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THE INSECT PEST SURVEY
BULLETIN

A periodical review of entomological conditions throughout the United States
issued on the first of each month from March to December, inclusive.

Volume 12

April 1, 1932.

Number 2

BUREAU OF ENTOMOLOGY
UNITED STATES
DEPARTMENT OF AGRICULTURE
AND
THE STATE ENTOMOLOGICAL
AGENCIES COOPERATING

Yours
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INSECT PEST SURVEY BULLETIN

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THE MORE IMPORTANT RECORDS FOR MARCH, 1932

Following the very mild winter, very severe storms, with unusually low temperatures, prevailed over much of the eastern part of the United States during March, and frost extended well into the Gulf region.

The situations with regard to the Hessian fly and the chinch bug have not materially changed since our last report, although it is believed by some observers that the extreme cold snap was somewhat deleterious to the latter insect.

The usual spring complaints of cutworm infestations were received from practically the entire southern half of the United States.

The sugarcane borer, which was developing rapidly prior to the cold weather, was very materially checked by the killing of a large part of the above-ground cane in Louisiana. The first adult was observed in that section on February 4, and eggs were first observed in the field on the 16th of that month.

Reports from South Carolina indicated that prior to March 26 a few codling moths emerged in outdoor cages; some had pupated about that time, but no adults emerged prior to March 21 in Georgia. The very cold weather that prevailed in the East Central States apparently had no deleterious effect on the larvae. Examinations made since the cold weather show from 90 to 95 per cent of the overwintering larvae alive in Illinois. At San Jose, Calif., pupation was taking place, but no adults had emerged by March 22.

Larvae of the eastern tent caterpillar are starting to emerge in the Gulf region. Reports of hatching were received from the first of the month on, from Arkansas, Mississippi, Missouri, and parts of Texas. This insect is more abundant in the latter State than it has been observed in many years.

Eggs of fruit aphids were reported as quite generally scarce throughout New England, and from moderately to very abundant over the East Central and Middle Atlantic States. The eggs of both the apple grain aphid and the rosy apple aphid have already started to hatch in the lower part of the East Central States.

The Florida red scale is reported as more abundant than it has been in several years in Florida; and a rather heavy infestation of the California red scale has been discovered near Yuma, Ariz.

During the early part of this year the vegetable weevil was found in Early, Muscogee, and Troup Counties, Georgia; in Washington, Bay, Gulf, and Calhoun Counties, Florida; and it was found in Butler, Montgomery, Macon, Chambers, Pike, Barbour, Russell, Dale, and Houston Counties, Alabama, in addition to the counties already known to be infested.

The seed corn maggot was reported during the entire month as more or less troublesome to potato seed pieces and corn seed along the South Atlantic seaboard and around the Gulf to Texas.

The change is attracting unusual attention by its damage to tobacco seed beds about Chadbourn, N. C.

The pea aphid is attacking Austrian peas, English peas, and garden peas at many points in Alabama, Mississippi, and Arizona.

The severe damage being done to cabbage in the South Atlantic and Gulf States during February continued well into March.

The white spruce sawfly (Diprion polytomum Htg.) has been reported from Bar Harbor, Me. This appears to be the first record of this insect for the United States.

A pine tip moth, Euetria rigidana Fern., is reported as causing serious injury to young pine trees at Jeanerette, La.

The Mexican mealybug Phenacoccus gossypii Towns. & Coll. is attracting considerable attention as a greenhouse pest in central and northern Ohio.

Strawberry plants and fruit suffered from a number of insect activities in the South Atlantic and Gulf States. Larvae of the green June beetle were reported as damaging the plants about Chadbourn, N. C. The bug Orthaea vincta Say, in the northern part of Florida, and the grass leafhopper, about Rocky Mount, N. C., were attacking the blossom stems. The fruit was being damaged by plant bugs in Alabama, by a beetle, Cryptiscus obsoletus Say, in Mississippi, and also by field crickets and garden slugs in that State. The beetle has heretofore, as far as we can ascertain, not been recorded as a pest of strawberries.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

Connecticut

B. H. Walden (March 24): Nymphs of overwintering species of grasshoppers are moderately abundant.

Florida

J. R. Watson (March 21): Schistocerca americana Drury reported moderately abundant, more common than usual for March.

Minnesota

A. G. Ruggles (March 21): In the infested districts, as reported last year, eggs are extremely abundant. In one of our stops in the worst areas we found as many as 180 egg pods per square foot. These eggs have been brought in from time to time during the winter and in ten days are giving us all the way from a 95 to a 100 per cent hatch.

North Dakota

J. A. Munro (March 26): Recently numerous specimens of rather harmless species of grasshoppers have been received from Sheridan, Hettinger, and McLean Counties. These nymphs were picked up on bare spots of the open prairie and were reported as numerous in the eastern part of Sheridan County. Conditions have remained favorable for the eggs of the injurious species overwintering in the soil.

South Dakota

H. C. Severin (March 21): None of the overwintering eggs has hatched. Many letters are received reporting hatching, but upon investigation the nymphs were invariably species that normally hibernate as nymphs. The eggs of Melanoplus bivittatus Say and M. differentialis Thos. that were so abundant in 1931 have passed the winter successfully and we expect a large hatch this spring. Undoubtedly the extent of the area where serious trouble may be expected in 1932 is much larger than it was in 1931.

Missouri

L. Haseman (March 22): Egg packets are abundant and passing the winter in good shape.

Nebraska

M. H. Swenk (March 1 to 20): During the course of the winter farmers frequently reported the presence of nymphs in the fields, especially in sod lands. Many thought that these represented early-hatched individuals of the two-striped or differential grasshopper, which species were so abundant and destructive in parts of Nebraska in 1931. We have investigated a number of such reports including localities in Thayer, Nance, and Brown Counties, and find that in all cases they refer to one or more of four common species of banded-winged grasshoppers (Oedipodinae). The commonest species represented in these collections as a whole in the green-striped grasshopper, Chortophaga viridifasciata De G. In central and northern Nebraska the nymphs of two larger species, the coral-winged grasshopper, Hippiscus apiculatus Harr., and the northwestern red-winged grasshopper, Arphia

pseudonietana Thos., are very common and about equally so. The fourth species was the velvet-striped grasshopper, Eritettix simplex Scudd. This last species was common in February in northern Nebraska. Nymphs of all of these species showed great resistance to cold, being repeatedly frozen during the latter part of the month.

