
- Scout susceptible fields for first three weeks after emergence

Chemical Controls:

- At-planting soil insecticide
- Seed treatment insecticide may reduce pressure
- Rescue treatments may be used with fair success if fields are scouted shortly after corn emergence

**Photo of billbug larva from Purdue University Extension Service



PIONEER
A DUPONT BUSINESS

Pioneer Agronomy Sciences ®, TM, SM Trademarks and service marks of Pioneer Hi-Bred. © 2010, PHIL