# Bugs Driving You Nuts? The Hazelnut Weevil and Other Insect Pests of Hazelnuts

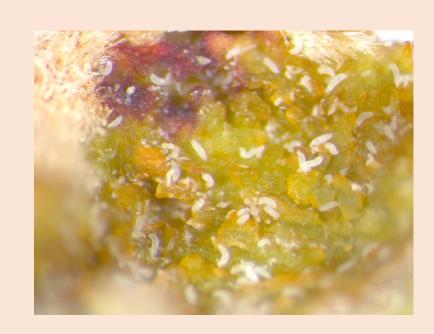
Hailey Shanovich and Brian Aukema
University of Minnesota
Department of Entomology











There are three main insect pests in the Midwest









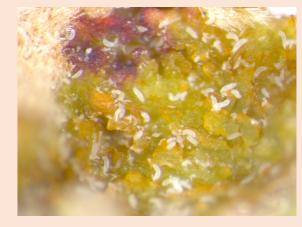
There are other minor pests as well



### We want to hear from you!!!











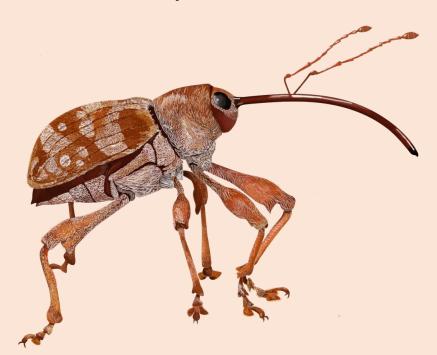


https://tinyurl.com/hazelnutpests



#### The hazelnut weevil

- Naturally associated with native wild hazelnut plants
- Already causing damage to hybrid planting throughout Midwest
- Similar species in other Europe and China that cause same damage



Adult female hazelnut weevils lay eggs on developing hazelnuts















Larvae feed on the developing kernel





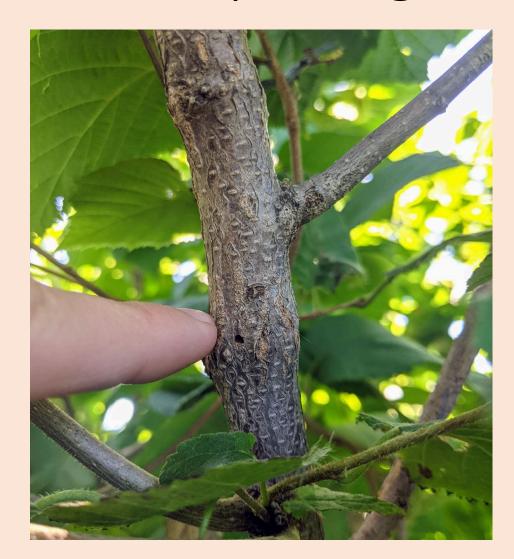
#### Hazel-stem borer

- Naturally associated with native hazelnut species
- Already causing damage to some hybrid planting throughout Midwest
- Known to target weakened, older (>10 yrs) or diseased plants (e.g., drought stress)



Photo by Tom Murray

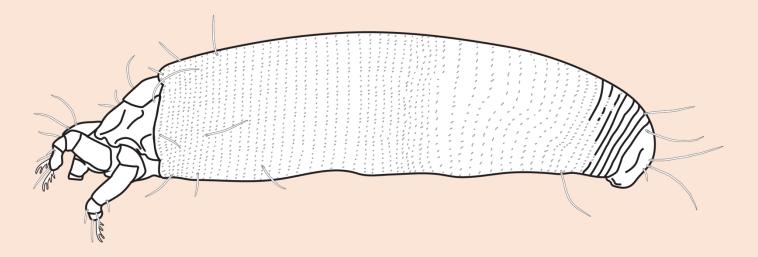
# Larvae tunnel through cambium eventually killing branch





