Least-toxic Control of Elm Leaf Beetles

Elm leaf beetles attack all species of elm, but prefer English and American Elms. These beetles feed on tree leaves, mainly causing aesthetic damage. However, this does stress the tree and may cause susceptibility to disease.

Adult beetles spend the winter in dry protected areas such as a garage or attic. They do not bite or damage fabric or furniture. In the spring, the adults fly to nearby elm trees and begin to feed. Population levels are low at this point in the season. Eggs are laid on the leaves. When the larvae hatch, they feed on the leaves as well. Full-grown larvae then descend the tree trunk to pupate. As adults (after about 18 days) they fly back to the leaves of the tree and continue feeding.

The cycle repeats itself (two times in warmer climates). Adults emerging in the fall find a protected home for the winter.

Monitoring

- Starts looking for these beetles' presence after all the first generation eggs have hatched but before the first larvae begin crawling down the trunk. This will usually take place in late May, but begin monitoring in early May.
- To monitor, look at the leaves of the trees to spot the larvae. If you do not see any eggs, you probably do not have a problem. If there are a large enough number of larvae, you can take control measures.
- Use your judgment regarding whether or not there are enough beetles to take control measures. You will learn through subsequent seasons what threshold level you can deal with.

Control

Unfortunately, there is little information regarding alternatives to pesticides for elm leaf beetle control. Use a sprayer to spray a narrow band around the trunk of susceptible trees instead of broadly spraying the whole tree. Only take such action when the population is high enough to warrant it.

Apply the pesticide high enough on the trunk to limit human contact with it. The band of pesticide will kill the full-grown larvae crawling down the trunk. Monitor and apply before this activity occurs.

References

Beyond Pesticides/NCAMP. "Least Toxic Control of Pests In the Home & Garden: A series of pest control & chemical factsheets." Washington, DC.

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