

THE INSECT PEST SURVEY BULLETIN

**A periodical review of entomological conditions throughout the United States,
issued on the first of each month from April to November, inclusive**

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INSECT PEST SURVEY BULLETIN

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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR OCTOBER, 1923

This number of the Insect Pest Survey Bulletin brings Volume 3 of the publication to a close. The season has been one of but moderate insect damage in general.

The Hessian fly seems to be on the increase in Minnesota, Iowa, and North Dakota. General adoption of the late planting of wheat is reported from the greater part of the wheat belt.

Continued rains through the late fall materially reduced the number of chinch bugs which went into hibernation in Illinois and Missouri. The pest is reported as more numerous than usual in Kansas, Minnesota, and Nebraska.

A serious outbreak of the velvet bean caterpillar was observed in Mitchell County, Ga., early this month.

A very unusual outbreak of the lubber grasshopper associated with the white-lined sphinx attacking the cattle range plants in enormous numbers was reported from New Mexico.

The apple and thorn skeletonizer is now known to occur from Washington County to Long Island, and westward to Fulton, Schcharie, Greene, Ulster and Orange Counties in New York State.

The Mexican bean beetle has materially extended its range during the season. Detailed reports of recent spread are contained in this number.

Reports on the cotton leafworm are still being received from a considerable part of the cotton belt, as well as from the more northern States.

Very serious damage was done during the past season to cotton in the Imperial Valley by the cotton leaf perforator.

CEREAL AND FORAGE - CROP INSECTS

MISCELLANEOUS FEEDERS

GRASSHOPPERS (Acridiidae)

- Delaware C. O. Houghton (October 23): Melanoplus femur-rubrum DeG. has appeared in considerable numbers at Newark of late.
- Illinois W. P. Flint: Grasshoppers are not sufficiently abundant in most sections of the State to cause any fear of an outbreak in 1924. In western Illinois, some damage has been done to pastures, but adults are not present in more than the usual numbers.
- Minnesota A. G. Ruggles (September 29): Of first importance among the field insects are the grasshoppers. In three counties of the State we had localized bad outbreaks. In St. Louis and Carlton Counties, the species was Camnula pellucida. In Hennepin County the species was Melanoplus bivittatus. If weather conditions are favorable I am expecting to see a large increase in grasshopper infestations next year in Minnesota.
- Nebraska M. H. Swenk (September 15-30): During the last two weeks in September there were some reports of grasshopper abundance in new wheat fields in Thayer and Lancaster Counties. (October 1-20): During the early part of October grasshoppers were reported doing injury in young wheat fields in York and Kearney Counties, but the injury was not general or particularly severe.

CUTWORMS (Noctuidae)

- Illinois W. P. Flint: Larvae of Prodenia ornithogalli Guen. have been reported from several sections of the State, mostly feeding on alfalfa.

WHEAT

HESSIAN FLY (Ephytophaga destructor Say)

- Illinois W. P. Flint: Abundant rains throughout August and September caused a seasonal emergence of the Hessian fly. As previously reported, flies were abundant in southern Illinois, relatively scarce in central Illinois, and present in normal numbers in northern Illinois. Emergence in southern Illinois apparently was nearly over about six days before the computed fly-free date.

- Iowa C. W. Ainslie (October 25): In Monona County volunteer and early-sown wheat is heavily infested. The fly in volunteer wheat has largely pupated although eggs are still to be found on the blades. In young wheat larvae of all sizes are numerous and the outlook is unfavorable for 1924.
- Minnesota A. G. Ruggles (September 29): The Hessian fly seems to be decidedly on the increase. Last year we found it doing considerable damage in one or two counties. This year I have had reports from a number of counties, but no reports on the extent of the damage done. Unfortunately I have had no time to devote to the problem and have been unable so far to work out the fly-free dates. Practically all of the infested counties so far are in the northern part of the State and are in the region where winter wheat is being grown more and more extensively.
- Missouri O. C. McBride (October 6): The adults were somewhat later in emerging this fall than in past years. Most of the farmers and county agents are cooperating with the extension entomologists and seeding after the fly-free date.
- K. C. Sullivan (October 19): I wish to report remarkably close observance of fly-free date and at present the fly situation looks very favorable.
- North Dakota C. N. Ainslie (August 31): Hessian fly is present in every field all over this part of the State (Mandan). I took it in Golden Valley County and today it was found at Dickinson when I stopped there between trains.
- Nebraska M. H. Swenk (September 15-30): At the Hessian fly observation station, established near Plattsmouth, Cass County, after a few days of comparative inactivity, the flies resumed emergence on September 18, bringing on a wave of emergence on September 21, on which date over 2,400 eggs were laid on 100 wheat plants, and nearly 60 per cent of the flaxseeds had given up their flies. Emergence continued steadily, the last wave occurring on the 26th to 29th of September, and then rapidly dropping off. By September 27 less than 10 per cent of the flaxseeds contained larvae or pupae, and on September 30 nearly 96 per cent of the flaxseeds were empty, the pupae in flaxseeds on that date representing only a fraction of 1 per cent of the whole. The fly-free date was announced for October 1 at this locality. (October 1-20): In the portion of southeastern Nebraska where the Hessian fly was most injurious this spring, the farmers mostly awaited the fly-free date before sowing their wheat this fall. In some counties, such as Cass and Richardson, fully 95 per cent of the farmers awaited the announcement of the fly-free date. Examination of the young plants of the new crop shows practically no infestation in such late-sown fields.

WHEAT SHEATH GALL JOINTWORM (Harmolita vaginicola Doane)

Michigan R. H. Pettit (September 21): I received on the 20th inst. samples of the sheath jointworm from John E. Hanson, Elsie, Mich. I am sorry to see this species coming back.

FALSE WIREWORM (Eleodes sp.)

Colorado C. P. Gillette. We commonly have many complaints from the dry farmers in the eastern portion of the State because of injuries to fall grains from the attacks of false wireworms. One of my men has just returned from an inspection trip and reports very little injury. He was able to find an occasional field where appreciable harm was being done. In a single instance he thought 20 per cent of the grain had probably been destroyed.

A PSOCID (Peripsocus sp.)

Nebraska M. H. Swenk (September 15-30): From Box Butte County a report of thousands of the Psocid (Peripsocus sp.) occurring on the racks with which grain was being hauled to the threshing machines during the last week in September was received.

SIX-SPOTTED LEAFHOPPER (Cicadula 6 notata Fau.)

Nebraska M. H. Swenk (October 1-20): During the period covered by this report there have been numerous inquiries concerning the large number of leafhoppers present in the volunteer wheat and the young wheat of the new crop. These reports have come from Dodge, Colfax, Seward, and other counties between October 4 and 15. The species concerned is chiefly Cicadula 6-notata. No serious injury has been noted or reported as a result of the unusual abundance of these insects.

A LEAFHOPPER (Deltocephalus affinis Gillette and Ball)

Nebraska M. H. Swenk (October 1-20): This insect, associated with an outbreak of Cicadula 6-notata, has been received from Dodge, Colfax, Hall, Seward and other counties between October 4 and 15.

A ROOT APHID (Geolca squamosa Hart.)

