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U. S. DEPARTMENT OF AGRICULTURE

QUESTION BOX

What cuts down young plants at night?
Collars control cutworms?
How prepare cutworm bait?
What insect strips bean plants?
How deal with Mexican bean beetle?

ANSWERS FROM

entomologists of the U. S. Department of Agriculture

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Questions, questions and more questions from gardeners are coming in the mailbag these days. Today the questions up for consideration are about garden troubles. And the answers to these questions come from entomologists of the U. S. Department of Agriculture.

Let's begin with some inquiries about dealing with garden pests. Here's a familiar question: "Can you tell me what animal or insect cuts down plants at night? Every morning lately I have been finding some of my young cabbage plants cut off close to the ground. I don't know what to do about it."

Entomologists say cutworms are at work in your garden. In spring and early summer when you find seedling plants such as peas, tomatoes, cabbage, lettuce or melons cut off near the ground, you can be pretty certain the cutworm is doing the damage.

Many kinds of cutworms go through the winter in the soil and begin work again early in the spring. Vegetable crops are not the only ones cutworms attack. They also feed on many ornamental plants and field crops. When you see a plant cut down this way, you usually will find the guilty worm curled up just under the soil within 3 or 4 inches of the plant.

Probably the easiest way to protect cabbage plants, or tomato plants, or any of the plants with a single straight stem is to place paper collars around them when you set the young plants out. A circle of stiff paper around the plant will bar the worms if the paper sets down in the soil about an inch and is perhaps 2



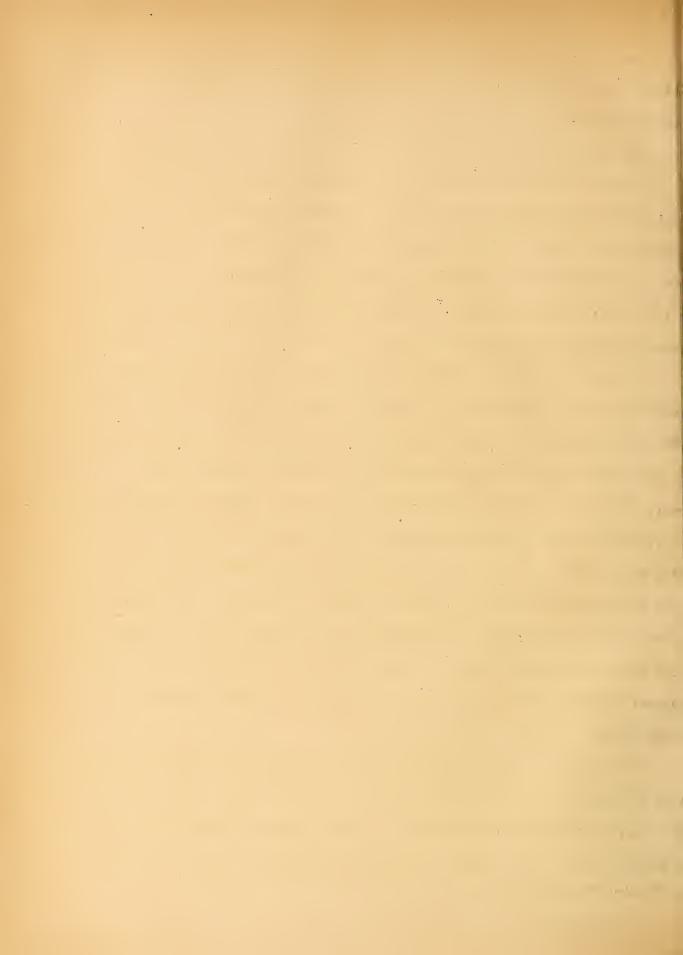
inches above ground. You see, the worms don't go deep in the ground, and won't climb over the paper.

If you find a plant cut off, look for the worm just beneath the surface of by
the soil near the plant, and destroy the worm before you reset/crushing it with your
foot. Shingles or small boards near the garden often make daytime hiding places
for worms. They also hide under stones or rubbish near young plants.

In larger gardens the best way to get rid of cutworms is to put poisoned bait around the plants or between rows. Mix 2 level tablespoons of white arsenic or Paris green with 5 pounds of dry bran. Then add 5 to 6 quarts of water. Stir well as you add the water. Use only enough water to make a crumbly mass. Put this poison bait out in the garden in the early evening so that it will be fresh, and moist, and tempting to the cutworms when they come out to feed at dusk. Put it around plants or spread it generally over the ground or between rows.

But here's a word of warning about this bait. Both white arsenic and Paris green are poisonous to man and animals—that is, to your dog, your chickens or your children as well as to cutworms. Therefore, all containers holding these materials must be kept plainly labeled "Poison" and under lock and key. Any bait left over after you have used it in the garden should be kept safely out of reach of animals or children. The same is true of the pail you mix the bait in. And be sure to wash your hands thoroughly after you have handled the bait. If you prepare and apply the bait properly, it is safe to use.

You may want to have on hand printed information giving all the details about mixing bait and dealing with cutworms. You are welcome to a leaflet published by the U. S. Department of Agriculture. Send a postcard asking for Leaflet No.2 called "Cutworms in the Garden." Address your postcard to the U. S. Department of Agriculture, Washington, D. C.



Now to answer a gardener who reports serious trouble growing beans. She writes: "Last year some insect destroyed most of the leaves and even the beans on my pole and snap beans. Is there any way I can treat the bean seeds before planting this year to prevent such damage?"

Entomologists answer that the insect doing the damage was probably the Mexican bean beetle which has a habit of completely stripping the bean plant within a week or two. The Mexican bean beetle is a yellow or brownish ladybeetle, spotted with black marks. It feeds on beans of all kinds. The spiny yellow worms or grubs of this beetle do the damage. They feed very rapidly on the underside of the bean leaves until they make lacework of the leaves and completely strip the plant.

To go back to the question in the letter, the entomologists say you can't treat bean seeds to prevent trouble from this pest, but you can save your beans by spraying or dusting, and help a good deal by destroying both beetles and eggs as you find them. When the coppery-colored beetles begin to appear on the young bean plants in May and June, gather and kill them. About a month later crush the masses of yellow eggs that you find on the leaves. As soon as the beetles appear, and later when you first notice the eggs, start spraying or dusting. Use a dust or spray containing derris or pyrethrum, or a spray of cryolite. Apply thoroughly and carefully to the underside of the leaves. If you use a cryolite spray on snap beans, don't spray after the pods begin to form. If you use derris or pyrethrum, you can continue treating the pods, because derris and pyrethrum don't leave harmful residues on the beans.

The answers to many other questions about insects in the garden are in a bulletin published by the U. S. Department of Agriculture, Washington, D. C. If you want a good first-aid manual for your victory garden, write for this bulletin. It is called "Diseases and Insects of Garden Vegetables", Farmers' Bulletin No. 1371. As long as the supply holds out, it is free.

Listen for more questions and answers on Thursday.