

Malathion and Sevin mixed

Problem: Malathion and Sevin are used in combination by some companies for insect control on trees. At what rate should each be applied when mixed together? What are the advantages of this mixture? (Canada)

Solution: The rate at which malathion and Sevin are mixed depends upon the pests to be controlled. For example, malathion can be used from 1.5 pints/100 gal. to 2 pints/100 gal., depending upon the pests to be controlled.

Similarly, 1 qt./100 gal. of Sevin is recommended for most pest control, but when dealing with beetles (like Ips), 2 qt./100 gal. of Sevin is recommended. The rate of these mixtures can be selected depending upon the pest problem.

When mixing malathion and Sevin, do not reduce the amount from their recommended rates because these insecticides are, for the most part, effective on different pests. Reports suggest that a mixture of these would give broad spectrum control of various insects.

Soil drench for birch trees

Problem: Can Cygon 4E be used as a soil drench for birch trees when applied at a rate of 3/4 oz. per inch diameter of trunk? What time is best for soil drench? Can Cygon 4E be used as a paint on the bark for treatment of birch trees? At what time is it best for Cygon paint? (Canada)

Solution: The Cygon label does not indicate that it can be used as a soil drench for birch trees. Check with your pesticide regulatory agency or the Ministry of Agriculture in Canada to determine the feasibility of its use around birch trees. There is no information on the label to indicate that Cygon 4E can be used as a paint on the bark of the birch tree.

Woolly aphid control

Problem: Can you suggest a method of controlling woolly aphids in fir trees other than using diazinon or malathion? My success rate has been only fair with those pesticides. Would a systemic give better results? (Canada)

Solution: The woolly aphids you are referring to are not true aphids. They are adelgids (*Adelges piceae*). Adelgids are a pest on true firs (*Abies* sp.). It does not affect Douglas fir, *Pseudotsuga menziesii*, a tree that is not a true fir.

Balsam woolly aphids are reported to be all females in the United States. The adults are less than one millimeter long and are purple to black when the straw-colored wax is removed. They are wingless

and remain attached to trees with their long penetrating mouth parts.

The eggs hatch into very small crawlers which can be spread to other areas through wind current. After reaching a suitable site, these crawlers introduce their feeding mouth part into the bark and develop whitish, waxy woolly material.

An early sign of damage is a small swelling or "gouting" at the end of the twig. If the infestation is severe, the whole trunk will be covered with the "wool" of the aphid. More susceptible firs such as balsam (*Abies balsamea*) or Subalpine fir (*A. lasiocarpa*) may be killed before the terminal swelling occurs.

Spray with Orthene systemic insecticide. This will kill the insects, but the woolly material may remain. It is important to spray thoroughly to get proper coverage to obtain good control. Read and follow label specifications.

Information on Basagran

Problem: You recently wrote about Basagran for use on nutsedge. Where can I obtain more information on the chemical and its availability in Asia? (Singapore)

Solution: For information on Basagran, contact BASF Wyandotte Corporation, Parsippany, New Jersey 07054 USA. BASF personnel should be able to answer your question concerning Basagran's availability in Asia.

Chemical over-application

Problem: If we follow label specifications, is it possible to over-apply an insecticide/fungicide on a tree with a recommended concentration or would the excess spray run off? (i.e. 1.25 liters malathion per 1,000 liters water and 1 lb. polyram per 100 gal. water) I am not referring to the concentration of the chemicals, but the spray applicator spraying too much of the mixture on the tree. (Canada)

Solution: It is unlikely that you could over-apply an insecticide/fungicide on a tree with a recommended concentration. However, if the label specifications are not followed, the results may vary. Another thing to remember is to make sure that the material is labelled for that particular pest, host, and use, and that the foliage is not blasted or sprayed when the temperature is too hot.



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Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.