Nebraska M. H. Swenk (October 1-20): In Douglas, Dodge, and Colfax Counties there have appeared during October in some of the early-sown fields an abundance of Geolca squamosa. The county agricultural agents of these counties report that some of these fields are being seriously injured by these aphids.

A ROOT APHID (Forda olivacea Rohwer)

Nebraska M. H. Swenk (October 1-20): In Douglas, Dodge, and Colfax Counties there have appeared during October in some of the early-sown fields considerable numbers of wheat root-lice, chiefly Forda olivacea. The county agricultural agents of these counties report that some of these fields are being seriously injured by these aphids.

CORN

CHINCH BUG (Blissus leucopterus Say)

- Illinois W. P. Flint: Continued rains through September have somewhat reduced the number of bugs, and it is now doubtful whether they will be present in hibernating quarters in any greater numbers than in the fall of 1922. Heavy flights of adult chinch bugs to hibernating quarters occurred during the warm days of the first half of October.
- Minnesota A. G. Ruggles (September 29): At Brookpark in Pine County, the chinch bugs seem to have become established again. They did considerable damage this year to crops in that region. We are putting on a community campaign in that area this fall.
- Missouri O. C. McBride (October 6): In a few counties of central and northern Missouri the chinch bugs caused considerable damage. (September 28): Several nymphs in the third instar were noted, and from all indications large numbers of the adults will go into winter quarters in a vigorous condition.
- A. C. Burrill (October 15): The wet weather seems to have held the chinch bug down, from all reports I can gather, except in Andrew, Buchanan, and Caldwell Counties. Personal investigation in the Missouri River Bottom shows no numbers of chinch bugs, although single individuals are present.
- K. C. Sullivan (October 19): Chinch bugs are still plentiful in many sections. At present a vigorous campaign for burning all harboring places is being organized.
- Nebraska M. H. Swenk: A report from Johnson County on September 29 indicated that the chinch bug was present in the cornfields in that locality in abundance on that date.
- Kansas J. W. McColloch (October 22): Bugs have been going into hibernation since early October. Apparently there are more bugs than at this time last year.

CORN EARTWORM (Heliothis obsoleta Fab.)

- Delaware C. O. Houghton (October 20): Late sweet corn at Newark is badly infested by this species.
- Illinois W. P. Flint: This insect is less abundant and destructive to corn than usual this season. Late sweet corn shows an infestation of approximately 30 per cent. Field corn is not as heavily infested. This is a remarkable contrast to the infestation of over 90 per cent in the fall of 1921.

Missouri O. C. McBride (October 6): Some of the late corn was heavily infested with the corn earworm but not as heavily as last year.

Kansas J. W. McColloch (October 22): The corn earworm was not as abundant as normal in eastern Kansas. Approximately 50 per cent of the ears were injured, the grain injury amounting to from 1 to 3 per cent. In western Kansas the injury was much more severe.

CORN LEAF APHID (Aphis maidis Fitch)

Nebraska M. H. Swenk (September 15-30): During the last week in September the corn leaf aphid was reported as injurious to kafir, milo, and the smaller grain sorghums in Phelps County.

WESTERN CORN ROOTWORM (Diabrotica longicornis Say)

Iowa C. N. Ainslie (September 28): Adults of this pest are exceedingly numerous this fall in this vicinity, although little damage to corn has been reported during the past summer. The adults are feeding on dandelions and other late flowers, and are found also in large numbers on young alfalfa plants, on which they feed.

Missouri O. C. McBride (October 6): The western corn rootworm was noted feeding upon the pollen of late-planted corn (September 28) in large numbers. No damage was noted.

ALFALFA AND CLOVER

GARDEN WEBWORM (Loxostege similalis Guen.)

Illinois W. P. Flint. This insect has continued abundant through September and early October, and has badly thinned or entirely killed out many fields of alfalfa which were sown during the latter part of August.

have

J. H. Bigger (October 13): These webworms/destroyed 50 per cent of the crops in a 20-acre field, and are still working.

CLOVER-ROOT CURCULIO (Sitona hispidulus Fab.)

Illinois W. P. Flint. Adults of S. hispidulus are abundant in clover and alfalfa fields, where they are now depositing their eggs. They have caused some damage to newly-sown alfalfa.

PEA APHID (Illinoia pisi Kalt.)

Illinois W. P. Flint : Pea aphids are a little more than normally abundant in red clover and alfalfa throughout central Illinois.

KAFIR AND SORGHUM

SORGHUM WEBWORM (*Celama sorghiella* Riley)

- Missouri O. C. McBride (October 6): The kafir worm that caused considerable damage to kafir corn in southwestern Missouri two years ago appeared again this fall. It is later in appearing than two years ago, but is doing considerable damage in Barry, Jasper, Howard, and Boone Counties. In some localities as high as 50 per cent of the seed crop has been damaged.
- Kansas J. W. McColloch (October 18): Larvae have been reported doing considerable injury in several fields in Franklin County.

VELVET BEAN

VELVET BEAN CATERPILLAR (*Anticarsia gemmatilis* Hbn.)

- Georgia John B. Cill (October 2): The velvet bean caterpillar appeared in very injurious numbers in Mitchell County, Ga., causing complete defoliation in large fields of velvet beans. Some damage was also noted on kudzu vines, but velvet bean was decidedly the preferred host. According to the farmers of that section, this was the worst infestation that they had ever witnessed.

RANGE PLANTS

WHITE-LINED SPHINX (*Deilephila lineata* Fab.)

- New Mexico W. E. Emery (September 26): Dr. Baerg and I drove at least 20 miles through this army of caterpillars and they are stripping the foliage from all plants and are ruining the cattle range for the coming winter in Dona Ana County. (Determined by Dr. Heinrich,)

LUBBER GRASSHOPPER (*Brachystola magna* Gir.)

- New Mexico W. E. Emery (September 26): This insect is very abundant and is found on almost all plantations, together with the white-lined sphinx, *Deilephila lineata*, devastating the cattle range for the coming winter. (Determined by Mr. Caudell,)

FRUIT INSECTS

APPLE

APPLE-GRAIN APHID (*Rhopalosiphum prunifoliae* Fitch)

- Ohio T. H. Parks (October 20): These aphids were collecting in large numbers on apple foliage and twigs during October. This is the first recurrence of heavy migration to apple since the fall of 1918. They were so numerous as to be annoying to apple pickers.

LOBDLING MOTH (*Carpocapsa pomonella* L.)

- Massachusetts A. O. Bourne (October 22): A few straggling larvae of the second

generation of codling moths are still maturing, and are to be found on infested trees, but they have practically all gone into hibernation at this time.

Illinois W. P. Flint: In most of the orchard sections the third brood of codling moth was not of much importance this year. Damage by this brood has been reported in only one commercial orchard.

New Mexico R. L. Middlebrook (October 23): Codling moth caused 15 per cent rejections at packing plants, but as the price of apples is high and rejections are bringing a good price, this is not doing as much financial harm as usual.

APPLE AND THORN SKELETONIZER (Hemerophila pariana Clerck)

Connecticut H. J. Zack: Sprayed trees are comparatively immune from apple leaf-pruner at Deep River and Chester, in Middlesex County. This year the infestations were very noticeable everywhere in home orchards and yards. The infestations are noticeably increasing over those of 1922.

New York P. M. Eastman (August 30): There was a very light infestation in an old neglected orchard at Visscher's Ferry, in Saratoga County.