- Oklahoma C. F. Stiles (March 22): Indications are that we will have a serious outbreak this spring in gardens and alfalfa, over the greater part of the State.
- Montana A. L. Strand (March 22): Grasshoppers, probably M. mexicanus Sauss., were reported to have hatched during a warm spell in February. Much sub-zero weather since that time, however, makes their survival very doubtful.
- Wyoming A. G. Stephens (March 23): Grasshoppers are scarce in the northeastern section of the State.
- Colorado G. M. List (March 23): Grasshopper eggs are moderately to very abundant in the Arkansas Vally and in northeastern Colorado.
- Utah G. F. Knowlton (March 24): Grasshoppers are not yet hatching. Snow on much of the ground.
- Arizona C. D. Lebert (March): Grasshoppers are scarce in the Salt River Valley; a few Melanoplus sp. are found in alfalfa areas.

CUTWORMS (Noctuidae)

- North Carolina W. A. Thomas (March 2): Tobacco, garden peas, strawberries, and cabbage have been subjected to a very heavy infestation of cutworms (mostly Lycophotia margaritosa saucia Hbn.) during the past few days at Chadbourn. The principal damage comes from the destruction of the foliage. Areas in several fields of young strawberry plants have been completely defoliated. Garden peas and tobacco have also been defoliated in many instances.
- South Carolina A. Lutken (March 26): Cutworms are very abundant.
- Georgia O. I. Snapp (March 21): Cutworms have been unusually abundant this spring at Fort Valley, and have seriously damaged many gardens.
- Florida J. R. Watson (March 21): Cutworms are very abundant.
- Kentucky W. A. Price (March 24): Examinations of clover fields in central and northern Kentucky during early March revealed the presence of many cutworms.

Missouri L. Haseman (March 22): Half grown larvae of the variegated cutworm were abundant in peach orchard at Sikeston February 25.

K. C. Sullivan (March 22): Cutworms are very abundant in southwestern Missouri.

Tennessee C. Benton (February 22): Cutworms have been reported active in many parts of Lincoln and adjacent counties. The first report was received February 8. Severe damage from their feeding has occurred this month at Fayetteville to hollyhocks, tulips, lilies, and iris.

Texas F. L. Thomas (March 22): Cutworms are moderately abundant in Presidio, San Antonio, and San Angelo on alfalfa, lettuce, and bitterweed (Helenium tenuifolium).

WHITE GRUBS (Phyllophaga spp.)

Kentucky W. A. Price (March 24): White grubs were destroying tomato plants in cold frames at Earlington on March 17.

Mississippi C. Lyle and assistants (March): There was a great deal of complaint of white grubs attacking truck in gardens in northern Mississippi during the fore part of March. (Abstract, J.A.H.)

Texas F. L. Thomas (March 22): Phyllophaga rubiginosa Lec. and P. hirtiventris Horn were taken at light March 16 at Wharton. P. calceata Lec. was taken at light February 26 at Bryan. P. congrua Lec. was taken at light March 3 at Dickinson.

A WIREWORM (Heteroderes laurentii Guer.)

Alabama K. L. Cockerham (February 25): Larvae were observed attacking seed corn which had been planted on February 17. The larvae were active and boring into the sprouted kernels.

JAPANESE BEETLE (Popillia japonica Newm.)

Pennsylvania T. L. Guyton (March 23): The Japanese beetle is appearing in greenhouses in Philadelphia.

New Jersey C. H. Hadley and assistants, Japanese Beetle Laboratory (February): The first shipment of Australian material arrived this month. The parasites are tachinids of the genus Palpostoma which deposit their larvae on adults of several genera of Scarabaeidae. The shipment arrived in good condition on February 13 and consisted of one case containing 5,056 puparia. This material was shipped from Australia January 18, by R. W. Burrell.

GREEN JUNE BEETLE (Cotinis nitida L.)

North Carolina W. A. Thomas (March 5): There have been an unusual number of complaints reaching the laboratory from Chadbourn regarding the destructiveness of these larvae to strawberry plants. This seems to be especially true where large quantities of straw mulch was turned under in the fields last summer and fall. Lawns as well as sod lands are exhibiting signs of grub activity. There are indications of a heavy grub infestation in this section.

CALIFORNIA TORTOISE SHELL (Aglais californica Bdv.)

California E. O. Essig (March 6): A definite migration of California tortoise shell butterflies at Pt. Arena from south to north and west occurred from 1 to 3 p. m.

MONARCH BUTTERFLY (Danaus menippe Fab.)

Florida H. T. Fernald (March 21): I have watched the monarch butterfly all winter, as some claim it goes farther south to winter, but it has been plentiful at Orlando until this month. My last observation on February 29. Have they migrated farther south (doubtful); or have they died after laying eggs for a new generation here? I suspect the latter to be the case with some of them at least, as I took a fresh specimen (only a little over half size) April 9, 1931. Yet that same day I also took a full-sized, faded one.

COMMON RED SPIDER (Tetranychus telarius L.)

Missouri L. Haseman (March 22): Some growers in southwestern Missouri are alarmed over the abundance of red spider eggs.

C E R E A L A N D F O R A G E - C R O P I N S E C T S

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

Ohio T. H. Parks (March 24): There are more overwintering larvae present than in the average year.

Missouri L. Haseman (March 22): The Hessian fly is wintering well and the situation is threatening.

Tennessee C. Benton (February): Pupation began in early February and increased to 20 per cent with slight emergence by the end of the month.

Kansas R. H. Painter (March 25): According to reports of the county agent, a field 2 miles south of Oskaloosa. is a total loss.

