

## Insects of Indiana in 1956

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As in 1955, major insect problems were fewer and of less importance than in normal years. In general, rainfall was ample until into September and thereafter conditions were unusually dry. Also temperatures throughout the year were below normal.

### Field Crop Insects

Cutworms. The glassy cutworm (*Crymodes devastator*) was more serious than for many years. Greatest damage was to corn in light sandy soils. Many thousands of acres of corn were destroyed in Starke, LaPorte, and other northern Indiana counties. The black or overflow cutworm (*Agrotis ypsilon*) was widespread throughout the State, especially in muck areas, but not as serious as a few years back.

European corn borer (*Pyrausta nubilalis*) overwintered in larger numbers than for several years, especially in the central and northern part of the state. The first generation larvae were very abundant in the early part of the growing season, but the population of borers dropped off rapidly so that the resulting number of adults were considerably smaller than was anticipated. Total damage by the corn borer in the state was light with a few scattered areas of moderately severe damage to early planted corn. Fall survey showed a low overwintering population.

The corn earworm (*Heliothis zea*) was generally more abundant than in 1955 with heavy infestations in the southern part of the state.

Alfalfa plant bug (*Adelphocoris lineolatus*) was more abundant this year than usual.

Grasshoppers (principally *Melanoplus mexicanus* and *M. femurrubrum*) were not seriously destructive to cultivated crops, due in part to the succulence of native vegetation, the natural habitat of the insects.

Chinch bugs (*Blissus leucopterus*) did not materialize as a serious problem, although they did winter over in moderate and threatening numbers.

The spittle bug (*Philaenus leucophthalmus*) infestations continued moderately heavy. Although this interesting insect is a common native species on weeds, it was 10 years ago (1946) that it rather suddenly appeared as a pest of several cultivated crops. Since then it has been a rather regular annual pest, especially on clover, alfalfa and other legume crops, strawberries and flowering plants. Aside from actual damage to the crops, the infestations have made it difficult to cure hay since the spittle masses dry slowly and keep the forage damp after it is cut. Effective control measures have been developed and increasing numbers of farmers are applying controls when necessary. In 1956 there was virtually no spraying for spittle bug because of the low early

populations and the fact that most farmers had more hay and pasture than needed.

The armyworm (*Pseudalelia unipuncta*) was not destructively abundant in Indiana this year.

Northern corn root worm (*Diabrotica longicornis*) adults were common throughout the state. They were unusually abundant and destructive to corn silks in the Vincennes area, resulting in incompletely fertile ears.

Clover leaf weevil (*Hypera punctata*) was scarce during the spring months.

The spotted alfalfa aphid (*Pterocallidium* sp.) was reported for the first time in Indiana this year by M. Curtis Wilson. It is believed this species first came into Posey County the latter part of August. By October 15 it had spread along the Wabash and Ohio rivers into seven Indiana counties, as follows: Gibson, Knox, Perry, Posey, Spencer, Vanderburgh, and Warrick.

The Hessian fly (*Phytophaga destructor*) did not materialize as a pest as anticipated.

### Vegetable Garden Insects

Tomato hornworms (*Protoparce* spp.) were scarce on tomatoes and not as abundant as normally on tobacco along the Ohio River. They were late in appearing.

Squash bugs (*Anasa tristis*) which have been abundant and destructive to commercial plantings the past few years, especially in southern Indiana, were rather scarce.

Bean leaf beetle (*Cerotoma trifurcata*) was a common pest of garden beans and soybeans. This insect has been building up on soybeans for several years and in 1956 it was severe enough in some localities (Crawfordsville) to justify treatment with DDT.

Cabbage maggot (*Hylemya brassicae*) was less abundant than normal.

Tomato fruitworm (*Heliothis zea*) was especially abundant on green and ripening tomatoes during the month of September. In many fields the infestation was 15 to 20 percent, and canning plants throughout the state rejected many loads of worm infested fruit.

### Tree Insects

Bagworms (*Thyridopteryx ephemeraeformis*) continue to be the major pest of ornamental plantings and shade trees, and were so abundant as to be considered the most severe year on record in Indiana. New infestations were reported in Starke and St. Joseph counties. The period of egg hatching was prolonged.

Elm leaf beetle (*Galerucella xanthomelaena*) infestations have been especially severe on Chinese elms, most inquiries coming from central and southern Indiana. Also they have been a continuing household pest.