M. D. Leonard (September 15): B. W. Philbrick reports this insect increasing in abundance at Rhinecliff throughout the month and some orchards entirely defoliated. They are now also making their appearance in orchards that have been sprayed. (October 23): An examination of roadsides apple trees on October 16, in company with P. M. Eastman, of the Department of Farms and Markets, Albany, showed a light infestation as far north in Washington County as Granville and West Granville. Granville is practically on the Vermont border and West Granville is less than 10 miles south of Whitehall. This light infestation runs west to Hudson Falls and Glens Falls and southward to Saratoga. At Saratoga the infestation is heavier and, approaching Schenectady, it increased in abundance.

On October 19, in company with Mr. Eastman, it was determined that there was a light infestation of the insect on roadside apple trees and neglected trees from Berne, on the western border of Albany County, southward as far as Cobleskill. The infestation in the southwestern end of Schenectady County, in the vicinity of Delanson and Quaker Street and eastward through Duanesburg, is more severe.

According to information at hand, the present distribution of the apple and thorn skeletonizer in this State would indicate that the insect is present from Orient Point, on Long Island, north

practically to Whitehall, in Washington County. On the east side of the Hudson River Valley it reaches to the borders of Connecticut, Massachusetts, and Vermont. On the west shore of the Hudson it extends westward as far as Saratoga and includes all of Schenectady and Albany Counties as far west as Cobleskill, in Schoharie County and the townships of Jewett and Windham in Greene County. It has not been definitely determined how far west in Ulster and Orange Counties the pest has spread. An examination was made earlier in the season by Mr. Eastman of neglected trees at Johnstown and Gloversville, in Fulton County. Apple leaves were submitted for examination, but it is not certain whether they had been injured by the skeletonizer or not.

On the above dates caterpillars in apparently all stages, as well as pupae and pupa skins, were found, although in most cases the insects were not present at all on the leaves.

For the last week at Albany a few moths have been present on window screens.

E. P. Felt (September 20): At Nassau third-brood caterpillars are full-grown and a moth was found on this date.

APPLE MAGGOT (Rhagoletis pomonella Walsh)

Massachusetts A. O. Bourne (October 22): I have under date of October 18, reports from Mr. Farrar from Middlesex County, who says that sweet varieties of apples and Northern Spies have been much damaged by fruit fly or railroad worm injury.

Connecticut W. E. Britton (October 24): This insect was found attacking apple at New Haven, Cheshire, and Berlin. It is present in usual abundance.

APPLE LEAFHOPPER (Empoasca mali LeB.)

Missouri O. C. McBride (October 6): The past 10 days this pest has appeared in great swarms, causing mottling of the entire foliage of the older orchards (especially those in sod). The fruit in this State is mature, so the damage is relatively small.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Missouri O. C. McBride (October 6): The San Jose scale is still taking its toll on the apple crop of Missouri. The fifth brood of young is just appearing in southwestern Missouri. Several orchards in Cooper and Howard Counties are heavily infested, with 25 per cent of the fruit spotted.

PEACH

PEACH BORER (Aegeria exitiosa Say)

Georgia O. I. Shapp (October 19): Thousands of pounds of paradichlorobenzene

for the peach borer are now being put out in the Georgia Peach Belt under very favorable weather conditions.

Missouri O. C. McBride (October 6): The small larvae entering the peach trees are more numerous than at any time in the past three years. The first larvae were noted entering the trees September 3. They are now feeding between the outer bark and cambium varying from 3/16 to 9/16 inches in length.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Georgia O. I. Snapp (October 19): Fruit-tree bark-beetles are very abundant this year on account of San Jose scale devitalizing many trees.

SNOWY TREE-CRICKET (Oecanthus niveus DeG.)

California California Weekly News Letter, Vol. 5, No. 19 (September 22): At the request of the Libby, McNeil and Libby Company, T. D. Urbahns and D. F. Milbraith, of the State Department of Agriculture, made an investigation of a large orchard under the control of this company to determine the cause of damage to Philips Cling Peaches. It was found that tree-crickets had appeared in abundance, eating small holes in the ripe fruit. Following closely on the damage caused by the crickets, spores of a brown-rot fungus began to develop, with the result that the fruit quickly showed evidences of decay. About 100 tons of peaches were lost in this single orchard.

PEACH-TWIG MOTH (Anarsia lineatella Zell.)

New York Mrs. A. Tutton (September 4): Peaches on one tree at Ithaca are badly infested.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Georgia O. I. Snapp (October 19): Numerous reports reaching the laboratory at Fort Valley indicate a materially increased San Jose scale infestation in the northwestern part of the Georgia Peach Belt.

RED SPIDER (Tetranychus viridis Banks)

Georgia J. B. Gill (October 2): A rather heavy infestation of the red spider occurred on peach trees in the Albany, Ga., section. The damage will be of such a serious nature as to cause premature defoliation of some trees. This species is also found commonly on hickory trees, especially Hicoria glabra.

PLUM

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Georgia O. I. Snapp (October 19): The curculio has entered hibernation

at this point. There was only one generation of this insect here during the past season. Only two adults of a second generation were reared in the insectary.

Illinois J. H. Bigger (October 13): This pest is injuring 6 to 10 per cent of the apples in Calhoun County and 25 to 30 per cent in Macoupin County.

PALE TUSSOCK CATERPILLAR (Halisidota tessellaris Hbn.)

New York C. R. Crosby (September 18): Specimens of this pest were received from Wilson. It is very abundant on plums.

A MEALYBUG (Pseudococcus maritimus Ehrh.)

Michigan Eugenia McDaniel (October 9): On August 24 our attention was called to a mealybug working on grapes down in Van Buren County. This mealybug seems to be abundant in only a few vineyards. It collects in the bunches and causes some of the berries to drop before maturity. It also produces honeydew, which is smeared over the bunches and makes them unsightly. One notices they are sticky when handled. It practically puts them out of the basket class. An examination of this mealybug shows it to be the omnivorous Pseudococcus maritimus, a mealybug that is reported as having done damage some years ago to California grapes.

PECAN

PECAN-LEAF CASE-BEARER (Acrobasis nebulella Riley)

Georgia J. B. Gill (October 2): This pest is very abundant in pecan orchards in and southern Georgia and northern Florida. More spraying is being done for Florida the control of this pest than heretofore, and many growers are obtaining very good results in their spraying operations.

PECAN-NUT CASE-BEARER (Acrobasis hebesella Hulst)

Georgia J. B. Gill (October 2): This species has extended its range of destructiveness in this State during the present season, but as yet its exact spread has not been determined.

PECAN CIGAR CASE-BEARER (Coleophora caryaefoliella Clem.)

Alabama J. B. Gill (October 2): A heavy infestation of this pest is reported from Fowl River, where it has caused serious damage to pecan orchards during early spring.

PECAN SPITTLE-BUG (Clastoptera obtusa Say)

Georgia J. B. Gill (October 2): This pest has been very abundant this fall, occurring generally on both pecan and hickory trees.

PECAN SHUCKWORM (Laspeyresia caryana Fitch)

Georgia J. B. Gill (October 2): The pecan shuckworm is showing up in

sufficient numbers in pecan orchards in southern Georgia to cause an appreciable amount of damage to the crop. It is expected that the late-maturing varieties of pecans will be the worst affected.