Nebraska

M. H. Swenk (March 22): Hessian flies are moderately to very abundant. During the last week in October and early in November the winter wheat in Phelps and adjacent counties developed a serious infestation. This infestation includes the whole of Phelps County, and extends northward over western and northern Buffalo County, eastward into Kearney County, southward into northern Harlan County and Franklin County, and westward into Gosper County (see my report of December 1). At the same time, what appeared at first to be a much less important infestation was found in Seward and Thayer Counties. Later, however, it was found that this more eastern area of infestation extended over much of Butler, Seward, Saline, Fillmore, Thayer, Jefferson, and Gage Counties, and also extended somewhat into adjacent counties. Wheat in this more eastern area that looked all right when the November snows covered the fields was brown and dead when the late January thaws exposed the plants, and many showed a heavy infestation with puparia. These infestations developed as a result of a much delayed emergence of the main fall brood, due to the hot dry conditions of September and October. The present situation points to the probability of extensive serious damage this spring.

WHEAT STRAW WORM (Harmolita grandis Riley)

Kansas

R. H. Painter (March 25): I found the wheat straw worm in a sack of straw February 26, and all emerged from the straw March 23. This insect was found among wheat plants in the field March 18, and is still present in the field.

CHINCH BUG (Blissus leucopterus Say)

Missouri

K. C. Sullivan (March 22): Chinch bugs are very abundant in central and western Missouri. Recent cold weather has been very helpful in so far as chinch bugs are concerned. A great deal of burning has been done during the past two months.

APHID (Aphidae)

Tennessee

C. Benton (February): Aphids were observed to be abundant in a wheat plot at Fayetteville, February 22, and in two barley fields near Belfast February 26. The species has not yet been determined.

California

E. O. Essig (March 19): Dispersal migrations of winged grass and grain aphids were noted March 10 at Berkeley.

CORN

CORN LEAF APHID (Aphis maidis Fitch)

Louisiana

J. W. Ingram and E. K. Bynum (February 27): Four winged corn aphids have been collected on sticky paper in the field during

the month, indicating that this insect is beginning flight at this early date.

ALFALFA

ALFALFA CATERPILLAR (Eurymus eurytheme Bdv.)

Arizona

C. D. Lebert (March): Fourth instar larvae of the alfalfa caterpillar have been found in alfalfa fields. Some adults have been noticed, but they are not numerous as yet.

CLOVER ROOT CURCULIO (Sitona hispidula Fab.)

Kentucky

W. A. Price (March 24): The sitona beetle is doing serious damage to alfalfa in the vicinity of Independence. A survey of that territory on March 1 showed 3 or 4 beetles to nearly every plant.

GRASS

A NYMPHALID BUTTERFLY (Euphydryas perdiceas Edw.)

Washington

C. W. Getzendaner (March 21): Larvae are very abundant in spots on the open prairie, at Grand Mound, averaging about 12 per square foot and running as high as 27 per square foot.

A CRANE FLY (Tipula bicornis Forbes)

Missouri

L. Haseman (March 22): Larvae about one-half grown are beginning to attract attention again in central Missouri; they are very abundant in meadows.

A MARCH FLY (Bibio albipennis Loew)

Nebraska

M. H. Swenk. (March 1 to 20): During the first week in March, farmers in the Republican Valley in Webster County found maggots of B. albipennis very numerous in cornfields, underneath old ears of corn lying on the ground, and inquired concerning their identity.

SUGARCANE

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana

W. E. Hinds (March 24): Adults began emerging by the middle of February and the first generation was getting well started under abnormally high winter temperatures. On March 9 the coldest weather of the winter occurred and the coldest March temperature since 1890, when 27° F. was recorded at New Orleans. This year the minimum temperature went to 25° at Baton Rouge and through the northern part of the Cane Belt, with freezing temperatures throughout the Belt. This cold killed back to the

ground the major part of the cane growth and also destroyed the first generation. It also resulted in materially increasing the mortality among pupae. The sugarcane growth above ground was not all killed in the southern part of the Belt and will recover quite promptly.

J. W. Ingram and E. K. Bynum (February 27): The first adult observed this year emerged on the 4th from a pupa collected in the field. Others have emerged during the month. The first eggs were observed on the side of a jar containing a few adults on the 12th. Eggs were first noticed in the field on the 16th. First-generation borers were found feeding in the tops of young cane shoots on the 19th. Three adults were collected at lights between 7.15 and 8 p. m. on the 26th.

W. A. Douglas (March 23): As a result of freezing weather early in March, it has been found that from 14 to 15 per cent of the borers in rice stubble were killed.

SUGARCANE BEETLE (Euethola rugiceps Lec.)

Louisiana

J. W. Ingram and E. K. Bynum (February 27): Beetles began feeding on young sugarcane shoots during the last part of February. Numbers of "deadhearts" caused by the beetles were found on the 26th. One plantation laborer collected 83 beetles found attacking cane shoots on that date. The males found on young cane shoots have thus far outnumbered the females by about 5 to 3. No beetles have been collected at lights.

A WEEVIL (Anacentrus (Limnobaris) sp.)

Louisiana

W. E. Hinds (March 24): The activity of sugarcane rootstock weevils has continued and they were protected from the effects of the cold wave by their location below the surface of the ground.

F R U I T I N S E C T S

APPLE

CODLING MOTH (Carpocapsa pomonella L.)

Pennsylvania

H. G. Hodgkiss (March 26): The codling moth is very abundant in the Cumberland Valley.

South Carolina

W. C. Nettles (March 26): Pupation is well advanced and a few moths have emerged in outdoor cages.

Georgia

C. H. Alden (March 21): The codling moth is very abundant at Cornelia. A few have pupated; there has been no emergence to date.

- Ohio T. H. Parks (March 24): Moderately abundant. Birds did not seem to destroy so many as usual during the winter.
- Illinois W. P. Flint (March 22): The recent spell of cold weather has apparently had little effect on overwintering larvae. Examinations since the cold weather show from 90 to 95 per cent of the overwintering larvae alive.
- Missouri L. Haseman (March 22): Codling moths seem to be wintering perfectly; a heavy spring brood is expected.
- Colorado G. M. List (March 23): The colding moth is very abundant.
- California G. S. Hensill (March 22): The first brood adults have not yet emerged at San Jose. Some are in pupae at present.

