

(revision date:10/4/2018)

## ***Predatory Bugs: Big-eyed bugs***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

Big-eyed bugs are oval, somewhat flattened, and 1/10 to 1/5 inch in length. They are usually gray-brown to blackish and have a wide head with prominent, bulging eyes. Antennae are short and enlarged at the tip. Big-eyed bugs walk with a distinctive “waggle” and emit an unpleasant odor when handled. Eggs are laid near potential prey and hatch into nymphs that resemble adults except they are smaller and lack wings. Development from egg to adult through five nymphal stages takes approximately 30-40 days under summer conditions. Both adults and nymphs are predatory, but can survive on nectar and honeydew when prey is scarce. Nymphs may consume up to 1600 spider mites during development and adults feed on 80 to 100 mites a day. Big-eyed bugs prey on a wide variety of insects and mites smaller than themselves. They also feed on eggs and small larvae of cutworm moths and other caterpillar pests, as well as all stages of leafhoppers, thrips and mites. Two to three generations a year occur between April and September. Adults overwinter in leaf litter or under bark.

### **Prey or Pest Targeted**

~ Mites, aphids, leafhoppers, thrips,  
caterpillars, mealybugs, beetles, scale insects, insect eggs

### **Attracting and Keeping Beneficial Insects in Your Yard**

- ~ Avoid regular use of synthetic, broad-spectrum pesticides. Infrequent use of certain narrow-spectrum pesticides is more compatible with some beneficials but generally the less chemical inputs there are, the greater and more diverse the beneficial insect community will be. Extensive lawns are also not conducive to attracting and retaining a diversity of beneficial insects, mites and spiders. Minimize lawn areas and maximize shrub and bush plantings. Many beneficials reside naturally in riparian and other ‘natural’ areas near to many back yards. Natural dispersion from these refuges ensures that some beneficials will visit back yards but they will not stay unless food, host and shelter resources are available. Native plants have closer affinities with native insects and therefore provide most of these resources. A garden with a good diversity of local native flora in and around back yards, will improve the abundance and diversity of local, beneficial arthropods. Native flora also provides natural overwintering sites for many beneficial insects and it is useful to leave at least a small area of native vegetation undisturbed during fall and winter.
- ~ Some kinds of beneficial insects (e.g. lady beetles, lacewings, predatory mites) are available for purchase from commercial suppliers. However, benefits from introducing these beneficials are usually limited and short-lived. Upon release, commercially obtained lady beetles and lacewings often disperse and may rapidly leave your backyard despite the presence of prey and suitable nectar resources. Generally, it is more effective and sustainable to create a garden habitat that will be colonized by beneficials naturally.

*Predatory Bugs: Big-eyed bugs*

*Images*



~ Caption: Adult big-eyed bug (*Geocoris* sp.)  
(*Miridae*)  
~ Photo by: D.G. James