



## Seed and Seedling Insects of Soybeans

- Most insects found during emergence or early soybean growth are incidental pests
- With adequate seeding rates, soybeans can usually compensate for mild to moderate damage or losses from these insects
- Use of an insecticide seed treatment is most often sufficient to reduce the impact of soil insect feeding

- Insect problems may be localized within a field, such as with white grub damage below.
- Localization may be caused by differences in temperature, moisture, soil color, topography or some other factor affecting the insect life cycle.

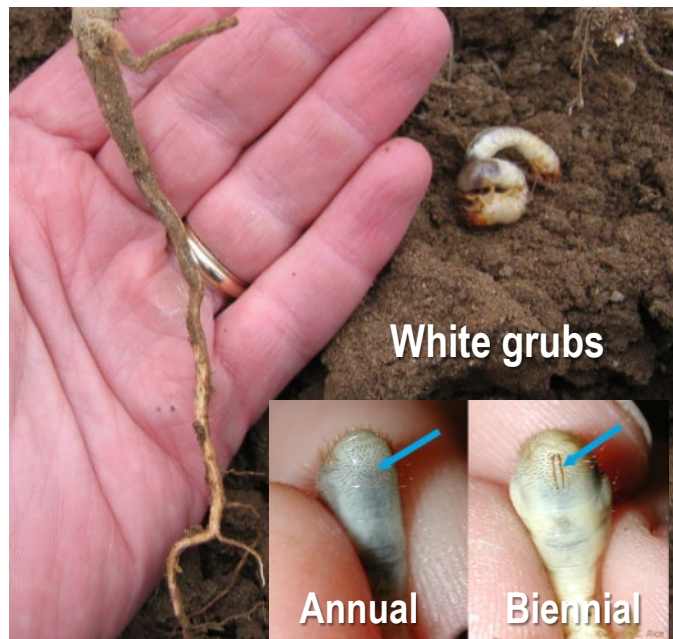
### White Grubs

- Damage may appear as gaps in the rows or wilting and dying plants
- Damage is rarely widespread across a whole field; rather, it is usually found in patches near wooded areas or areas with a history of injury
- Feeding on root hairs causes desiccation and allows invasion of root pathogens
- White grubs are affected by seed treatments but may consume more tissue before feeding ceases
- Biennial white grubs may be present two years in a row



### Wireworms

- Wireworms are rarely a problem in soybeans as they migrate deeper with warm weather and the large number of soybean plants can dilute a large population of wireworms without significant damage
- May be higher populations after a sod or grass crop
- Standard soil insecticides are usually sufficient deterrent



White grubs

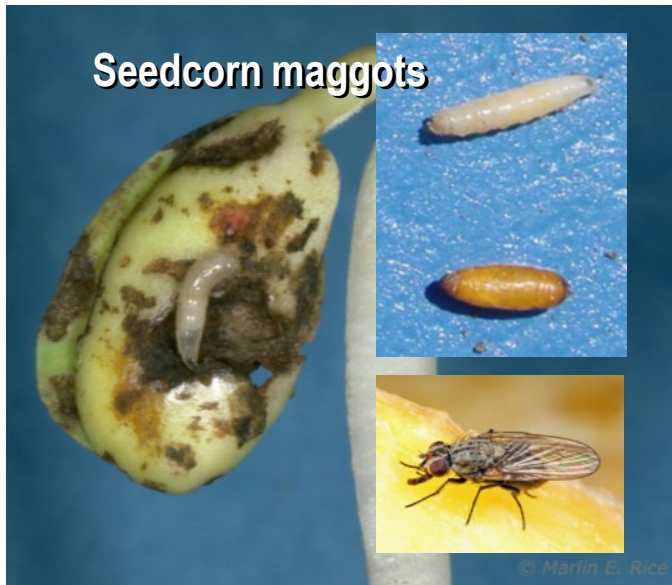
Annual

Biennial

Indistinct setae rows (a "random" pattern) | Distinct double row of setae on the tail



Wireworms



## Seedcorn Maggots

- The adult seedcorn maggot is a fly. The larva is the damaging stage
- Adults may be attracted to decaying organic matter in the field to lay their eggs
- Larvae may feed on cotyledons before first leaves appear, reducing vigor and stand
- Standard insecticide seed treatments usually provide adequate control
- Unless other factors are at work, seedcorn maggots rarely decimate stands sufficiently to warrant additional control

## Bean Leaf Beetles (BLB)

- The overwintering generation of BLB adults feed on cotyledons and leaves shortly after soybean emergence (right)
- Neonicotinoid seed treatments normally provide sufficient control to limit this early feeding
- BLB can be a vector of bean pod mottle or other viruses in the seedling stage
- Densities of greater than 15 adults per foot of row may warrant an insecticide spray



## Seedcorn Beetles

- Small beetles about 5/16 of an inch in length
- Two species may be found, spotted seedcorn beetle and slender seedcorn beetle
- May forage by feeding on or within the seed or young seedling
- Insecticide seed treatments at planting may help prevent their attack as control after planting is not realistic