EASTERN TENT CATERPILLAR (Malacosoma americana Fab.)

- Missouri L. Haseman (March 22): Egg masses were reported as being abundant in the southern part of Missouri.
- Arkansas W. J. Baerg (February 29): Caterpillars are just beginning to hatch in Fayetteville; the egg masses are common on wild cherry, wild plum, and peach.
- Mississippi C. Lyle (March 21): The first tent caterpillars to be received at this office during 1932 were taken from a plum bush at Meridian on March 16 by Inspector M. L. Grimes. No injury had been caused.
- Texas F. L. Thomas (March 22): The apple tree tent caterpillar is more abundant at College Station than I have ever seen it. The red haw is being rapidly stripped and practically all bushes are infested with one or more nests. A temperature of 23° F. did not kill the worms.

APHIDS (Aphidae)

- Vermont H. L. Bailey (March 12): Short inspections of apple twigs in Windham, Washington, and Addison Counties indicate a scarcity of apple aphid eggs.
- Connecticut B. H. Walden (March 24): Eggs of the rosy apple aphid (Anuraphis roseus Baker) and the green apple aphid (Aphis pomi DeG.) are scarce.
- Delaware L. A. Stearns (March 24): Fruit aphids are moderately abundant.
- Pennsylvania T. D. Guyton (March 1): Eggs are very abundant in Lancaster and Franklin Counties.

- Ohio T. H. Parks (March 24): Orchard aphids have not hatched, and practically no dormant spraying has been done, as the weather has hovered around and below freezing for three weeks.
- Kentucky W. A. Price (March 24): Specimens of twigs of apple sent in from Beattyville, Berea, and Mayfield on March 3 and 4 were badly infested with the rosy apple aphid and the apple grain aphid (Rhopalosiphum prunifoliae Fitch).
- Michigan R. H. Pettit (March 23): Fruit aphid eggs are plentiful.
- Missouri K. C. Sullivan (March 22): Fruit aphids are moderately abundant in general.
- L. Haseman (March 22): Growers are worried about possible damage from rosy apple aphids again this spring. Some apple grain aphids began hatching at Columbia before the recent cold spell.
- Mississippi C. Lyle and assistants (March 21): Fruit aphids are scarce; there are a few apple aphids.
- Oregon D. C. Mote (March): Rosy aphids reported in Willamette Valley as hatching March 18. Buds just swelling on early varieties.

TREEHOPPERS (Membracidae)

- West Virginia L. M. Peairs (March 29): Treehoppers on apple at Martinsburg and vicinity. Extreme damage from egg-punctures in orchards kept in clover and alfalfa.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

- Delaware L. A. Stearns (March 24): The San Jose scale is somewhat more abundant than in years past.
- Pennsylvania T. L. Guyton (March 23): The San Jose scale is very abundant in Harrisburg. This is also true for the Cumberland Valley area.
- Illinois W. P. Flint (March 22): During the first week in March we experienced the coldest weather of the winter, with temperatures running close to zero even in the southern part of the State. This had the effect of killing some of the overwintering San Jose scale, reducing the percentage of live scale from between 60 and 70 per cent to between 35 and 50 per cent.
- Kentucky W. A. Price (March 24): San Jose scales are reported very abundant. The very mild winter seems to have favored this pest, which has been on the increase in the State during the past year. In many places the encrusted state has been reached. Females were actively reproducing at Peytonsburg on March 12.

Michigan R. H. Pettit (March 23): The San Jose scale is very abundant.

Missouri K. C. Sullivan (March 22): The San Jose scale is very abundant in general.

L. Haseman (March 22): The San Jose scale situation in the southern part of the State is alarming.

Texas F. L. Thomas (March 22): The San Jose scale is very abundant on peach and pear trees in El Campo.

Colorado G. M. List (March 23): A slight increase of the San Jose scale has been observed in Mesa and Delta Counties.

LEAFHOPPERS (Cicadellidae)

Connecticut B. H. Walden (March 24): Apple leafhopper eggs are very abundant.

APPLE FLEA WEEVIL (Orchestes pallicornis Say)

Ohio J. S. Houser (March 16): A heavy infestation of this insect occurred in the Twitchell orchards at Chillicothe (1931), and large numbers of the beetles entered hibernation. The purpose of this note is to record the heavy winter mortality due to the work of the fungus Sporotrichum globuliformum which has taken place. The debris under some trees where examined yielded large numbers of the dead fungus-covered beetles and few if any living ones. Dead beetles were most abundant in the sections of the orchard that were not well drained.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Alabama J. M. Robinson (March 21): Shot-hole borers were observed on apple twigs at Bankston.

Mississippi C. Lyle and assistants (March 25): The shot-hole borer is very abundant in several orchards in northeastern Mississippi. The trees were weakened by the presence of the San Jose scale and other pests which gave the shot-hole borer a good opportunity to work.

EUROPEAN WILLOW BEETLE (Flagiodes versicolora Laich.)

Connecticut W. E. Britton (March 22): The beetles were abundant hibernating under dead bark of an apple tree in Ridgefield.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Vermont H. L. Bailey (March 12): Very few eggs of the European red mite were found in such inspections as have been made.

A MITE (Eriophyes sp.)

California

E. O. Essig (March 19): Eriophyes sp. was abundant in the buds of apple trees in the Yosemite National Park February 22. Last summer the leaves showed very serious injury because of the mite.

PEACH

PEACH BORER (Aegeria exitiosa Say)

Georgia

O. I. Snapp (March 21): Growers are reporting this insect to be more abundant than usual in Fort Valley, which may be due to the prolonged oviposition period last fall. Eggs were deposited as late as November 8, and under orchard conditions they hatched as late as December 1.

LESSER PEACH BORER (Aegeria pictipes G. & R.)

Georgia

O. I. Snapp (March 21): Adults were observed in orchards today in Fort Valley. This is an early record, and is undoubtedly due to the very mild winter.