#### Hazelnut big bud mite

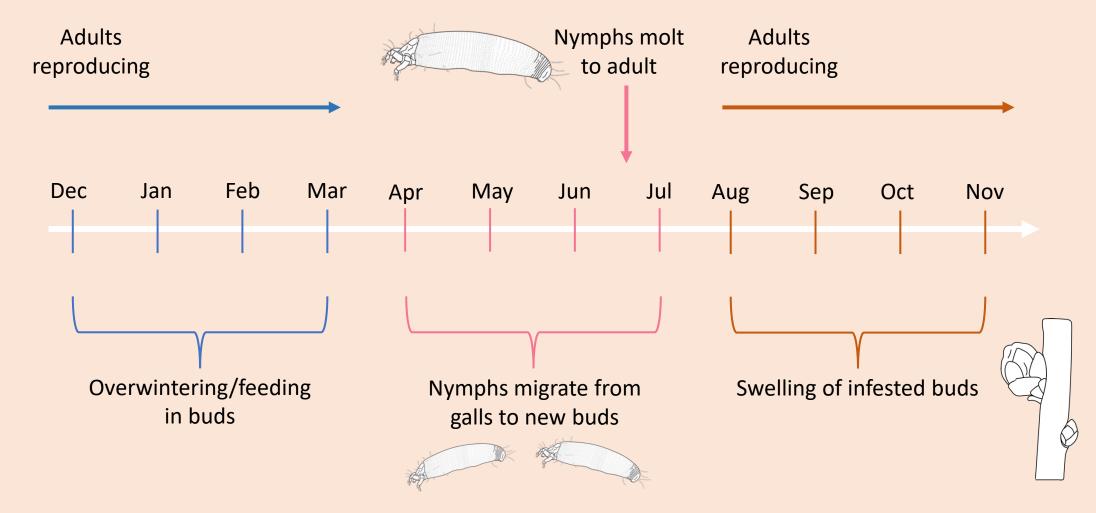
- Introduced species from Europe
- Causes galls in both floral and vegetative buds causing "big buds"
- Hazel varieties vary widely in susceptibility
- Transported by wind or moving plant material around





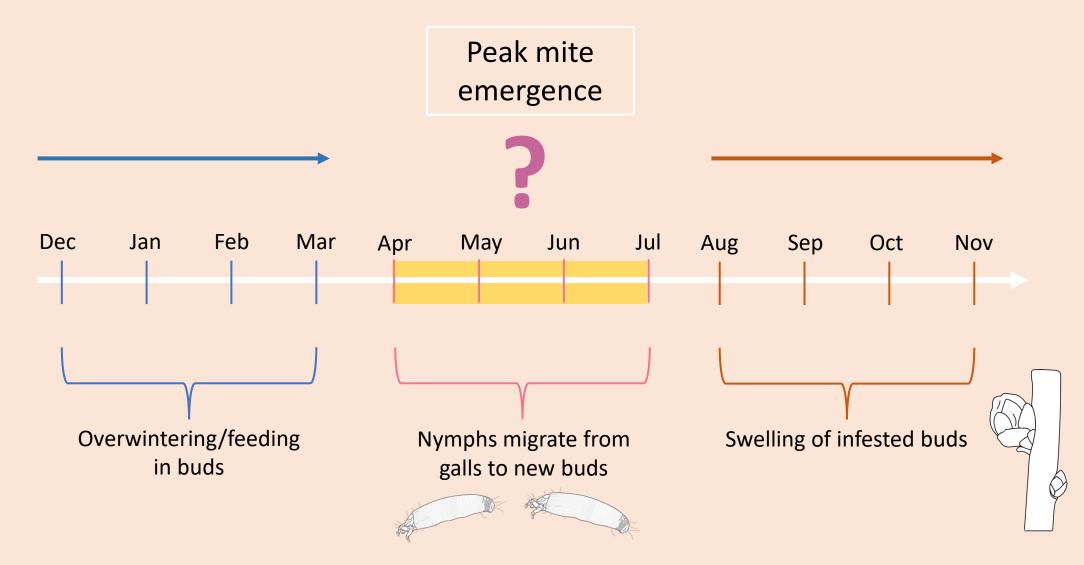


#### Mites leave big buds in spring to migrate to new axillary buds





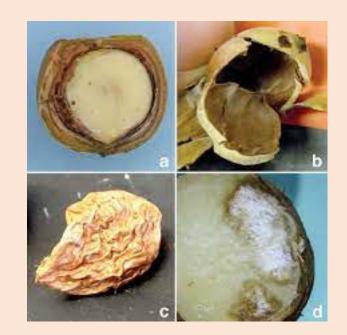
#### Mites leave big buds in spring to migrate to new axillary buds





#### Brown marmorated stink bug

- Introduced from east Asia; widespread throughout country now
- Feeds on many species of plant's fruits, seeds and nuts
- Has been reported to be causing damage to kernels in North Dakota and Nebraska in hazelnut







## Thank you!

https://tinyurl.com/hazelnutpests







United States
Department of
Agriculture

