

UK COOPERATIVE EXTENSION SERVICE

UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE

CANKERWORMS

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Cankerworms, also called inchworms, loopers, or spanworms, are caterpillars that move with a distinctive "looping" motion. Small numbers of cankerworms are present every year but occasionally large outbreaks occur. When this happens, cankerworms can cause significant defoliation of a variety of deciduous landscape and forest trees.

Newly hatched larvae eat the soft tissue of young leaves at the tips of branches, giving them a skeletonized appearance. Larger larvae eat all but the midribs or tougher veins of expanded leaves. Most damage occurs about the time the leaves become fully developed. Trees may be completely stripped of foliage; some trees never have a chance to leaf out. Cankerworms have a distinctive appearance and movement because they have fewer fleshy legs along the abdomen than do typical caterpillars. Most cankerworms have five pairs of fleshy abdominal legs, including the pair at the tail end. The spring cankerworm has two pairs of these fleshy legs while the fall cankerworm has three pairs. The color and markings of these caterpillars can vary. If pale stripes can be seen along the sides of the body, the spring cankerworm has one per side and the fall cankerworm has three.



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Fall cankerworms emerge as adult moths in late fall. The wingless females crawl up tree trunks onto branches, are mated by winged males, and then lay single-layered masses of flower-pot shaped eggs on limbs and trunks. The eggs are the overwintering life stage. Spring cankerworms overwinter as pupae and emerge as moths beginning in February. The wingless females crawl up tree trunks, are mated, then lay oval-shaped eggs in masses under loose tree bark.

Cankerworm outbreaks sometimes occur two to three years in succession and then virtually disappear for a few years. If an outbreak can be anticipated, tanglefoot applied to tree trunks in a band two to four feet aboveground, will prevent female moths from crawling up and laying eggs in the trees. This technique may be preferred to insecticide sprays especially when dealing with very large trees.

Usually, outbreaks cannot be anticipated so an insecticide can be applied to prevent complete defoliation of trees.

Biorational insecticides (Group Number*)	
Common name	Example brand names
Azadirachtin (26)	Neem, Azatin
Insecticidal soap	M-Pede
Bacillus thuringiensis (Bt) (11a)	Dipel, Biobit, Caterpillar Killer
Pyrethrins (3)	Pyrenone
Spinosad (5)	Conserve, Spinosad Concentrate

The eggs of both species hatch in early spring, about the time tree leaves are unfolding. Cankerworms feed for three to four weeks, then either crawl or drop to the ground on silken threads and pupate in the soil.

Conventional Insecticides (Group Number)	
Acephate (1b)	Orthene
Carbaryl (1a)	Sevin, Carbaryl
Bifenthrin (3)	Talstar, Bug-B-Gon Max
t-Fluvalinate (3)	Mavrik
Cyfluthrin (3)	Tempo, Multi-Insect Killer
Bifenthrin+ Imidacloprid (3+4)	Allectus
Cyfluthrin+ Imidacloprid (3+4)	Discus
Cyhalothrin (3)	Scimitar
Permethrin	Astro, TenGuard

* Insecticides with the same Group Number have the same mode of action against the target pest.

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