ORIENTAL FRUIT MOTH (Grapholitha molesta Busck)*

South Carolina

W. C. Nettles (March 26): Oriental fruit moths are emerging and some eggs have been laid in outdoor cages.

Georgia

C. H. Alden (March 22): Oriental fruit moths are scarce in Cornelia. The first moth was observed on March 19.

Illinois

W. P. Flint (March 22): S. C. Chandler reports that the oriental fruit moth pupation started at Carbondale on March 17.

PEACH TWIG BORER (Anarsia lineatella Zell.)

Kansas

E. G. Kelly (March 25): We have an insect much harder to control and one that caused much damage, unnoticed before last year, and that is the peach twig borer.

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Georgia

O. I. Snapp (March 21): Adults have not yet started to appear from hibernation in Fort Valley. Indications point to a late start for this insect this year, in which case a second-brood attack would not be anticipated.

*Correction - The note by W. H. Clarke, published in the Insect Pest Survey Bulletin, March, 1932, page 17, in next to the last line: "only 25 per cent" should be corrected to read, "only .25 per cent."

Kansas

H. R. Bryson (March 25): A report of A. M. Walker of Pittsburg, to E. G. Kelly, was as follows: "With the peach crop destroyed in 1930, the curculio was almost exterminated and with peaches and plums both killed completely and no thorn for it to breed in, we should not be bothered with the curculio for a few years."

RASPBERRY

RASPBERRY FRUIT WORM (Byturus unicolor Say)

Washington

W. W. Baker (March 18): Observed attacking loganberry at Auburn. This is the earliest date at which I have ever found the adults above ground. This may have been due to the fact that the soil was flooded for a couple of weeks. However, the adults in the soil were apparently uninjured by the standing water.

A CURCULIONED (Geoderces melanothrix Kby.)

Washington

W. W. Baker (March 8): There has been very little if any evidence that this weevil has as yet started to feed on the raspberry buds, but they were above ground in large numbers although a few were still in the pupal chambers in Puyallup.

RED-NECKED CANE BORER (Agrilus ruficollis Fab.)

Mississippi

C. Lyle (March 21): Young berry twigs injured by A. ruficollis were received from Columbus on March 17. The correspondent indicated that only slight injury had been observed. Injury by this species to young berry plants was reported from Hurley on March 18.

BLACK-HORNED TREE CRICKET (Oecanthus nigricornis quadri-
punctatus Beut.)

Nebraska

M. H. Swenk (October to February 29): In Wayne County a heavy infestation of raspberry canes with the eggs of the black-horned tree cricket (Oecanthus nigricornis) was reported about the middle of November.

PLUM

PEAR THRIPS (Taeniothrips inconsequens Uzel.)

Oregon

S. C. Jones (March): A few found on wing March 12. March 15 were found coming out in cages and on March 21 were emerging in large numbers.

GRAPE

GRAPE LEAFHOPPER (Erythroneura comes Say)

Nebraska

M. H. Swenk (October to February 29): On February 26, with a sudden onset of warm and springlike weather, in Hamilton County, an abundance of active adult grape leafhoppers (Erythroneura sp.) was noted in the vicinity of a farm vineyard.

California

J. F. Lamiman (March): The grape leafhopper is very abundant in the central San Joaquin Valley.

APPLE TWIG BORER (Amphicerus bicaudatus Say)

Mississippi

G. L. Bond (March 19): The grape vine borer was reported at Louin as doing considerable damage to grapevines.

Colorado

G. M. List (March 23): The apple twig borer has been unusually abundant in the Arkansas Valley on grapes during the past two seasons. Several inquiries have been received lately indicating that they are quite numerous again.

PACIFIC RED SPIDER (Tetranychus pacificus McG.)

California

J. F. Lamiman (March): The Pacific red spider is becoming active in San Joaquin and Stanislaus Counties, and is leaving hibernating quarters beneath the bark of grapevines; it is feeding on weeds in the vineyards prior to development of buds on the vines.

PECAN

PECAN COSSID (Cossula magnifica Streck.)

Georgia

J. B. Gill (March 25): Damage by the hickory cossid borer is showing up in the pecan orchards at Albany and vicinity.

Mississippi

Wm. L. Gray (March 16): The pecan cossid is moderately abundant on pecan at Natchez, Adams County.

TWIG GIRDLER (Oncideres cingulatus Say)

Mississippi

M. L. Grimes (March 21): Pecan twig girdlers were found in several orchards in Neshoba, Kemper, Newton, Lauderdale, and Clarke Counties.

GIANT APHID (Longistigma caryae Harr.)

Georgia

J. B. Gill (March 25): These aphids are moderately abundant on pecan trees in Albany and southern Georgia.

Mississippi N. L. Douglass and M. L. Grimes (March 18, 21): Large brown aphids are found on pecans in moderate abundance at Meridian.

OBSCURE SCALE (Chrysomphalus obscurus Comst.)

Georgia J. B. Gill (March 25): The obscure scale is occasionally found on oak trees around Albany, but not in very injurious numbers. In all infestations observed, the beneficial fungi were present and appeared to be important factors in keeping the scale under natural control.

Mississippi C. Lyle (March 21): C. obscurus was found on pecan from Cary, February 26.

Arkansas P. D. Sanders (March 10): The pecan scale was doing considerable damage to three large pecan orchards I inspected in Pulaski County. I also noted 600 trees heavily encrusted on a farm in Holly Grove. I visited three pecan growers located 15 miles east of Little Rock where 1,000 trees were heavily infested; many branches are being killed at Alexander farms.

CITRUS

FLORIDA RED SCALE (Chrysomphalus aonidum L.)

Florida J. R. Watson (March 21): The Florida red scale is more abundant than it has been for several years past, owing to the unusually warm weather for several winters.

CALIFORNIA RED SCALE (Chrysomphalus aurantii Mask.)

Arizona C. D. Lebert (March): The California red scale again made its appearance on a small lemon tree at Mesa, where a heavy infestation was treated last year. Just a few scales were found on the new wood. All other trees were apparently clean. A rather heavy infestation was found March 10 on a small mixed citrus planting at Yuma. The grove was cut back and treated March 15.

COTTONY-CUSHION SCALE (Icerya purchasi Mask.)

