

Some Chinch Bugs Aren't

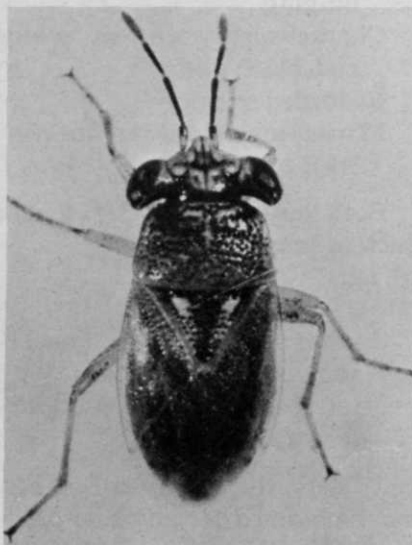
By Ira Caplan

New York State Agricultural Extension Service

In May of 1963 the proprietor of a golf course in Rockland County called us in to check on the identity of an insect infestation. He had been told that the abundant insects were chinch bugs and that an expensive spray program would be required to prevent wide-spread damage to his turf. The greens and fairways most certainly had a heavy infestation of insects, but close examination disclosed that the insects were not chinch bugs. At the time we could only tell the proprietor what the insects were not, and it was some time later that we were able to obtain an authoritative identification by entomologists in Washington. The report was that the invaders were indeed true bugs, as is the chinch bug, but with the rather descriptive common name of "Big-eyed Bug" (*Geocoris bullatus*). It was also reported that this insect was not parasitic upon grass and thus that no expensive insecticide application was necessary.

History and Distribution

The "Big-eyed Bug" (*Geocoris*) was first described in the 1800's and first found in New York State in the mid 1920's. The recorded distribution in New York State is rather wide. *Geocoris* has been found in numerous areas of Long Island, frequenting the hot, sandy banks of both shores. It is found all along the Hudson Valley, north to the Adirondacks and across the state to the Buffalo area. During 1963, as a result of our publicity throughout the Extension Ser-



Big-eyed Bug

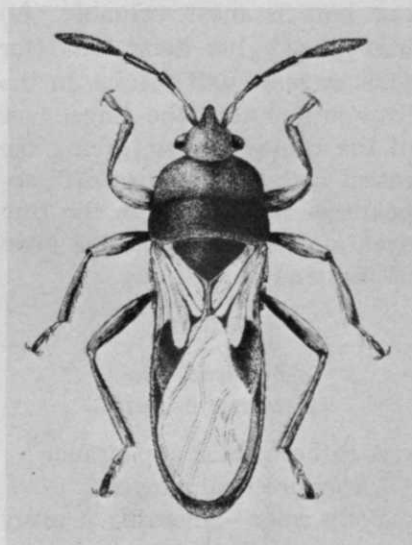
vice, the Big-eyed Bugs have been reported in the Syracuse area, the Schenectady-Albany area, and the New York Metropolitan area.

Reference manuals record that in the United States the insect has been commonly found throughout Florida and ranges north to New Jersey, west to southern Indiana, Oklahoma, and Colorado and south and southwest to Texas, Arizona, California, and Mexico.

Habits of *Geocoris*

The Big-eyed Bug (*Geocoris*), like the chinch bug, is a true bug and both belong to the insect family *Lygaeidae*. The two insects frequent the same type of sunny, hot dry conditions, and we have often found all stages of both insects running together in turf areas.

Little is known about the biology and feeding habits of *Geocoris*. We do know that these



Chinch Bug

bugs are predaceous in habit, that is, they feed upon other insects in contrast to the chinch bug which sucks the sap from various grass plants. There is a report from Virginia that *Geocoris* feeds on insect eggs, plant bugs, and leafhoppers. In California, some members of the genus are reported to feed on mites.

Identify and Save

It is important that any turf manager be able to distinguish between the dangerous hairy chinch bug and the apparently harmless Big-eyed Bug. In general, damaging chinch bug infestations are very rare in New York State except in the southeastern area and on Long Island, whereas the Big-eyed Bug apparently is quite frequent throughout most of the state. Damaging infestations of the true chinch bug in up-state areas are usually traced to the importation of the insects in plant ma-

terial, and apparently there is no survival through the following winter.

Contrasts between the adult Big-eyed Bug and the chinch bug are clearly evident in the accompanying illustration. Since these insects are about the same size, and both very small (to 1/5 inch long), a hand magnifying lens is most valuable. An inexpensive 10x hand lens (for \$1.50 or less) will suffice. In the illustration note the huge eyes of the Big-eyed Bug, giving the insect body a "chopped off" appearance in contrast to the tiny eyes and small triangular head of the true chinch bug.

Adults

Big-eyed Bug (*Geocoris bullatus*)

A rather robust appearance
Large protruding eyes
Body color—generally a pithy

black, a reddish yellow tinge on the under or vertical surface

Blackish leg color
A rather rapid mover

Chinch Bug (*Blissus hirtus*)

A more slender body shape
Eyes smaller, not nearly so bulging
Characteristic whitish wings and black body
Reddish leg color
Moves much slower in contrast to *Geocoris*.

Both insects about 1/6 to 1/5 inch in length.

Nymphs

Similar to adults in appearance but not winged.
First two instars have characteristic banding.

To date, the Big-eyed Bug can not be blamed for any turf dam-

age. Thus it will behoove anyone who is to embark on an expensive spray program to learn what these insects look like. It may save some time and, to be sure, some money. But don't jump to conclusions! Some chinch bugs aren't but there are a lot of chinch bugs that are!

Spell It Out in Grass Via Warren's Monogram

Now you can spell out whatever message you desire in living grass, according to Warren's Nurseries, Palos Park, Ill.

Warren's Monogram Bluegrass, soon to be available to the public, can be used to spell out the name and address of home owner or business corporation. Lighter in color than Merion, for example, it stands out from the other grass in which it is planted.

BIG BRUTE TURF CUTTER

REQUEST an 8mm

color movie film of the
cutter at work,

FINLAND TURF CUT,

18035 Georgia Ave.,

Olney, Md. 20832



U.S. Pat. No. 3,357,499

The **BIG BRUTE** is for the professional who demands maximum efficiency for greater production. It is the latest advance in turf cutter engineering for high production performance in any soil conditions. Proven in the fields since 1963 by professionals. The **BIG-BRUTE** is the fastest turf cutter machine in production. The cutter is driven by a three point hitch tractor and its P.T.O., at speeds of low, second, and third, depending on soil conditions. This cutter has yield 33¼ sq. yards a minute in second gear, and 3 to 4 acres in a 8 hour day. The average blade life will give you from 6 to 15 acres, and the side coulters will yeild 25 to 35 acres, all blades and side cutting coulters are guaranteed never to break under any turf cutting conditions.

CIRCLE No. 14 READER CARD