Leaf footed bugs (and their cousins, the stinkbugs), are among the biggest challenges to gardeners! These are true bugs (Hemiptera) and are not as easily controlled as most other garden pests. They’re not chewing insects, but rather puncture tomatoes, other fruits, leaves and some seeds with their soda straw-like mouthparts and then inject a substance that dissolves cells around the area. Then they drink the contents, move over a few steps and puncture another spot. At the surface of the skin, you see diffuse and spots white to yellow cloudy areas. Underneath the skin, the tissue hardens into corky white to light yellowish hard spots (“cloudy spot”) on the tomato fruit that can ruin the tomato (although you can cut out these spots). Sometimes, the tissue will be so extensive that you’ll see brown necrotic (dead) tissue in the fruit (this is called “internal dry rot”).
Weedy areas and mulch serve as shelters for these insects during the winter season, when tomatoes and other host plants are not available. Try to eliminate weedy areas near your garden or keep weedy areas closely mowed. But while controlling weeds around vegetable gardens and orchards can help reduce bug populations, both leaf footed bugs and stink bugs are strong fliers and can easily move into gardens from areas further away. Also, try to manage overwintering populations of adults that can be found down in the organic mulch. Soapy water can drive adults out of the mulch on a warm winter day and they perish when it gets cold again or you can slay them as they come out.
It is important to observe your garden on a daily basis. The HOD method ("Hand of Death") is a time-honored approach. They can be removed by hand or with a butterfly net from small plantings in gardens. Or, you can handpick the bugs, especially early in the season when the very young nymphs are tightly clustered together, especially in the morning. Wear gloves because of the odor they will emit when handled, and drop them into a can of soapy water. This is a tedious approach and only provides temporary relief unless you keep at it!

**Birds and spiders are important predators of leaf footed and stink bugs.** There are several birds eat leaf footed bugs but leaf footed bugs and stink bugs too, tend to ward off would be predators because of their scent glands.

In addition there are several species of beneficial insects that feed on these pesky bugs. These include wheel bugs, assassin bugs, and predatory stink bugs. Also, the eggs are eaten by crickets and ants. There are also parasitic insects that can help control these pests, but they are sensitive to pesticides. In areas where pesticides are regularly used the populations of these and other beneficial insects will be greatly reduced. You can encourage beneficial insects to move into your yard by minimizing pesticide use (organic or synthetic!) and planting a diverse variety of flowers, trees, and shrubs to provide habitat for beneficial insects and pollinators.
Another approach is to plant something that is more attractive to leaf footed bugs than tomatoes – *trap crops!* Auburn University extension scientists have been looking at this recently: A trap crop planted two to three weeks ahead of the main crop worked best in the studies. They’ve planted grain-type sorghum (specifically, sorghum variety NK300) and sunflowers (specifically, Peredovik-type sunflowers).

It happens that sorghum panicles and sunflower seeds are strongly attractive to leaf footed bug adults! Mixed planting of trap crops work best. Using *pearl millet* as a trap crop has also been suggested. Some other plants that are attractive to stink bugs and leaf footed bugs include bread seed poppy pods (after the petals fall), corn, southern peas, cardoon and artichoke blooms, and thistle blooms.

The challenge with any trap crops though, is having the trap crop producing at the desired stage just before or about the same time as the tomatoes become a target for the bugs. With sunflowers, sorghum and millet, the seeds are most attractive when they are soft and developing. In the case of millet the seeds are most attractive in the "milk" stage before the firm interior of the seed starts to form.

*Unfortunately, very few organic pesticides have any effect on these bugs.* The nymphs are soft bodied so this is the only stage at which organic insecticides will work effectively. And, after hatching, the young nymphs tend to stick together in a mini "herd" – they congregate - making it fairly easy to whack a lot of them at one time if you use something effective! The adults have a hard body and therefore it make any insecticides (organic or other) difficult to penetrate the carapace (shell).

One mechanical insecticide that has shown fairly good results is made from a finely-milled white, edible clay known as *kaolin*. This organic product coats plants and fruits in a white film, deterring pests. The film is washed off before eating. It is sold under the brand name Surround WP, though usually has to be ordered online or by mail since few local garden centers carry it.

Pyethrum-rotenone mixes may provide quick "knockdown" but need to be re-applied weekly. This approach works best in killing the nymphs and repelling the adults. Insecticidal soap and neem oil sprays have been effective on nymphs as well.