Georgia J. B. Gill (March 25): Many complaints of cottony-cushion scale infestations have been received from scattered localities in the southern part of the State, where the insect has been doing much damage to ornamental plants and Satsuma orange trees. We have been furnishing interested growers and parties with Vedalia beetles from our Albany, Georgia, station. In most cases very good control is being obtained through the colonization of the Vedalia on the infested properties.

CITRUS APHID (Aphis spiraeicola Patch)

Florida

J. R. Watson (March 21): A. spiraeicola is reported scarce for March. It is decidedly more abundant on citrus than a month ago, but the infestation is still not severe as compared with other years.

COWPEA APHID (Aphis medicaginis Koch)

Arizona

C. D. Lebert (March): A. medicaginis is moderately abundant in Phoenix. This insect, which attacks the tender new growth of citrus, is quite numerous at this time in the valley. However, a little hymenopterous parasite has been observed in most cases to be working on the aphid.

BLACK CITRUS APHID (Toxoptera aurantii Boyer)

Mississippi

C. Lyle (March 21): Satsuma leaves infested with Hysteroneura aurantii (det. by A. L. Hamner) were received from Pascagoula on March 7. The aphids were heavily parasitized.

CITRUS WHITEFLY (Dialeurodes citri Riley & Howard)

Georgia

J. B. Gill (March 25): The citrus whitefly is moderately abundant on ornamentals and citrus in Albany and in southern Georgia.

Florida

J. R. Watson (March 21): The citrus whitefly is beginning to emerge. Its numbers are not so great as one would expect from a warm winter, owing undoubtedly to an unusual development of the entomogenous fungi during the winter.

Louisiana

W. E. Hinds (March 24): The citrus whitefly is very abundant on all host plants in southern Louisiana.

A TORTRICID MOTH (Platynota sp.)

Arizona

C. D. Lebert (March): Larvae of Platynota sp. were found in grapefruit and oranges near Phoenix. About 4 per cent of the fruit was found to contain larvae which were found below the rind in the white tissue. Entrance holes were numerous and a rot had followed the injury. This is the second time this insect has been found on citrus in this locality.

CITRUS THRIPS (Scirtothrips citri Moul.)

Arizona

C. D. Lebert (March 21): Citrus thrips are out at Phoenix. Several immature individuals have been found on the tender new growth and only two or three winged specimens.

FIG.

THREE-LINED FIG TREE BORER (Ptychodes trilineatus L.)

Mississippi

J. P. Kislanko (March 19): The three-lined fig tree borer is very abundant in Hattiesburg and seriously injuring the fig trees.

GREEN SHIELD SCALE (Pulvinaria psidii Mask.)

Florida

E. W. Berger and G. B. Merrill (March 22): The green shield scale is very abundant on wild rubber, Ficus aurea, in southern Florida and the Okeechobee area.

GUAVA

CARDIN'S WHITEFLY (Aleurodicus cardini Back)

Florida

E. W. Berger and G. B. Merrill (March 22): Cardin's whitefly is moderately abundant on guava bushes in Port Myacca, eastern shore of Lake Okeechobee.

ALMOND*

WESTERN TENT CATERPILLAR (Malacosoma pluvialis Dyar)

California

A. E. Michelbacher (March 18): The coast tent caterpillar is starting to defoliate almonds around Antioch. A year ago it did much damage in this area.

TRUCK - CROP INSECTS

VEGETABLE WEEVIL (Listroderes obliquus Gyll.)

Georgia

M. M. High (February) The vegetable weevil was found in Early and Troup Counties this year. An ant (Solenopsis per-gandei Forel) was observed injuring pupae and larvae in large numbers, and a disease has caused heavy mortality of larvae, pupae, and adults in Stone and a part of Harrison County.

M. R. Smith (March 17): H. T. Vanderford has found the vegetable weevil at Columbus, Muscogee Co. A specimen which he collected (exact date not specified, but between March 6 and 10) was sent here along with the ants which he submitted.

Florida

M. M. High (January-February): This insect has been found in Washington, Bay, Gulf, and Calhoun Counties.

Alabama

M. M. High (January-February): This insect was found in Houston, Dale, Pike, Barbour, Macon, Russell, Chambers, Montgomery, and Butler Counties.

Mississippi

C. Lyle and assistants (March): Complaints of heavy injury have been received during March from many points in the State, where they were damaging a wide variety of truck crop. (Abstract, J.A.H.)

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

Florida

J. R. Watson (March 21): D. balteata was found near Gainesville.

Mississippi

K. L. Cockerham (February 23): The banded cucumber beetle was observed feeding on volunteer sweetpotato plants in Bay St. Louis, Hancock County, on this date.

C. Lyle and assistants (March): This insect is still abundant and damaging peas and beans in the southern part of the State. (Abstract, J.A.H.)

SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Georgia

J. B. Gill (March 25): The spotted cucumber beetle is scarce in Albany. It has been found on the blossoms of peach and plum trees.

Alabama

J. W. Robinson (March 21): The spotted cucumber beetle is moderately abundant on winter legumes at Auburn.

WESTERN SPOTTED CUCUMBER BEETLE (Diabrotica soror L.)

Oregon B. G. Thomson (March 25): This species has been out of winter quarters since March 1 and can be found generally in young clover fields, but appear to be not as numerous as last year. Eggs are now being found in the field.

FLEA BEETLES (Halticinae)

Tennessee C. Benton (February): Flea beetles were reported injuring patches of turnip greens at Fayetteville.

Alabama J. M. Robinson (March 21): Flea beetles were found on small sweetpotato plants at Bay Minette.

SEED CORN MAGGOT (Hylemyia cilicrura Rond.)

North Carolina W. A. Thomas (March 15): During the early part of March adults were unusually abundant in the fields in Chadbourne. Larvae, pupae, and adults were also abundant under canvas on tobacco beds. There was apparently no injury to the tobacco seedlings. On both potatoes and sprouting corn in the fields considerable damage is being done at the present time.

South Carolina A. Lutken (March 26): The seed-corn maggot is very abundant.

Mississippi C. Lyle and assistants (March): Injury was reported from several points in the State; to onions at Sallis, bean seed at Meridian, and iris at Gulfport. (Abstract, J.A.H.)

