

Caterpillars on Tomatoes

recognition of the kind is the first requirement in control program

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Caterpillars become pests of field tomatoes in northern California immediately after the first arriving pest—the tomato mite—and continue through the season.

The visible evidence of the damage they inflict to tomatoes serves as the best clue to the kind of caterpillar present, and indicates the treatment which should be applied.

Recognition of the distinctive appearance of each kind of caterpillar and where they are found is the first need in planning an effective control program.

A generalized program in the northern part of the state in a normal year calls for three applications of insecticides:

The first, between July 1 and 15; the second during the first two weeks of August; and a third, between September 1 and 15.

Such a program will be based on the natural habits of the pests, their time of appearance and the conditions fostering their growth. It will be specifically designed to control several pests at a time, thus saving money by eliminating unnecessary applications.

A planned control program will consider the relative advantages of dusting and spraying—with the goal of providing protection to the tomato crop.








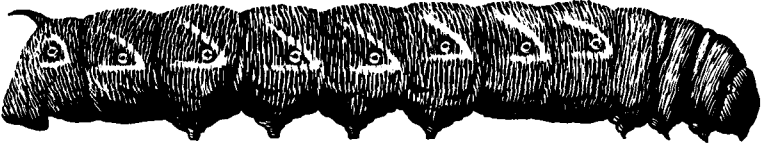
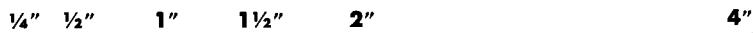
The time element is the most important part in a planned control program.

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A detailed report on this subject, with control recommendations, is published in the Agricultural Experiment Station Circular 384, "Controlling Common Pests of Tomato in Northern California," and is available without charge at the local office of the Farm Advisor or by addressing the Publications Office, College of Agriculture, Berkeley 4, California.

Mature Caterpillars of Actual Size	How They Look	Where to Find Them	
 Tomato Pinworm	When newly hatched, the tiny larvae are light pink; when fully grown to ¼ inch they appear grayish purple.	In a folded leaf, or in dry burrows in a fruit.	
 Potato Tuber Moth Larva	When fully grown these are white, yellow, pinkish or greenish with head and prothoracic shield dark brown.	In dry burrows in the fleshy part of the fruit.	
 Beet Armyworm	These appear in several color phases which range from pale green to nearly black. They are darker above than below, and down each side is a lighter stripe. Fine lines run along the dorsal side.	On the foliage, usually toward the inside of the vine, or on the outside of the fruit.	
 Alfalfa Looper	These are pale green and longitudinally striped with fine, whitish lines. In crawling they arch their backs and hence are called loopers.	On the leaves, as they are primarily foliage feeders.	
 Corn Earworm	These vary from green to almost black, marked with stripes of various colors. They are sparsely covered with rather long hairs arising from tubercles.	Inside the fruit in all stages of growth.	
 Yellow-Striped Armyworm	Almost black with two prominent and many fine, bright yellow stripes on the side.	On the foliage, or on the outside of the fruit.	
Tomato Hornworm		These are green and have seven diagonal white stripes on the sides, and a red horn at the rear.	On the vine, which they may completely defoliate.
Tobacco Hornworm		Similar in appearance to the tomato hornworm, but with eight "V-shaped" markings formed by longitudinal and diagonal stripes down the sides. In the larger specimens the horn is black instead of red.	On the vine, which they may completely defoliate.
			

Pictured are the fully-developed caterpillars. The TOMATO MITE—another major enemy of tomato—is not pictured because of its microscopic size.