PECAN WEEVIL (Balaninus caryae Horn)

Georgia J. B. Gill (October 2): The pecan weevil is reported from pecan orchards in the vicinity of Barnesville. The adults appeared in numbers on bearing pecan trees during the first two weeks in September.

AN APHID (Lachnus sp.)

Georgia O. I. Snapp (October 26): The heaviest infestation of this large aphid ever observed by the reporter was seen at Fort Valley today on Delmas pecan trees. Most of the limbs were entirely covered with the insects.

FALL WEBWORM (Hyphantria cunea Drury)

Georgia J. B. Gill (October 2): The fall webworm is very prevalent in neglected pecan orchards, especially those bordering woodlands.

SOUTHERN GREEN STINK-BUG (Nezara viridula L.)

Georgia J. B. Gill (October 2): For the past three weeks the southern green stink-bug has been occurring in numbers on bearing pecan trees of this section, and some damage to the pecan crop from this case is feared. This stink-bug is now abundant on cowpeas, lima beans, and various species of weeds.

TWIG-GIRDLER (Oncideres cingulatus Say)

Georgia O. I. Snapp (October 10): The hickory twig-girdler, attacking pecan trees in the locality of Marshallville, is more abundant this year than normally.

CITRUS

FIRE ANT (Solenopsis geminata Fab.)

Texas T. C. Barber (October 21): Many complaints are heard of ant injury on young citrus trees. The damage consists of gnawing into the tender leaf tips and also in many places through crevices in the bark. The injury starts the gum candying, which appears to be the object of the attack. Possibly a great deal of the damage is due to "gummosis" first attracting the ants, which gnaw into the tree in search of further food supplies.

T R U C K - C R O P I N S E C T S

MISCELLANEOUS FEEDERS

BLACK BLISTER BEETLE (Epicauta pennsylvanica DeG.)

New York W. D. Mills (August 30): Specimens of this insect were received and reported as attacking garden produce from Mineola.

POTATO

POTATO APHID (Macrosiphum solanifolii Ashm.)

Maine E. M. Patch (September 15): This pest is abundant this year at Presque Isle. Fall migrants are in swarms.

GREEN PEACH APHID (Myzus persicae Sulz.)

Maine E. M. Patch (September 15): This pest is more abundant than previously known to me in this State.

POTATO STALK-BORER (Trichobaris trinotata Say)

Illinois C. C. Compton (October 1): The potato stalk-weevil has caused a loss of from 15 to 25 per cent to several growers of eggplants near Des Plaines. A number of plants were killed or are not bearing fruit.

SPOTTED BEET WEBWORM (Hymenia perspectalis Hbn.)

Florida F. H. Chittenden (October 1): This pest is injurious to Irish potatoes at Lynn Haven.

TOMATO FRUITWORM (Heliothis obsoleta Fab.)

Georgia O. I. Snapp (October 10): The tomato fruitworm has been doing considerable damage to green and ripe tomatoes in this locality.

CABBAGE

IMPORTED CABBAGEWORM (Pontia rapae L.)

Georgia O. I. Snapp (October 10): Larvae of the cabbageworm had completely defoliated a patch of collards at Marshallville on this date.

HARLEQUIN CABBAGE BUG (Murgantia histrionica Hahn)

Missouri O. C. McBride (October 6): The Harlequin cabbage bug has been reported doing damage over several widely distributed districts of Missouri. In some places it is practically destroying the late cabbage crop.

STRAWBERRY

STRAWBERRY CROWN-BORER (Tyloclerum fragariae Riley)

Missouri O. C. McBride (October 6): The infested area is gradually increasing. In a 2-acre field in McDonald County and a 1-acre field in Cooper County two-thirds of the plants were killed by August 25.

MURKY GROUND BEETLE (Harpalus caliginosus Fab.)

Delaware C. O. Houghton (October): This species, which sometimes does

considerable injury to strawberries in this State, has appeared only in small numbers this fall. During October it is usually very common on ragweed in the fields, but I have observed but few specimens this month.

BEANS

MELON APHID (Aphis gossypii Glov.)

Delaware C. O. Houghton (October 22): This species has appeared in large numbers recently at Newark on late lima beans.

BEAN APHID (Aphis rumicis L.)

California R. E. Campbell (October 1): This aphid attacked a considerable acreage of lima beans along the coast below Ventura in August. The infestation not only was more general than usual but remained longer. It occurred at the time of blossoming and materially reduced pod setting.

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

GENERAL DISSEMINATION Neale F. Howard (October 22): The Mexican bean beetle is now known to be established as far east as a line extending from Ashe, through Burke and Lincoln, to Gaston County, N. C., thence from Cherokee County to Abbeville County, S. C., and as far south as Sumter County, Ga., with the exception of the localized outbreak in Thomas County. The pest was also reported from Chillicothe in Ohio.

Georgia J. B. Gill (October 2): The Mexican bean beetle has been reported from Lamar County by the county agent, who submitted three adult specimens with the report.

Ohio T. H. Parks (October 20): These beetles and larvae were sent in by the county agent of Adams County with the statement that they were doing damage to beans in that county along the Ohio River. This is the first report received of damage from this insect in this State.

Mississippi Neale F. Howard (September 29): Prof. R. W. Harned reports that the State Plant Board of Mississippi has scouted practically every county in the State but has not found the Mexican bean beetle outside of Itawamba and Tishomingo Counties in the northeastern portion of the State. These counties have been previously reported.

New Mexico R. L. Middlebrook (October 23): Crops in southern counties of New Mexico are very slightly, if at all, damaged by the beetle. Deming district, Luna County, had a good yield of "pinks", and no appreciable damage was done by the beetle. Dona Ana County had a fair yield of "pintos", no appreciable damage being done by the beetle. The only large brood was the last brood, which hatched too late to be of any particular harm.

Mexico E. G. Smyth: A survey was made today of bean fields in the foothills, and in valleys and depressions among the foothills, at the edge of the high prairie west of Tacubaya, D. F., and extending from there southward almost to San Angel, D. F.,. Comparatively few fields were encountered, and in practically all of these the beans were grown among corn. E. corrupta was comparatively scarce in all of the fields observed. In no field did the infestation exceed 2 to 3 per cent of the plants, and in some of them no infestation could be found. A series of larvae, and a few egg masses, were collected for confinement to rear possible parasites.

BEAN LEAF-ROLLER (Eudamus proteus L.)

Georgia J. B. Gill (October 2): The bean leaf-roller is causing serious damage to snap beans at Thomasville.

CUCUMBER

STRIPED CUCUMBER-BEETLE (Diabrotica vittata Fab.)

Maine E.M. Patch (September 25): This insect has been terrifically abundant in the vicinity of Orono this season. Great numbers in the spring and the fall crop of adults are thick under the drying leaves of the vines and under nearby leaves at this date.

SQUASH

SQUASH BUG (Anasa tristis DeG.)

New York R. Q. Smith (September 11): Infested squash leaves were received from Walton.

C. R. Crosby (September 19): A correspondent from Philmont reports that this pest has killed all his squash and pumpkin vines, both last season and this.

MELON CATERPILLAR (Diaphania hyalinata L.)

New York C. R. Crosby (September 12): Infested squashes were received from Cortland.

