



## BAGWORMS

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**Identification** — In winter, spindle-shaped bags one or two inches long hang from trees and shrubs. In summer, similar but smaller bags may be seen, but the black worm inside moves them from place to place.

**Life Cycle and Habits** — The overwintering bags contain the eggs that produce a brood of worms in the summer. In southern Illinois these eggs hatch during the latter part of May; in central Illinois, about the first week in June; and in northern Illinois, during the latter part of June. Newly hatched worms may be easily overlooked. On leaving the mother bag, the worms feed on nearby foliage and construct a bag with silken threads and bits of foliage taken from the host plants. Hence the bags on maples look very different from those on arborvitae. The bags enlarge to accommodate the rapidly growing worms; and everywhere the worm goes, the bag goes.

### Use one of the following materials:

Lead arsenate, or  
 Malathion, 50% to 57% emulsifiable concentrate,  
 or  
 Malathion, 25% wettable powder, or  
 Sevin, 50% wettable powder, or  
 Toxaphene, 60% emulsifiable concentrate

It may be necessary to repeat the spraying if rain follows soon after treatment. Sprays applied in late summer after the worms stop feeding or during the winter are not effective. **The worm population, however, can be reduced by picking off and destroying**

In the United States and Canada live 1/15 of the people of the world. They produce:

- 50% of the world's aluminum
- 20% of its iron and steel
- 74% of its uranium
- 48% of its autos, trucks, buses
- 42% of its electric power
- 50% of its wheat
- 50% of its corn
- 42% of its beef and veal
- 35% of its pork

The annual income per capita for the United States is 31 times that of Asia, twice that of Latin America, 5 times that of the world average, and 3 times that of Western Europe.

— From Friendship Press book

Revolutions are made by the poor of the world.

— From Friendship Press book

It is estimated that the teen-agers of the U.S. spent over ten billion dollars in 1963.

— From Friendship Press book

When full grown (in late summer), the worms transform into the pupal or resting stage and later into the adult stage. The wingless and almost legless females stay in the bags, while the black furry males, which have wings, leave the bags and fly about to mate with the females. A female may lay as many as 500 eggs, tamped into the upper part of the bag with scales from her body. After laying eggs, the female dies. There is only one generation a year.

**Nature of Injury** — Bagworms feed on foliage of evergreens as well as on a wide variety of deciduous trees and shrubs. These plants may be partly or almost completely defoliated. Defoliation of deciduous trees generally does not cause them to die, but a defoliated evergreen is likely to die.

**Control** — It is important to spray while the worms are small, soon after all eggs have hatched. The larger the worms, the harder they are to kill. To prevent damage to the plants, spraying should be completed in June. The following sprays are recommended for bagworms:

### Quantity of material for

<u>1 gallon of water</u>	<u>100 gallons of water</u>
1 tablespoon	4 - 6 lbs.
2 teaspoons	1 qt.
1 tablespoon	4 lb.
1 tablespoon	2 lb.
3 teaspoons	3 pt.

**the overwintering bags before the eggs hatch in the spring.**

It is usually advisable to supplement lead arsenate, toxaphene, and Sevin with a miticide like Aramite, chlorobenzilate, or Kelthane to control mites.

**Caution:** Malathion may injure Canaert red cedar.