Painted Maple Aphid

Drepanaphis acerifoliae (Thomas)
Homoptera: Aphididae

Dreistadt, S. H.; Flint, M. L. 1995. Landscape pest monitoring methods and training managers to use them. *Journal of Arboriculture* 21: 1-6.

Objective: To describe a monitoring method for *D. acerifoliae* useful to urban foresters in control decision-making.

Abstract: The painted maple aphid, *Drepanaphis acerifoliae* (Thomas), is a common pest of maples, *Acer* spp., growing in urban areas. Infestations result in dieback and aesthetic damage. Honeydew, a waste product excreted from the posterior of the insect, drips from infested leaves and is often considered a nuisance. Aphid populations can be monitored effectively in urban environments by using a type of water sensitive, yellow paper that turns blue when in contact with honeydew droplets (Dreistadt 1987). This monitoring technique was described in relation to controlling the painted maple aphid on silver maple, *Acer saccharinum* L., in California. Control measures were warranted whenever honeydew drop densities exceeded 1-2 drops/cm^2/4 h.

Sampling Procedure: To monitor *D. acerifoliae* populations, a water sensitive, yellow card is used to detect the presence of aphids. These cards produce a dark blue dot whenever honeydew lands on the surface. Tape each card to a piece of cardboard, which is attached to a bent wire coat hanger. Hang each card 46 cm beneath lower crown foliage. Place a card in each cardinal direction weekly. Deploy cards for 4 h, retrieve, and determine the number of dots per square centimeter. Control is warranted if densities exceed 1-2 drop/cm^2 on any one card.

Note: Aphid populations are distributed normally and occur in urban environments where honeydew production is undesirable.

References:

Dreistadt, S.H. 1987. Monitoring honeydew excretion in the field as a method of sampling *Illinoia liriodendri* (Homoptera: Aphididae) infesting *Liriodendron tulipiferia*. *Journal of Economic Entomology* 80: 380-383.