BEETS

SUGAR-BEET WEBWORM (Loxostege sticticalis L.)

New Mexico F. H. Chittenden (October 1): J. R. Douglass, of the Truck-Crop Insect Investigations, reported the sugar-beet webworm at Estancia this year. Without looking up all the records, I think this is unusually far south for the distribution of this species.

SOUTHERN BEET WEBWORM (Pachyzancla bipunctalis Fab.)

Virginia F. H. Chittenden (October 1): The southern beet webworm was very

destructive to Swiss chard in one locality in this State that was reported destroying the entire crop, and there is little doubt that Hymenia fascialis, Hymenia perspectalis, and Pachyzancla bipunctalis, with the exception of the sugar-beet webworm, are very frequently confused with the garden webworm.

HAWAIIAN BEET WEBWORM (Hymenia fascialis Cram.)

North Carolina F. H. Chittenden (October 1): The Hawaiian beet webworm has been troublesome in this State.

PEPPER

PEPPER WEEVIL (Anthonomus eugenii Cano)

New Mexico W. E. Emery (September 12): This insect attacked the Chili pepper crop in Dona Ana County last year, doing at least 50 per cent damage to the fruits. There are none noticeable this year, for some unknown reason.

SOUTHERN FIELD - CROP INSECTS

COTTON

BOLL WEEVIL (Anthonomus grandis Boh.)

Louisiana T. H. Jones (The Times-Picayune, Saturday, August 25): Efforts of A. Abshire, a farmer in Vermilion Parish, southeast of Estherwood, to check the ravages of insect pests in his cotton fields this week resulted in the death of one of his horses and the serious illness of Mr. Abshire from inhaling the Paris green and lime mixture which the farmers were scattering among the cotton plants. Mr. Abshire drove along the rows of cotton scattering the poison dust and accidentally inhaled a quantity of poison. Several other farmers are reported to have become ill through inhaling the poison mixture that they scattered to kill insect pests.

COTTON LEAFWORM (Alabama argillacea Hbn.)

Massachusetts A. I. Bourne (September 28): On the 24th of September a flight of these moths was reported from the town of Webster. Apparently they were present there in swarms, which is characteristic of the species. Under date of September 25 I received specimens of these moths from North Adams, with the record that "clouds of them settled on the streets a week or two ago," which would indicate the period from the 10th to the 14th. Personally I collected several specimens of these and saw many others in Pittsfield on September 22. Therefore, we have from several different points in the State records of a northward flight of these moths on approximately the above dates.

Connecticut W. E. Britton (October 24): Moderate numbers of moths were observed on store windows on September 12 and 13. They are more abundant than in an average year.

New York C. R. Crosby (September 17): Moths were found at Ithaca on the passage way between Stone and Roberts Halls about 11 p.m.

Virginia W. J. Schoene (September 28): All cotton in some fields was nearly completely defoliated, but most of the fields noted were only partially defoliated. A very few caterpillars have matured and pupated. This is the third season in succession this pest has occurred in this State in large numbers.

Illinois F. C. Bishopp (October 1): Moths of this species were observed in considerable numbers on windows and about fruit stands.

W. P. Flint: Adults of this insect are still being sent in from southern and central Illinois. It has persisted in the State for a longer period than usual this year.

- Michigan R. H. Pettit (September 21): I took my information from one of the inspectors employed by the State to supervise the standardized packing of fruit under the new Braman law. I asked him particularly when it first came and he gave me the date as the first of September. He also showed me a peach which had been attacked and described the work, which appears to be absolutely typical. We received from the Gladwin Construction Company a number of samples that are undoubtedly this insect. Our experience up here in the past has been that they disappear after a heavy frost.
- Iowa C. N. Ainslie (September 30): An unusual flight of adults was observed in certain parts of the territory in and about Sioux City. The moths invade porches and attract attention by reason of their numbers.
- Arkansas and Georgia John B. Gill (October 2): The cotton leafworm was in epidemic form in some sections of southern Georgia by the middle of August, and owing to the lateness of the cotton crop some serious damage was done by the caterpillars. The worst infestation coming under my observation was in Mitchell County, Ga. We have received a report from Hope, Ark., stating that the cotton leafworm was very destructive in that section. In a pecan orchard which had been planted in cotton, so many of these caterpillars pupated in leaves on the lower limbs as to cause the limbs to bend to the ground.
- Missouri O. C. McBride (October 6): The third brood of the cotton armyworm reached its height about September 28 in southeastern Missouri, stripping the entire foliage from the cotton plant and feeding on the immature bolls. However, they were so late that the lower production bolls were mature and the damage to the cotton crop was comparatively small. The migrating adults have been reported in large numbers for Jasper and DeKalb Counties.
- Kansas J. W. McColloch (October 10): The moths were reported especially numerous in beds of everbearing strawberries. In some cases one-half of the crop was ruined.
- Texas Geo. A. Maloney (October 2): This insect is reported from 38 counties in this State.
- M. C. Tanquary (October 17): The cotton leafworm has stripped practically 100 per cent of the cotton in this portion of the State. In riding on the train from San Antonio to College Station on October 10, every field of cotton noticed from the car windows was almost entirely defoliated. Unless the foliage comes out again on these plants the work of the leafworm should cut down enormously the number of boll weevils going into hibernation.
- T. C. Barber (October 21): Late cotton fields, which have been held in the expectation of a top crop, have recently been very heavily attacked by a late brood of the cotton worm, and are rapidly being completely defoliated. Considerable numbers of adult moths have also been flying to lights during the past few days.

F. C. Bishopp (October 23): Practically all fields in northern Texas from Dallas to Denison were stripped of foliage. Practically no poisoning was done for the insects, owing to the fact that the crop had made about all that it would owing to dry weather and the work of the boll weevil in the lowlands. Observations made from the train between Fort Worth and Clarendon, Tex., indicated that the leafworm was not present, at least to any great extent, except in the vicinity of Ft. Worth.

COTTON LEAF PERFORATOR (Bucculatrix thurberiella Busck)

California O. A. Pratt (September 19): The insect Bucculatrix thurberiella, which has caused considerable damage to the foliage of cotton in the Imperial Valley this season, has probably been present as a minor pest since the beginning of the cotton industry in this valley. Since 1917 the insect has been found present in every cotton field inspected in the valley (Imperial, in California and Mexico), but where a serious damage was noted, other troubles were also present, such as weeds and grub infestation and poor irrigation. In 1923 a serious outbreak of the insect occurred. The farmers were very much alarmed, as the cotton plants looked as if they were dying and the infestation was pretty general throughout the valley, though many acreages showed no appreciable damage. The farmers were advised to water heavily so as to keep the plants in an active growing condition. It is impossible to estimate the amount of damage done this season but it was greatest and amounted to an almost total loss of the crop where the farmers failed to apply water at the crucial period.

TOBACCO

TOBACCO HORNWORM (Protoparce sexta Joh.)

Missouri K. C. Sullivan (October 18): This species is very plentiful in the counties along the Missouri River.

F O R E S T A N D S H A D E - T R E E I N S E C T S

MISCELLANEOUS FEEDERS

PERIODICAL CICADA (Tibicina septendecim L.)