Zimmerman pine moth (*Dioryctria zimmermani*) was found for the first time in Indiana in LaPorte county by D. L. Schuder. This is a

new record for the state. The insect was found infesting red and scotch pines.

Bronze birch borer (*Agrilus anxius*) was a serious pest to birches where new trees were planted and where drought conditions over the last two years was serious.

Maple bladder gall (*Vasates quadripes*) was common throughout the state.

The giant aphid (*Longistigma longistigma*), our largest species of aphid, was reported from several timber trees, including oak and linden. Apparently it is of no economic significance.

*Melanoxanthrium smithiae* was generally common on willow. Although of no apparent damage to the host, the species migrates about in the fall and where crushed, on lawn seats and the like, leaves a blood red stain.

Juniper webworm (*Dichomeris marginella*) was reported as heavily infesting junipers in a number of localities, mostly from Central Indiana.

Mimosa webworm (*Homadaula albizziae*) was reported as heavily infesting honey locust in the Indianapolis area.

European pine sawfly (*Neodiprion sertifer*) has been normally abundant on red and scotch pine plantings in northern Indiana. D. L. Schuder reports excellent results from the artificial use of the virus disease which he introduced into Indiana several years ago.

Red-headed pine sawfly (*Neodiprion lecontei*) has been destructively abundant on pine in southern Indiana.

The yellow-necked (*Datana ministra*) and red-humped (*Schizura concinna*) caterpillars were abundant on various trees, especially those of the apple family.

### Household and Miscellaneous Pests

Roaches continue as the major household pest. Although several species are involved, the Oriental roach (*Blatta orientalis*) is the major problem.

The clover or grass mite (*Bryobia praetiosa*) continues as a major annoyance in homes in the spring and fall of the year. As observed in the past, the infestations develop in new lawns as a rule.

Box-elder bugs (*Leptocoris trivittatus*) and elm leaf beetles (*Galerucella xanthomelaena*) have become more or less annual pests in many parts of the state, entering homes in the fall, while seeking places of hibernation. Although they do no damage to household furnishings, their presence is annoying. The box-elder bugs breed on the common box-elder and the elm leaf beetles primarily on Chinese elms. Although both trees are not desirable shade trees, we do not advocate cutting down such trees in the immediate vicinity of homes because the bugs and beetles may migrate from other trees several blocks away. The gradual replacement of these trees by species better suited for shade trees may be desirable.

The usual number of complaints have been received regarding honeybee swarms taking up quarters in walls of homes.

Ants of various species were the subject of many complaints, perhaps the majority coming in the fall of the year and mistaken for termites. However, many inquiries have referred to ants in the home and as reported a year ago, especially in slab-constructed homes.

Aphids on trees, especially elm trees, have been commonly annoying because of the "honey dew" produced. This tree sap passing through the digestive tract is annoying in two ways, first by spotting cars parked under the trees and second by providing a medium for the development of black sooty fungus on leaves of flowering plants growing under and nearby the trees.

Carpet beetles, especially the black carpet beetle (*Attagenus piceus*) was reported repeatedly from all parts of the state. But few reports of the clothes moth were received.

Click beetles (*Melanotus* spp.) were again reported abundant and annoying in homes. The first report of click beetles in homes which our observations record was in 1954 and reported to this Academy.

Many reports of damage by powder post beetles (*Lyctus* spp.) were received during the year. In many cases they were mistaken for termites.

During the year to date, 115 letters were received regarding the control of termites (*Reticulitermes flavipes*). These pests are the number one building problem. Reports of damage to underground cable were received from the northwestern part of the state. Dr. T. E. Snyder, world authority, verified the cause of damage.

In 1954 we reported infestations of the damp wood or rotten wood termite (*Zootermopsis angusticollis*) in shipments of Douglas fir lumber to South Bend from Oregon. Again this year, September 6, an infestation was reported in Douglas fir in a shipment of lumber from Tillonosh, Oregon, to a lumber company in Anderson, Indiana.

Several species of millipedes have been reported to be abundant in lawns around homes during the dry weather, such infestations usually occurring adjacent to wooded areas.

The rose chafer (*Macrodactylus subspinosus*) damaged flower garden plants in several localities of northern Indiana.

The saddle back caterpillar (*Sibine stimulea*) was more abundant than usual during September, especially on corn.

The Japanese beetle (*Popillia japonica*) has become more abundant and widespread in distribution during 1956. In the area around Kentland the adult beetles were unusually numerous and destructive on soybeans.