

The Cabbage Hair Worm is Absolutely Harmless.

Messrs. Editors: That the cabbage hair worm possesses poisonous properties is an opinion still clung to by many of our good citizens, while others are in doubt as to its real identity. Several inquiries from correspondents have been received at the Department of Agriculture this fall asking for information about this creature, while in some cases specimens were sent in for identification. One person writes: "These little things (cabbage snakes) are getting right common and we would be glad to know whether they are poisonous or not." A teacher: "Would like to know something about cabbage snakes which are said to be poisonous and cause death to people eating cabbage with which they have been cooked."

So it can be seen that the great stir about this worm, which was created by unreliable newspaper reports during the fall of 1903 and 1904, left behind erroneous impressions which have not yet died out.

The cabbage hair worm, or "cabbage snake," of popular account, is a small cylindrical creature best described as resembling a piece of good sized basting thread, or a strand of corn silk. They are white, or whitish in color. When mature they usually measure from four to eight inches in length and about one-fifteenth of an inch in thickness. One specimen received at the Department measured twelve inches in length, an uncommonly long one. These worms are entirely without organs of locomotion and move by a wriggling motion.

Several species of hair worms have been found on cabbage, but the most common one is *Mermis albicans*. This particular species is parasitic to insects, i. e., passes the greater part of its life inside the bodies of insects. The young are born in the ground during the spring. Soon after birth they burrow upward and enter the bodies of such insects as lurk under leaves and rubbish at the surface of the ground. Inside the bodies of these insects the hair worms develop and, when mature, they leave to again enter the ground where they pass the winter.

As some of these insects, parasitized by the worm, are among those which feed to a more or less extent upon cabbage, it often happens that the hair worm's host is upon the crucifer at the very time when the worm wishes to leave its host's body. Hence the fully-developed creature, departing from its place of development, finds itself upon the cabbage head and, as instinct leads it to go downward, it consequently burrows into the cabbage head deep between the leaves. The cabbage hair worm does not select cabbage through its own choice, but is accidentally transferred there through the agency of insects. It harms the cabbage in no way except to decrease its market demand.

Newspaper reports commenting on the injurious nature of the hair worm are entirely groundless. Such tales as have been concocted of "persons taken ill and vomiting," or "entire families being poisoned" through eating cabbage affected by these worms, are false, and, if you will pardon an Americanism, I would label this class of articles as an all-too common type of "newspaper science." These creatures are perfectly harmless, possess no poisonous properties whatever, cannot bite or sting. Extensive experiments by a medical man in Tennessee have proven conclusively that the cabbage hair worm produces no toxic effect, even when taken alive into the digestive tract.

R. S. WOGLUM,
Acting Entomologist, Raleigh.

Do Bats Carry Bed-bugs?

Messrs. Editors: If you don't consider it a foolish query, and in advisable to answer in your columns, I'd like to have some of your scientific men say whether or not bats carry around bed-bugs.

It is a common saying in some localities, that bats carry around bed-bugs and that they will cause rooms that they may have entered to become infested with bugs.

Please ignore this query, if it is a silly one, but if it is answered by one who really knows, it will be a source of great satisfaction to an interested reader.

E. S.
Henrico Co., Va.

(Answer by Prof. T. Gilbert Pearson.)

I have written to some of those naturalists in America who are in the best position to give information regarding the inquiry of E. S. The replies received from them add but little to what can be found in the latest works on natural history.

About 450 species of bats are known to exist in the world. The bat is, of course, not a bird, but in a mammal, a milk giver, and belongs to the same class of animals as the cat, the cow, the whale, and man himself. In flying, the mother bat usually carries her young with her, as I have on more than one occasion proved to my satisfaction, by finding the young clinging to the nipples on the breast of the mother. The great majority of bats feed entirely upon a diet of insects, although there are some large ones in the tropics, notably the "flying foxes" of the Malay Archipelago which feed wholly upon fruit. These bats are of enormous size, many of them being over three feet in expanse of wings. So destructive are they to cultivated fruit, that there is a law in the United States which prohibits their importation to this country, and so rigidly is this law enforced, that no one specimen can be imported even for exhibition in the zoological garden.

Mr. Gerrit S. Miller, of the United States National Museum, Washington, D. C., who has made a close study of the order of bats, has written me under date of September 26th, as follows: "I may say that bats are not known to carry bed-bugs. I would not attempt to say that this never happens, but I think that the popular belief arises from the fact that a wingless fly (*Nycteri-biidae*), commonly found on bats, somewhat resembles a bed-bug in form."

Yours very truly,
T. GILBERT PEARSON,
Sec. State Audubon Society.

From an Appreciative Virginia Reader.

Norfolk, Va., Oct. 27, 1905.

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