

## Sharp-nosed leafhopper

*Life cycle* – Sharp-nosed leafhoppers feed and reproduce on blueberry, huckleberry, cranberry, and other related plants. Sharp-nosed leafhopper feeding causes little direct damage but it transmits the phytoplasma that causes **stunt disease** in blueberries. They are small brown insects with a pointed head (Figure 1). Sharp-nosed leafhoppers pick up the disease while feeding on infested bushes and carry it to other plants in subsequent feedings. Usually only adults will carry the disease from plant to plant, since nymphs are wingless and can't fly (Figure 2).

This insect completes two generations in New Jersey. Adults are abundant in the woods, where many alternative hosts are present, and may move to commercial blueberry fields in the spring. Eggs overwinter inside fallen leaves and hatch in mid-May.

Nymphs complete 5 instars. Nymphs from the first generation reach adult stage in mid-June, while nymphs from the second generation reach adulthood in early August. Adults move back to the woods in the fall. Monitoring these generations is critical for timing of control strategies.

*Monitoring and control* – **This insect is the ONLY regular target for post harvest sprays.** Adults can be monitored using yellow sticky traps. First generation sharp-nosed leafhopper is often controlled with sprays targeted for plum curculio, aphids, and cranberry fruitworm. Treatment decisions for the 2<sup>nd</sup> generation should be based on individual population levels, as well as any history of stunt disease on your farm. Because adults migrate from woods, monitoring should be intensified in, and sprays should be directed to, the perimeter of fields to control migrants carrying the disease.

Insecticides are usually applied just prior to peak flight, which will probably be sometime near the end of August to early September. Note that Burlington County farms often have higher



Figure 1. Sharpnosed leafhopper adult top view and adult side view. Notice the mottling on the wings and the sharp point of the head.



Figure 2. Sharpnosed leafhopper nymph (wings not present) vs. adult.

populations of sharp-nosed leafhoppers than farms in Atlantic County. In Burlington County with high sharp-nosed leafhopper populations, treatments may be needed by the middle of the month, and possibly again during the first half of September. If you are in Atlantic County, or have low sharp-nosed leafhopper populations, then 1 application should be applied late August to early September, if needed. We recommend use of Assail 30SG @ 3-5 oz, Actara @ 3-4 fl oz, Provado @ 6-8 fl oz, Platinum @ 5-8 fl oz, Lannate LV @ 1.5 pt, or Malathion LV @ 10 oz per acre. It is also important to remove all plants that show symptoms of stunt disease. Removal of bushes should be done after insecticide treatment to avoid movement of leafhoppers from infested to healthy plants, thereby facilitating spread of the disease.