Alabama J. M. Robinson (March 21): Seed-corn maggots are moderately abundant on seed potatoes at Auburn.

Texas F. L. Thomas (March 22): The seed-corn maggot is moderately abundant on spinach in Crystal City.

CHANGA (Scapteriscus vicinus Scudd.)

North Carolina W. A. Thomas (March 1): The mole crickets are much more destructive to tobacco seed beds than usual in Chadbourne. On many of the beds the soil has been thoroughly pulverized and the young plants uprooted.

FALSE CHINCH BUG (Nysius ericae Schill.)

North Carolina W. A. Thomas (March 15): This insect has been unusually destructive to broccoli and mustard during the past month in Chadbourne. The infestation seemed to be much heavier on overwintering plants than on the young spring crop. Cabbage and rutabaga turnips seem to have almost entirely escaped injury by this insect.

South Carolina A. Lutken (March 26): The false chinch bug has been destructive in the lower part of the State.

Nebraska W. H. Swenk (February 29): During the second week in November large swarms of the false chinch bug occurred on the crowns of alfalfa plants in fields in Dundy County.

BORDERED PLANT BUG (Euryopthalmus convivus Stal)

California A. E. Michelbacher (March 19): Bordered plant bugs are leaving hibernation, as is evident by their mating.

BEAN THRIPS (Heliethrips fasciatus Perg.)

California E. O. Essig (March 7): First appearance of bean thrips on pepper grass and wild lettuce at Vernalis. Adults quite plentiful following a month of fair weather.

GREENHOUSE CENTIPEDE (Scutigera innaculata Newp.)

California A. E. Michelbacher (March 18): As early as February 12 many eggs of the garden centipede were observed. Since that time there has been a period of heavy egg laying. In places, at least, they appear to be very slow in hatching, as very few young centipedes have been observed. The centipedes have been active for a considerable period of time. In several places they have wiped out localized areas of sugar-beet plantings. They apparently attack the seed as soon as it has germinated. In places they seem to have killed the seedling beets after they have reached the surface. Garden centipede attack is also apparent on asparagus at the present time.

SOWBUGS (Oniscidae)

Alabama J. M. Robinson (March 21): Sowbugs are in gardens at Pt. Cliff and Birmingham.

Mississippi C. Lyle and assistants (March): Sowbugs have been attracting considerable attention in the extreme southern part of the State, principally by attacking strawberries, but they have also been reported as attacking violets and other soft annuals. (Abstract, J.A.H.)

SLUGS (Mollusca)

Mississippi C. Lyle and assistants (March): Slugs have been doing ^{very} considerable damage to strawberries in the Gulf Coast Counties. (Abstract, J.A.H.)

POTATO

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Florida J. R. Watson (March 21): The Colorado potato beetle is moderately abundant. It was quite common in Alachua County the first part of March. There was a scattered infestation in the Hastings potato belt.

Alabama K. L. Cockerham (February 26): Several Colorado potato beetles were observed on volunteer Irish potato plants in a field in Foley today. They were active and feeding.

Mississippi K. L. Cockerham (February 19): The first adult of this season was observed in Biloxi today crawling around on a sidewalk.

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Mississippi C. Lyle and assistants (March): The first adult of the season was observed in Stone County, March 3. By the third week in the month as many as 6 beetles per sprout had been observed in some fields. (Abstract, J.A.H.)

POTATO TUBER WORM (Gnorimoschena operculella Zell.)

Florida C. T. Stahl (March 10): It appears that a shipment of potatoes had been received at Jacksonville from Raiford which was held for some time on account of low market. These potatoes were evidently infested when they were received and the infestation developed rapidly in storage. When Mr. Nooney discovered this infestation he had all of the potatoes removed and destroyed. These potatoes were packed in hampers. After this experience Mr. Nooney cleared out the warehouse and cleaned it up and had it thoroughly whitewashed. He does not think that he will have any further trouble because he does not expect to hold any potatoes over for any length of time.

EGGPLANT

CORN EAR WORM (Heliothis obsoleta Fab.)

Florida W. H. White (February 15): A specimen of the corn ear worm was taken from an eggplant purchased on the local market (Washington), and reported to have come from Florida. There were six or seven worms on the fruit and they had entered the stem end. (Determined by C. Heinrich.)

BEANS

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

- Connecticut N. Turner (March 22): On warm days during December and January a few active adults were seen in pine plantations in the southern part of the State.
- West Virginia L. W. Peairs (March 29): The Mexican bean beetle is moderately abundant at Morgantown. Caged beetles show good survival.

A LEAFHOPPER (Empoasca filamenta DeL.)

- Utah G. F. Knowlton (March 25): The most abundant leafhopper in northern Utah on potatoes and beans during 1931 was the species recently described by DeLong as E. filamenta.

PEAS

PEA APHID (Illinoia nisi Kalt.)

- Alabama J. M. Robinson (March 21): English peas are heavily infested with plant lice at Atmore, Troy, and Dothan; there is a heavy infestation on Austrian peas at Enterprise.
- Mississippi K. L. Cockerhan (February 15 to 29): In the vicinity of Pascagoula, Jackson County, 175 acres of early peas were planted for early shipping. During the last half of February the pea aphid attacked this crop so severely that control measures were necessary.
- C. Lyle and assistants (March): This insect was very abundant on Austrian winter peas and garden peas. (Abstract, J.A.H.)
- Arizona C. D. Lebert (March): The pea aphid is becoming very numerous in the Salt River Valley. Late last fall peas were infested heavily and this year's planting is becoming infested rapidly. About 1,000 acres are known to be infested.

CABBAGE

DIAMOND-BACK MOTH (Plutella maculipennis Curt.)

- Georgia J. E. Gill (March 25): Some complaints of injury to cabbage plants have been received during the month from southern Georgia. Evidently this insect is more abundant than usual, especially for this early in the year.

CABBAGE LOOPER (Autographa brassicae Riley)

Mississippi H. Dietrich (March 21): Full-grown larvae were found sparingly on peas at Lucedale on February 27.

CABBAGE APHID (Brevicoryne brassicae L.)

