

TREE AND SHRUB INSECTS

Insects	Insecticide	Suggestions ¹
Aphids (NHE-7)	diazinon malathion	Spray foliage thoroughly with force. Repeat as needed.
Bagworms (NHE-6)	carbaryl diazinon malathion	Spray foliage thoroughly. Apply June 15. Later sprays are less effective.
Catalpa sphinx	carbaryl malathion	Spray foliage when feeding or worms are first noticed.
Eastern tent caterpillars	Same as for catalpa sphinx	Spray when nests are first noticed.
Elm leaf beetle (NHE-82)	carbaryl	Spray as soon as damage is noticed.
European pine shoot moths and Nantucket pine moth (NHE-83)	dimethoate	Spray ends of branches thoroughly in early June for European species and in mid-May for Nantucket species.
Fall webworms	carbaryl diazinon malathion	Spray when first webs appear; clip off and destroy infested branches or burn out webs.
Galls (NHE-80, 81)		
Elm cockscomb	diazinon	Spray foliage thoroughly when buds are unfolding.
Hickory	malathion	
Maple bladder		
Hackberry blister	diazinon malathion	Spray foliage thoroughly in late May. Kills psyllids in galls.
Cooley spruce	diazinon	Apply in late September or October or early spring just before buds swell.
Eastern spruce	malathion	
Green-striped mapleworms	Same as for catalpa sphinx	Spray as soon as damage is noticed.
Leaf miners	diazinon	Spray foliage thoroughly when mines first appear. Repeat treatment in 10 to 12 days.
Birch	malathion	
Boxwood		
Hawthorn		
Oak		
Mealybugs	malathion	Spray foliage thoroughly and with force. Repeat in two weeks.
Mimosa webworms (NHE-109)	carbaryl malathion	Spray foliage thoroughly when first nests appear (June, July). A repeat treatment may be needed.
Mites (NHE-58)	chlorobenzilate dicofol	Pay particular attention to underside of leaves. Apply 2 or 3 times at weekly intervals.
Oak kermes	malathion	Spray foliage thoroughly about July 1 to kill the crawlers.
Periodical cicadas (NHE-113)	carbaryl	Spray all branches thoroughly when adults appear. Repeat in 7 to 10 days.
Sawflies	Same as for fall webworms	Spray as soon as worms or damage is evident.
Scale (NHE-114)	malathion	Spray foliage thoroughly in early April for <i>Fletcher</i> and <i>European elm scale</i> ; in late May for <i>pine needle</i> and <i>sweet gum scale</i> ; in early June for <i>scurfy</i> , <i>oystershell</i> , and <i>euonymous scale</i> ; in early July for <i>cottony maple</i> , <i>Juniper</i> , and <i>dogwood scales</i> ; in mid-July for <i>spruce bud scale</i> ; and again in early August for <i>oystershell scale</i> .
Putnam	dormant oil diluted	Apply when plants are still dormant in late winter. Do not use on evergreens.
San Jose	according to label	For tulip tree scale, a malathion spray in late September or in early spring is also effective.
Tulip tree		
Spring cankerworms	Same as for catalpa sphinx	When leaf buds open in spring, while worms are still small.
Spruce budworms	Same as for fall webworm	Spray when caterpillars are noticed.
Sycamore lace bugs	carbaryl malathion	Spray when nymphs appear, usually in late May.
Thrips	Same as for aphids	Mainly on privet. Spray foliage thoroughly.
Yellow-necked caterpillars	Same as for catalpa sphinx	Spray foliage when worms are small.
Zimmerman pine moths	malathion	Spray in mid-August and again two weeks later. In each spray use twice the amount of malathion suggested in the chart below.

¹ Treatment dates are listed for central Illinois. In southern Illinois apply 2 weeks earlier and in northern Illinois 2 weeks later.

Amount of Insecticide Needed for Volume of Spray

	1 gal.	6 gal.	100 gal.		1 gal.	6 gal.	100 gal.
carbaryl 50% W.P. ¹	2 tbl.	¾ cup	2 lb.	chlorobenzilate 25% W.P.	1 tsp.	2 tbl.	2 lb.
diazinon 25% E.C. ²	2 tsp.	4 tbl.	1 qt.	dicofol 18.5% E.C.	2 tsp.	4 tbl.	1 qt.
lindane 20% E.C.	1 tsp.	2 tbl.	1 pt.	dimethoate	2 tsp.	4 tbl.	1 qt.
malathion 50-57% E.C. ³	2 tsp.	4 tbl.	1 qt.				

¹ Do not use on Boston ivy. ² Do not use on ferns or hibiscus. ³ Do not use on canaert red cedar.

Note: E.C. = emulsion concentrate; W.P. = wettable powder.