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EC71-1526 Elm Leaf Beetle

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ELM LEAF BEETLE

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Description and Life History

The elm leaf beetle is an imported pest, having been in the United States since about 1834. It is almost exclusively a pest of elms—American, Chinese and others.

Adult beetles somewhat resemble western corn rootworms in being yellow and black with a black stripe near the outside of each wing cover. However, these beetles are active early in the spring as soon as warm weather arrives whereas rootworms do not emerge until late June and early July.

Elm leaf beetles are gregarious, bunching up in the fall to seek a place to hibernate. The site selected for overwintering is often outdoors, beneath piles of leaves, boards, etc., but often beetles move into homes and animal dwellings, hiding beneath floor boards, in cracks in walls and in crawl spaces. Whenever the weather warms beetles become active, making their presence noticeable and disturbing to homeowners. They are completely harmless in homes, except for their nuisance value.

In the spring, after the beetles emerge from hibernation, they move to elm trees, depositing their eggs on the undersides of the newly emerged leaves. The yellow eggs are laid in groups of 25 or more and resemble small lemons. The presence of large numbers of eggs indicates possible severe defoliation during late May and June. Both larvae and adults will skeletonize elm leaves, leaving nothing but the leaf veins if the attack is severe. Most trees will not be killed unless the defoliation is nearly complete for two or three consecutive years.

Two generations of yellow and black striped and spotted larvae are produced each year in Nebraska. The elm leaf beetle is generally statewide in distribution. When the slug-like larvae are mature (about three weeks after emerging from the egg) they move down to the base of the trunk to pupate. The adults emerge one to two weeks after pupation.
Damage

Beetles in homes can simply be picked up with a vacuum cleaner or sprayed directly with a household spray bomb containing pyrethrins, diazinon or malathion. On elm trees, if the homeowner is determined to spray, any one of several insecticides can be effective, providing the tree is thoroughly covered by the spray.

Suggested insecticides and dilutions are shown in Table 1.

Table 1. Insecticides and dilutions for elm leaf beetles.

<table>
<thead>
<tr>
<th>Material</th>
<th>Amount per 1 gallon water</th>
<th>Amount per 100 gallons water</th>
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</thead>
<tbody>
<tr>
<td>Sevin 50% WP</td>
<td>2 tbsp.</td>
<td>2 lb.</td>
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<tr>
<td>Methoxychlor 50% WP</td>
<td>3 tbsp.</td>
<td>3 lb.</td>
</tr>
<tr>
<td>Diazinon 25% (Spectracide)</td>
<td>2 tsp.</td>
<td>1 qt.</td>
</tr>
<tr>
<td>Malathion 50% EC</td>
<td>1 tbsp.</td>
<td>3 pt.</td>
</tr>
</tbody>
</table>

About 15 gallons of finished spray will be necessary to treat a tree 30 feet high. It may be impractical to treat large trees since high pressure sprayers may be necessary to obtain adequate coverage.

Many larvae can be killed at the time they move down to the trunk and base of trees to pupate. At this time spray with malathion or diazinon to kill them by contact with the spray.
. . . Store in original labeled containers out of the reach of children.

. . . Eliminate empty container hazards—
   Rinse empty metal, glass, and plastic jugs and cans. Two rinsings remove 95% of the removable pesticide. Then place in the garbage or bury.
   Burn paper bags and cardboard boxes making sure to stay out of the smoke or put them in the garbage.