Massachusetts Don D. Lacroix (September 28): In driving through the infested territories south and east of the Cape Cod Canal, on July 11, I found that by far the greatest damage done by this brood of T. septendecim L. occurs in the eastern part of the town of Falmouth, around the village of Waquoit. Here the insect has deposited its eggs in practically every suitable plant, including ferns, false indigo, and goldenrod. Almost every oak from 1 to 20 feet high has dead and dying twigs in abundance. In several cases I saw oaks 12 feet high and 3 or 4 inches through at the base with foliage entirely brown, and much of the youngest growth already drooping. Another point of interest which I noted was the finding in several instances of Calosoma beetles, Sycophanta sp., preying on adult cicadas.

New York M. D. Leonard (October 15): We are digging up very unusual numbers of cicadas at Blauvelt. About 15 or 20 were taken from a single square foot of space.

WHITE-MARKED TUSSOCK MOTH (Hemerocampa leucostigma S. & A.)

New York R. E. Horsay (September, 1923): The egg masses of this pest are reported well scattered around the city of Rochester, and while there was little damage this year and the egg masses are nowhere abundant we are apprehensive for next year.

Ohio W. W. Mendenhall (October 12): I find a good many tussock moths in the shade trees on the streets and parks in Sidney. I find them particularly on the elms. We find now the cocoons on the trunks of the trees.

Illinois C. C. Compton (October 5): Egg masses of the white-marked tussock moth are more numerous than usual at Evanston, Ill.

FALL WEBWORM (Hyphantria cunea Drury)

New York B. W. Philbrick (September 14): This pest has only appeared for the past few days and attacks elm, while some were found on elder.

R. E. Horsey: On a trip to Cayuga Lake a number of webs were noted along the roads, but no serious damage.

FOREST TENT CATERPILLAR (Malacosoma disstria Hbn.)

Connecticut C. D. Clark (October 9): Reported from Fairfield on this date. Egg clusters are very abundant compared with an average year.

BAGWORM (Thyridopteryx ephemeraeformis Haw.)

New York M. D. Leonard: Upper Manhattan is especially badly infested, but many trees in this whole section are reported as having considerable numbers of bagworms. (October): "Bags" very abundant and many trees in the city streets of these towns (New Brighton and St. George Staten Island) are having apparently considerable defoliation earlier in the season.

Nebraska M. H. Swenk (September 15-30): Some complaints of the bagworm in Richardson County were received during the latter half of the month of September.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Ohio E. W. Mendenhall (September 29): The oyster-shell scale is common on Carolina poplars in the western part of the State.

PALE TUSSOCK MOTH (Halisidota tessellaris Hbn.)

New York R. E. Horsey (September, 1923): This is still being reported, and live insects were found and trees sprayed at Central Park, a street with a strip of grass and plane trees in the center; several trees

here were almost denuded of foliage. The arsenate of lead spraying is very effective for this; the few trees sprayed last year were the least infested. The peculiar phase about this insect with us is that we have found it only on plane trees. In Highland Park, where basswoods, crab apples, maples, and elms are nearby and touching the plane trees, they are found almost entirely on the plane trees, which are badly eaten. It seems strange that this is reported as a general feeder. The weather this summer is exceptionally cool and as a rule insect pests are much less noticeable than usual.

TWIG GIRDLER (Oncideres cingulata Say)

- Nebraska M. H. Swenk (October 1-20): Some injury to elm twigs by the twig girdler in Richardson County was reported.
- Missouri K. C. Sullivan (October 19): This species is very bad this year at Kansas City. Ground under trees is covered with twigs.

ARBORVITAE

ARBORVITAE LEAF-MINER (Argyresthia thuiella Pack.)

- Maine H. B. Pierson (July 25): This insect is prevalent along the Maine Coast as far north as Mt. Desert Island.

BIRCH

BIRCH LEAF SKELETONIZER (Bucculatrix canadensisella Chamb.)

- Maine H. B. Pierson (June 25): This species has been reported from Mt. Desert Island attacking white birch.
- New York and Vermont M. D. Leonard (September 25): This species is reported by W. J. Cowee of Berlin, New York, as exceedingly abundant, and leaves as badly affected; also in Dorset, Vt., in Little Hoosick Valley.
- R. E. Horsey (September): This pest is very prevalent on red birches at Rochester, and I suppose on many others; it is fully as abundant as last year. We have never sprayed for this.

Aphis betulaecolens Fitch

- Connecticut W. E. Britton (October 24): Swarms of these aphids occurred in the streets of New Haven from September 18 to 25, and were the cause of many inquiries and newspaper comments. They were also present in some other Connecticut cities.

BRONZE BIRCH BORER (Agrilus anxius Gory)

- New York R. E. Horsey (September): We continue to remove birches injured and killed by this insect.

BOXELDER

BOXELDER PLANT-BUG (Leptocoris trivittatus Say)

Minnesota A. G. Ruggles (September 29): A number of reports have been sent in concerning the boxelder plant-bug. These forms were not noticed during the season, but toward fall they began trying to get into the houses and it was only then that we heard from them.

CAMPHOR

CAMPHOR THRIPS (Cryptothrips floridensis Watson)

Georgia John B. Gill (October 2): The camphor thrips is attacking large and small camphor trees within the city limits of Thomasville, Ga. On some trees the infestation is so severe that the insects are killing the bark on large limbs and are causing considerable defoliation.

CATALPA

CATALPA MIDGE (Cecidomyia catalpae Comst.)

Ohio E. W. Mendenhall (October 16): The injury was pronounced on catalpa stock in the nurseries in Miami County this last summer, dead tips being due to midge larvae working in buds and tender wood. One nursery I have in mind in the county had 75 to 80 per cent of the trees injured.

CATALPA SPHINX (Ceratonia catalpae Boisd.)

Illinois W. P. Flint: Catalpa sphinx was very abundant throughout southern and central Illinois, completely defoliating many small plantations and individual trees in towns and cities.

ELM

ELM LEAF-BEETLE (Galerucella luteola Muell.)

Maine H. B. Pierson (July 10): The elm leaf-beetle is each year apparently spreading farther north, and this year was very abundant in August

New York R. E. Horsey (September): No new infestation was reported this month at Rochester.

HICKORY

WALNUT DATANA (Datana integerrima G. & R.) ;

Connecticut W. J. Zack (September): At Chester serious infestations have been noticed on trees growing alone, and in woodlands mainly on the side facing clearing.

LARCH

LARCH CASE-BEARER (Coleophora laricella Hbn.)

Maine H. B. Pierson (August 20): This insect which assumed serious proportions last year has for some reason not been abundant this year, although it has been reported as working to some degree in localities scattered throughout practically all of northern and eastern Maine.

LARCH SAWFLY (Nematus erichsonii Hartig)

Maine H. B. Pierson (August 15): The larch sawfly is becoming abundant wherever larch is again becoming prevalent. The worst localities appear to be in northern Aroostook and Washington Counties. (September 3): It is reported from Piscataquis, Penobscot, and Washington Counties as more abundant than in an average year.

MAPLE

MAPLE CHAETOPHORUS (Periphyllus lyropicta Kies.)

New York M. D. Leonard (August 21): Scattering infestation is reported on a number of the city trees.

OAK

OBSURE SCALE (Chrysomphalus obscurus Comst.)

