

Aphids

Multiple Genera

SUSCEPTIBLE HOSTS

As the most common insect found on trees and shrubs and with over 350 different species, there are numerous hosts for the aphids.

SIGNS OF DAMAGE

- Sticky honeydew on leaves and targets underneath the infested tree
- Dwarfed, stunted, or deformed leaves
- Branch decline on severely infested twigs



Aphids on underside of leaf

PHYSICAL APPEARANCE

- Aphids are slow moving, oval to pear-shaped insects ranging in size from 1/16 to 1/8 inch long
- Coloring may be black, brown, green, red, pink, or other color
- Pipe-like protrusions extending off the back of the insect are visible with a hand lens
- Some aphids will have transparent wings



Honeydew and sooty mold

BIOLOGY / LIFECYCLE

- Overwinter as eggs on hosts bark or needles
- In spring eggs hatch (100-250 GDD) and aphids migrate on to summer hosts to feed
- Females give live birth through most of the growing season
- Winged adults move to new hosts through the season
- Eggs are laid in late summer
- Several overlapping generations per year



Leaf distortion caused by feeding

TREATMENT STRATEGY / EXPECTATIONS

Early detection is the key in reducing infestations of aphid. When natural enemies, like the lady beetle, are not sufficient in keeping the population in check, insecticides are very effective for controlling aphids. Soil and bark spray applied systemic insecticides are very effective. Use Transtect Infusible or Xytect 10% as a tree injection treatment for trees that cannot be treated with foliar sprays or other systemic options.

Cultural treatments (e.g. root collar excavation, proper irrigation, soil management, etc.) need to be considered to improve/maintain plant health.

PRODUCT	APP. METHOD	DOSAGE	TIMING	RE-TREATMENT	GDD / PHEN.
Transtect*	Soil Application	1 packet/5-17 inches DBH, or 10-17 feet shrub height	Any time during the season, ideally 1-3 weeks prior to feeding and after full leaf emergence	Annually	1 st generation appears 100-250 GDD
	Lower systemic bark spray	6 packets/1 gal water apply 1.5-2.0oz solution/ 1 inch DBH			
Transtect Infusible*	Tree injection	Refer to label for rates. Varies based on tree size	Any time during the season, ideally 1-3 weeks prior to feeding and after full leaf emergence	Annually	1 st generation appears 100-250 GDD
Xytect 10%*	Tree injection	Refer to label for rates. Varies based on tree size	Any time during the season, ideally 1-3 weeks prior to feeding and after full leaf emergence	Annually	1 st generation appears 100-250 GDD
Lepitect*	Soil Injection	0.2 oz per inch DBH < 15" 0.4 oz. per inch DBH >15"	Any time during the season, ideally 1-2 weeks prior to feeding and after full leaf emergence	30-45 Days	1 st generation appears 100-250 GDD
Xytect 2F	Soil application	0.1-0.2 oz./inch DBH	Fall or Spring when soil is not frozen	Annually	-

*Product is Rainbow Ecoscience's industry standard recommendation for most industry situations.

Reach out to Rainbow Ecoscience Technical Support for additional protocol support.



Trunk Injection with Quantum



Soil Application with HTI 2000



Lower systemic bark spray

