VIRGINIA COOPERATIVE EXTENSION SERVICE

VIRGINIA TECH

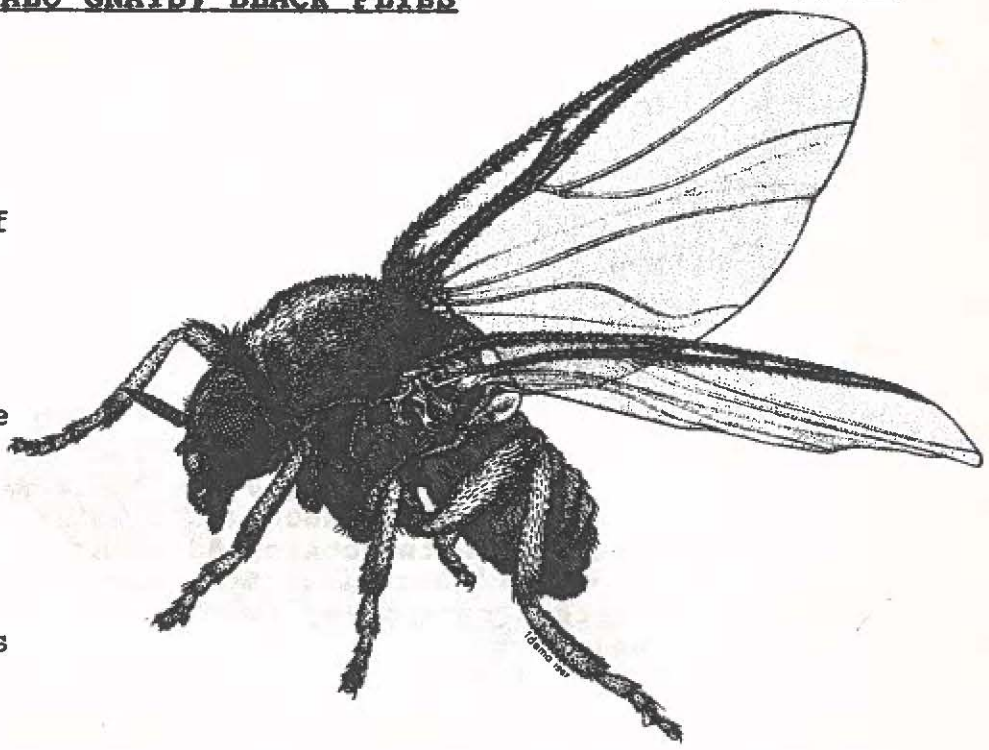
VIRGINIA STATE

No. 151

May 6, 1986

INSECT NOTES

BITING GNATS, BUFFALO GNATS, BLACK FLIES



In Virginia there are a few species of gnats that come together in large swarms in the spring. Many of these flies are harmless (non-biting), and are rather short lived. Black flies or buffalo gnats are flies that are common in the spring, but they usually "swarm" around the head of people and animals, and the female gnats will often bite--leaving a swollen and painful welt. These bloodsucking flies are common every spring in Virginia, and this year will probably not be any different.

Larvae of these flies are found in running water, and shallow mountain creeks. Some species breed in large rivers, and others in temporary streams. The adult females lay eggs in or near the water. The larvae remain in the water, attaching themselves to rocks, vegetation and other solid objects. The larvae feed on organic matter that is washed past them in the water.

Adults may migrate 7-10 miles from their breeding site in search of a blood meal. Some may be carried further by the wind.

There is perhaps no other insect of equal size that can inflict so painful a bite as can the buffalo gnat. It is a daytime biter and is rarely found indoors. The mouth parts consist of six bladelike lancets. Humans as well as domesticated animals are attacked. The eyes, ears, nostrils, wrists, and all exposed parts of the body of man are subject to attack.

Control of these flies is very difficult for the average homeowner. Mosquito repellents seem to work very well. However, these flies can be very numerous at times, and the only relief is to stay indoors. Treatment of local streams is almost impossible, as pesticides in clean water streams can be harmful to other animals. These flies are usually common in the spring and early summer, then again in the fall. The best control may be to limit outdoor activity when the flies are abundant.

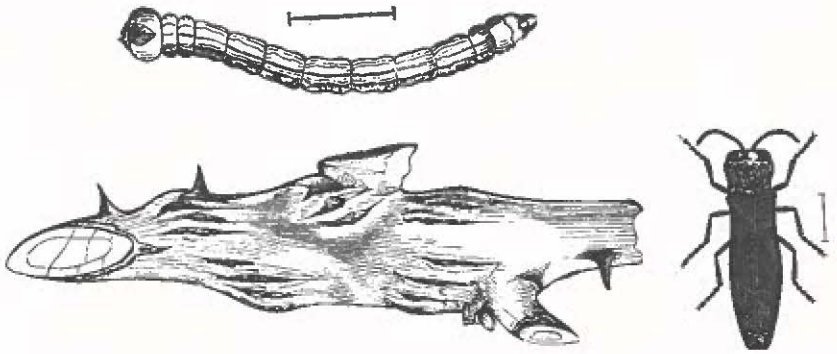
RASPBERRY CANE BORER AND THE RED-NECKED CANE BORER

There are two beetle grubs that can cause severe damage to raspberry bushes, they are the raspberry cane borer and the red-necked cane borer.