Ohio E. W. Mendenhall (October 23): This species is reported from Sidney, attacking English oak.

Heterocampa manteo Doubl.

North Dakota R. L. Webster (October 17): Considerable damage has been done to the tops of oak trees along Mouse River in September.

TWO-LINED CHESTNUT BORER (Agrilus bilineatus Weber)

Minnesota A. G. Ruggles (September 29): The two-lined chestnut borer seems to have done more damage than usual, a great many oaks having been killed this past season.

PINE

WHITE PINE APHID (Lachnus strobi Fitch)

Maine H. B. Pierson (September 28): Considerable damage was done to individual trees in a large stand of mature white pine at Old Town, Me.

PINE BARK-LOUSE (Chermes pinicorticis Fitch)

- New York R. E. Horsey (September): A considerable infestation on white pines at Highland Park is to be found at present.
- Delaware C. O. Houghton (October 10): This species is fairly common on pine in northern Delaware. We have received no specimens from the southern part of the State.

PINE-LEAF SCALE (Chionaspis pinifoliae Fitch)

- Nebraska M. H. Swenk (October 1-20): Complaints of injury by the pine-leaf scale continued to reach us during the period covered by this report.

PALES WEEVIL (Hylobius pales Herbst)

- Maine H. B. Pierson (October 2): This insect is very prevalent throughout southern Maine wherever logging of white pine is going on. Alfred seems to be quite a center.

WHITE PINE WEEVIL (Pissodes strobi Peck)

- Maine H. B. Pierson: The work of this insect has been found throughout northern Maine, even in isolated clumps or isolated individual pine in the spruce region.

PINE TUBE-MOTH (Eulia pinatubana Kearf.)

- Maine H. B. Pierson (August 20): This insect was reported from Indian Purchase in the vicinity of Millinocket.

EUROPEAN PINE-SHOOT MOTH (Evetria buoliana Schiff.)

- New York M. D. Leonard (August 28): A number of four-year-old trees were badly infested. Buds contained young caterpillars.

MOUND-BUILDING ANTS (Formica exsectoides Forel)

- Maine H. B. Pierson: These ants have been very active in the vicinity of Augusta and Waterville and have done considerable damage to white pine. Experiments have been tried with an arsenical gas to exterminate them but were unsuccessful. On the other hand carbon bisulphid proved very efficient.

EUROPEAN PINE SAWFLY (Diprion simile Hartig)

- Connecticut H. J. Zack (September-October): We have found infestations on trees in our nurseries and in ornamental plantings. This pest is controlled by arsenical spray and hand picking.

New York

M. D. Leonard (August 25): Mrs. O. J. Spahn reports that a small tree about 4 feet high at Pleasantville contained hundreds of the larvae and the needles were stripped off, also that many larger pines were heavily infested. (August 20): A spray of pine twigs was received bearing numerous full-grown larvae and several pupa cases.

R. E. Horsey (September): A few larvae were found on white pine, September 6, at Highland Park. Except for a bad outbreak in August, 1918, which was promptly controlled by arsenate of lead spraying, we have had no trouble with this, a few only being found each year since.

Bureau of Entomology Monthly Letter, No. 113: Dr. H. E. Burke reports considerable damage to the native forest of Monterey pine at Pacific Grove, Calif., by a defoliating sawfly. S. A. Rohwer has determined the sawfly as Itycorsia brunnicans Nort., stating that the species has not been reared and that practically nothing is known of its habits. Further study by Doctor Burke has yielded the eggs of the species, the habits of the young larvae, and the fact that nicotine dust promises to be more effective in control than lead arsenate.

FIR

FIR SAWFLY (Lophyrus abietis Harr.)

Maine

H. B. Pierson (July 15): This insect defoliated a considerable amount of fir in Whitneyville and was prevalent on the islands off the Maine Coast.

HEMLOCK

FLAT-HEADED HEMLOCK BORER (Melanophila fulvoguttata Harr.)

New York

M. D. Leonard (August 25): Bark was reported infested with grub at Upper Saranac, Franklin County, with a statement that many fine old hemlocks were found infested upon being felled.

POPLAR

TENT CATERPILLAR (Malacosoma americana Fab.)

Maine

H. B. Pierson (July): The tent caterpillar assumed alarming proportions in several sections of the State, and it is safe to state that probably at least 60,000 acres of poplar and white birch were stripped. As several areas were stripped this year, there is a danger of large areas being killed, owing to repeated defoliations. The worst areas are in the vicinity of Stacyville, Eagle Lake, Fort Kent, Mt. Chase, Masardis, and Moro Plantation. (October 3): One area in which the eggs and pupae were heavily parasitized last year proved to be even more heavily infested this year. Somerset, Piscataquis, Penobscot, and Aroostook Counties are reported infested by this insect. It is found in greater abundance than in an average year.

North Dakota C. N. Ainslie (October 8): Large areas of poplar groves in the Turtle Mts., Bottineau County, have been entirely defoliated by this insect. Vast numbers of eggs have been ~~ex~~posed on the upper branches of the infested trees. The stripped ~~leaves~~ leaves leaved out again, but were much injured by the attack.

COTTONWOOD LEAFBEETLE (Melasoma scripta Fab.)

North Dakota C. N. Ainslie (October 1): A grove of young cottonwoods on the Experiment Station at Dickinson was attacked by this pest during the present summer and severely injured by the larvae, which were present in large numbers. As late as September 1 the injury was still in progress.

SPRUCE

SPRUCE GALL APHID (Chermes abietis L.)

Maine H. B. Pierson (September 25): This insect is reported from Old Town, where it is attacking spruce.

SPRUCE BUDWORM (Cacoecia fumiferana Clem.)

Maine H. B. Pierson (July 25): The budworm is still active in several parts of the State, the outbreak investigated being in northern Aroostook County and the Rangeley Lake District.

Wisconsin S. B. Fracker (October 11): A survey by Dr. Hubert of the Forest Products Laboratory shows some budworm work, but it is much less serious in Wisconsin than in Minnesota, which he also visited.

WILLOW

AN APHID (Melanoxantherium sp.)

Connecticut W. E. Britton (October 24): This species is very abundant on certain willows and crawling over buildings close by. Honeydew is abundant and the place is swarming with honeybees, hornets and flies, at New Haven, Danielson, and Branford.

INSECTS ATTACKING GREENHOUSE
AND ORNAMENTAL PLANTS

ASTERS

BUMBLE FLOWER BEETLE (Euphoria inda L.)

New York C. R. Crosby (September 19): This insect is reported from Yonkers as causing some damage to aster fields.

LOCUST BORER (~~*Agrota*~~ *robineae* Först.)

New York C. R. Crosby (September 19): The locust borer is reported from Yonkers as causing some damage to aster fields.

CHRYSANTHEMUM

A MITE (*Tarsonemus pallidus* Banks)

New York C. R. Crosby (September 18): Badly infested plants were received from Bull's Head, Staten Island.

CHRYSANTHEMUM LEAF-TYER (*Phlyctaenia rubigalis* Guen.)

Illinois C. C. Compton (October 5): The chrysanthemum leaf-tyer is slightly more numerous in the Chicago district than it usually is at this time of the year.

LILAC

LILAC BORER (*Podosesia syringae* Harr.)