Raspberry cane borer. - The evidence of an infestation includes the tips of shoots of raspberry wilting; two rows of punctures one inch apart at base of wilted portion, with a small hole between. Canes may be burrowed to the base before fall.

Control measures include looking over the bushes occasionally in June and early July, and remove all withered tops. Be sure to cut low enough to catch the grub--destroy the portion cut off, with the contained grub.

Red-necked cane borer. - The canes appear swollen and distorted (see figure below). The best control is inspect the bushes in the early spring and to remove the branches with swellings.



HOPLIA BEETLES - AN INFREQUENT TURF PEST

Hoplia sp. beetles have been reported from several regions in the state this spring. These small (1/4 -1/2 inch), grayish-black beetles are related to other scarab beetle pests of turf, i.e. the Japanese beetle, June beetles, and green June beetle. Hoplia sp. beetles frequently emerge in large numbers and fly over turf; they may come to light at night. The presence of these insects frequently causes concern among homeowners and golf course superintendents.

Adults of these beetles emerge in the spring, frequently during the first few warm days following a rain. They may be abundant in one area one day, and gone the next. The adults have been reported to feed on flowers and the leaves of apple and peach. Larvae feed on the roots of grasses--similar to the larvae of other scarab beetles. Hoplia beetles have a one year life cycle, and may be present on a regular (yearly) basis. However, population may peak every 2-3 years.

Control of Hoplia sp. beetles is best accomplished by treating for the grub stage. Follow the treatment recommended for other white grubs, and apply the insecticide in late June or mid-July.

WHAT'S NEW IN TERMITE CONTROL

There are new chemicals available for the professional pest control operator to apply for termite control! Homeowners now have a choice between the long residual (35 years) insecticide, **chlordane**, or a moderately residual (13-18 years) insecticide, **Dursban TC**, or two medium residual (5-8 years) insecticides called **Torpedo** and **Dragnet**. The medium residual insecticides are pyrethroids, and are relatively odorless. All the other termiticides have some odor, but it does not persist.

As you can guess, the new insecticides will cost more! However, they should not be considered more effective. All these materials kill or repel termites, so do it longer than others.

For the next several years homeowners will have a choice of one of several chemicals for termite control. Some pest control operators may carry only one or two of the chemicals available, simply because it is too expensive to have all of them in stock. (Not because one is more effective than another.)

INSECT SURVEY

MAY INSECTS

April and May are when the Insect Identification Lab receives a large number of elm leaf beetles. The elm leaf beetles often overwinter in houses and in the spring emerge and leave, or try to leave, the house. They then search out elm trees to lay their eggs and start the next generation.

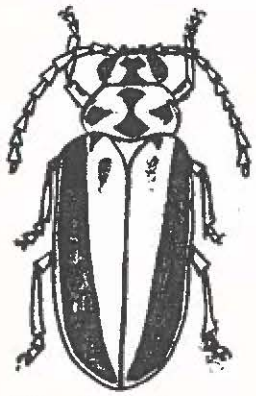
The adult beetle is about 1/4 of an inch long. It is yellowish to green in color with two long black stripes running down each side of the back.

One of the most common insects received throughout the year is the Indianmeal Moth. These are small moths about 1/4 to 1/2 inch long. The important identifying characteristic of this insect is the coloration of the fore-wings. The wing is divided into two regions by its coloration. On the half of the wing closest to the body it is a light tan and on the outer half it is a coppery-red color. When the moth is at rest it holds the wings close to the body giving the whole insect a banded appearance.

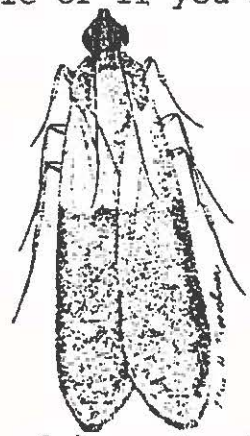
Cicada Huts/Locust Huts. This is the time of year when cicadas (locusts) begin to emerge from the soil where they have been feeding on tree and shrub roots. As the cicadas are leaving the soil they often construct closed earthen turrets, two to three inches tall. The turrets or huts are constructed of mud and are often seen under trailers, crawl spaces and porches.

Insect I.D. Lab. I would like to take this opportunity to introduce myself. My name is Eric Day and I will be the new manager for the Insect Identification Laboratory. I came here by way of Illinois where I just finished my Masters of Science in Entomology. I will continue to run the laboratory in the manner that it has been in the past. The phone number will remain the same (703)961-4899, SCATS-230-4899, and feel free to call me about the progress of a certain sample or if you have any questions.

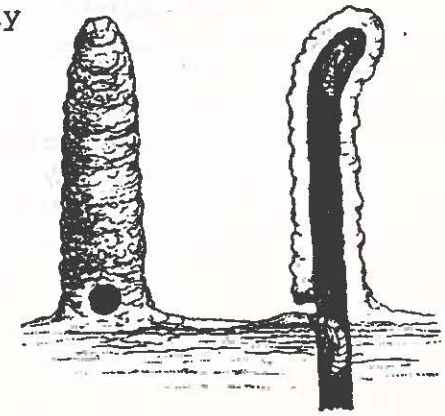
-Eric Day



Elm leaf beetle



Indian-meal moth.



Cicada Huts