New York R. E. Horsey (September): Considerable damage has been done in our lilac collection as usual this year. We force carbon disulphid into the holes, stopping them with grafting wax. We also have all plants on their own roots, as then new sprouts will spring up to take the place of any destroyed by borers.

LILIES

AN APHID (*Macrosiphum lillii* Monell)

New York M. D. Leonard (August 12): Specimens received from Roy Latham, Orient, Long Island, with statement that many plants have been killed by the attack of this aphid.

MAGNOLIA

TULIP SCALE (*Toumeyella liriiodendri* Gmel.)

New York M. D. Leonard (September 14): A tree was reported badly infested by this insect at Pawling, N. Y.

ROSE

ROSE SAWFLY (*Caliroa aethiops* Fab.)

Nebraska M. H. Swenk (October 1-20): Late injury by the rose slug was reported from Cedar County.

GREEN JUNE BEETLE (*Cotinis nitida* L.)

D. C. and Maryland F. H. Chittenden (October 1): The larvae of the green June beetle and the green June beetle itself are as abundant this year in the District of Columbia as last, in spite of the activities of birds in destroying it. Today I received specimens from Bethesda, Md.,

together with a report that the species is very injurious to lawns in areas here and there, as is usually reported.

INSECTS AFFECTING MAN
AND DOMESTIC ANIMALS
MAN

FLEAS (*Siphonaptera*)

Texas F. C. Bishopp (October 23): During the last few weeks there has been a material increase in the number of complaints of house and yard infestation due to Ctenocephalus canis and C. felis Bouché at Dallas.

California T. D. Urbahns (October 13): This season has been one with unusually abundant infestations of fleas (Ctenocephalus canis Bouché) on cats and dogs as well as in houses, and business houses, where they caused much annoyance to humans. The moderate summer weather may have been an influencing factor in their increase.

YELLOW FEVER MOSQUITO (Aedes aegypti L.)

GENERAL F. C. Bishopp (October 25): Yellow fever mosquitoes have not been as abundant as usual in the vicinity of Dallas this fall. Dengue fever has not gained any momentum in the South this year. According to the Public Health reports, the disease did not occur in Florida or Georgia and very few cases were reported in Alabama, Mississippi, and Arkansas. Reports covering the five weeks' period ending October 5 show Texas to have had 97 cases and Louisiana 142.

SPOTTED-FEVER TICK (Dermacentor venustus Banks)

GENERAL F. C. Bishopp (October 25): The few reports received from Colorado and Wyoming indicate that the spotted-fever tick was less numerous in that region this summer than usual. W. B. Sheppard writes that this tick ceased troubling by July 10, whereas last year it was in evidence until September 17.

PUSS CATERPILLAR (Megalopyge opercularis S. & A.)

Texas F. C. Bishopp (October, 1923): Not a single report of the stinging of man by this species has come to our attention this year. Caterpillars are extremely rare.

ARGENTINE ANT (Iridomyrmex humilis Mayr)

Texas F. C. Bishopp (October 25): A survey of the districts in Dallas infested with this ant, as made by G. E. Riley and T. J. Wilson, showed that there has been an increase in the area of about 58 blocks, making the total area now infested about 175 blocks.

CATTLE

STABLE FLY (Stomoxys calcitrans L.)

- GENERAL F. C. Bishopp (October 11): Cursory observations in central Ohio, Indiana, and Illinois indicate that this fly is sufficiently numerous to cause dairy cattle considerable annoyance.
- New York F. C. Bishopp (October 6): The activity of this insect is practically nil on account of cool weather.
- Nebraska Breeders' Gazette, by A. E. de Ricqlès, October 18: "In Nebraska rain has been so constant as to spoil much hay, and create a pest of flies that reduced at least 100 pounds in flesh from the average weight of all the cattle that were being fattened on grass. For months one could see the cattle in 'wads' in the corners of pastures, fighting flies all day long. It was a serious thing indeed."

HORN FLY (Haematobia irritans L.)

- New York F. C. Bishopp (October 6): Horn flies are comparatively scarce on dairy cattle in the vicinity of Syracuse. They are said to have declined rapidly in number in the last two weeks.
- Texas F. C. Bishopp and H. M. Brundrett (October 23): Horn flies have been reduced by cool weather to an average of about 75 per animal in this locality (Dallas). About the first of the month they were very annoying to dairy stock, and some report reduction of milk flow.

HORSE BOT-FLY (Gastrophilus intestinalis DeG.)

- Illinois F. C. Bishopp and C. C. Compton (October 1): A few adults of this species are ovipositing on horses in the locality of Elgin. While all animals are infested, the number of eggs present is comparatively small.

NOSE FLY (Gastrophilus haemorrhoidalis L.)

- Illinois F. C. Bishopp and C. C. Compton (October 1): Inquiry among farmers in this district developed the fact that this insect has been present and annoying to horses for at least 10 years. It is evident, however, that they are not as troublesome in the section about Elgin as in the Dakotas and elsewhere. The amount of annoyance this summer was about normal.

CHIN BOT-FLY (Gastrophilus nasalis L.)

- New York and Illinois F. C. Bishopp (October 1-8): Adults of this species have apparently ceased activities, and the infestation of horses as judged by the number of eggs present is comparatively light.

OX WARBLE (Hypoderma lineatum DeV.)

Texas

H. M. Brundrett, E. W. Laake, and F. C. Bishopp (October 23): Although this pest appeared in the backs of cattle much earlier than usual (the first appearing in the vicinity of Dallas about September 12), it has not increased in numbers very rapidly up to this time.

POULTRY

CHICKEN MITE (Dermanyssus gallinae Redi)

Texas

F. C. Bishopp (October 23): The usual increase in the number of chicken mites during the fall is being experienced. Some extremely heavy infestations have been included.

INSECTS ATTACKING STORED PRODUCTS

STORED GRAIN PESTS

Missouri

O. C. McBride (October 6): Several reports are coming in from the grain growers of Missouri regarding the stored grain pests. Most reports are from the southeastern Missouri Counties, besides a few other reports distributed throughout Missouri. Specimens of the following have been received by this department: Sitotroga cerealella Oliv., Tenebroides mauritanicus L., Silvanus surinamensis L., Ephestia kuehniella Zell.

K. C. Sullivan (October 19): Weevils are doing a tremendous amount of damage to wheat in granaries. Bean and pea weevils are also doing serious damage this fall.

Nebraska

M. H. Swenk (September 15-30): A moderate number of complaints of stored grain pests continued to be received.

GRANARY WEEVIL (Calandra granaria L.)

New York

C. R. Crosby (September 7): Infested wheat was received from Lockport, N. Y.

CADELLE (Tenebroides mauritanicus L.)

Nebraska

M. H. Swenk (October 1-20): The number of complaints of stored grain pest continues to be moderate, or normal. Many of them are of the Cadelles in 1922 wheat.

CRICKETS (Gryllus spp.)

Kansas

J. R. Horton (October 3): These so-called black crickets have been reported as being present in unusual numbers in many residences about Wichita -- most numerous in cellars. This is the first report on this insect as a household pest in five years.

GRAIN MITES (Tyroglyphus sp.)

Nebraska

M. H. Swenk (October 1-20): During the first week in October a very severe infestation of stored wheat by a grain mite, Tyroglyphus sp., came to notice in Cass County.