South Carolina A. Lutken (March 26): Cabbage aphids are abundant over the State.

Georgia J. B. Gill (March 25): The cabbage aphid is becoming troublesome on cabbage plants in southern Georgia.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Maryland J. A. Hyslop (March 26): An active adult was found among dead iris leaves in Silver Spring.

Georgia J. B. Gill (March 25): The harlequin bug is moderately abundant on collard and cabbage plants in Albany and southern Georgia.

Texas R. R. Reppert (March 22): The harlequin bug is moderately abundant on turnip in Pearsall.

ASPARAGUS BEETLE (Crioceris asparagi L.)

South Carolina A. Lutken (March 26): Asparagus beetles were actively feeding and depositing eggs, March 4, in Aiken.

STRAWBERRY

STRAWBERRY PANERA (Orthaea vincta Say)

Florida J. R. Watson (March 21): The panera, reported on strawberries, is still giving much trouble, particularly in the northern strawberry belt, including the counties of Alachua, Bradford, and Clay. Paromius longulus Dall. is also found associated with the above species.

GRAIN LEAFHOPPER (Draculacephala reticulata Sign.)

North Carolina Z. P. Metcalf (March 8): Very abundant on strawberry at Rocky Mount. Attacks the blossom stem, causing the blossoms to wither and die.

A MIRID (Lygus sp.)

Alabama J. M. Robinson (March 21): Lygus sp. is destroying the fruit of strawberries at Atmore.

FOREST AND SHADE - TREE INSECTS

A SAWFLY (Diprion polytomum Htg.)

Maine H. B. Peirson (March 25): A white spruce sawfly has been noted at Bar Harbor. This is the first reported occurrence in the United States of this serious European pest.

SPRING CANCKER WORM (Palencrita vernata Peck)

Iowa H. E. Jacques (March 28): Spring canker worms are now in flight.

Kansas H. R. Bryson (March 25): There have been reports that females taken from the crevices of the bark of an elm tree following the severe cold weather of March 5 to 15 were not killed by a temperature of -2°F .

Missouri L. Hasenan (March 22): Male moths were on the wing the last days in February and the early part of March in east-central and southeastern Missouri.

A HORNET MOTH (Alcathoe aniformis Clerck)

New York G. P. Engelhardt (March 10): The species has become well established in Brooklyn and outlying districts on Long Island, in New York City, the Bronx, Westchester County, Staten Island, Hoboken, Jersey City, and the Hackensack meadows region. In Brooklyn and locally on Long Island the insect is assuming economic importance. Its attacks are limited to the base of trees and lateral surface roots. Carolina poplars are the chief sufferers, next silver poplar, and Populus balsamifera and willows the least. From one Carolina poplar at Baldwin, L. I., I extracted over fifty pupae. Yet the species is poorly represented in most general collections of Lepidoptera. It is my opinion that it as yet has not spread very far from its point of introduction at or near New York City; an area of 100 miles probably covers its present range. My dates of emergence range from May 16 to June 21.

BAGWORM (Thyridopteryx emmenraeformis Haw.)

Ohio J. S. Hauser (March 11): Heavy damage caused last year in the Mt. Airy Forest of Cincinnati bids fair to be less pronounced in 1932 owing to the fact that parasites destroyed large numbers of the insects last fall. A heavy percentage of the bags are empty instead of containing eggs.

EUROPEAN FRUIT LECANIUM (Lecanium corni Bouche)

Vermont H. L. Bailey (March 22): Many young lecanium scale insects, apparently alive, have been found on branches of elm and ash in Montpelier where infestation was heavy last year.

A DARKLING BEETLE (Crypticus obsolutus Say)

Mississippi M. M. High (February): A beetle unrecorded as a pest of strawberry was found injuring berries at Longbeach.

A ROOT WEEVIL (Dyslobus ursinus Horn)

Oregon K. Gray (March): Adults were out and feeding March 17.

FIELD CRICKETS (Gryllus assimilis Fab.)

Mississippi C. Lyle and assistants (March): Field crickets were quite generally reported over the southern third of the State as doing considerable damage to strawberries. (Abstract, J.A.H.)

GARDEN SLUG (Agriolimax agrestis L.)

Mississippi M. M. High (February): A. agrestis has caused serious injury to strawberry about Landon, Harrison County. This slug appeared suddenly in large numbers and attacked the rine fruit.

BETTS

SUGAR-BEET ROOT APHID (Pemphigus betae Doane)

California A. E. Michelbacher (February 12): This insect has been found in great abundance on the roots of Polygonum spp. The organism has wintered over on this host.

TOBACCO

TOBACCO FLEA BEETLE (Epitrix parvula Fab.)

North Carolina C. H. Brannon (March): Large numbers of flea beetles are appearing a month earlier than usual in tobacco plant beds due to heavy infestations in the fields last fall and the mild winter weather. This early infestation is apparent now over a wide area in eastern and central North Carolina.

Florida F. S. Chamberlin (March 3): Flea beetles are rather abundant in tobacco seed beds in Gadsden County. Newly set tomato plants are being heavily attacked in some instances.

Mississippi F. P. Ansler (March 16): Tobacco flea beetles are moderately abundant on strawberries at Gulfport.

OYSTER-SHELL SCALE (Lecidosaphes ulmi L.)

- Michigan R. H. Pettit (March 23): The oyster-shell scale is moderately abundant on lilac and nut trees.
- Missouri K. C. Sullivan (March 22): The oyster-shell scale is very abundant in general.
- Colorado G. M. List (March 23): The oyster-shell scale was very much reduced in numbers by low temperatures during the winter of 1929 and 1930. The population is gradually building up again and we are having a number of inquiries about it this winter.

BARNACLE SCALE (Ceroplastes cirripediformis Const.)

- Georgia J. B. Gill (March 25): The barnacle scale is very abundant on hackberry trees in the Albany section. This scale also is found commonly on many other plants.

ASH

BANDED ASH BORER (Neoclytus caprea Say)

- Nebraska M. H. Suenk (March 1 to 20): In Holt County correspondents reported ash trees heavily infested with borers during the first week in March. These seemed to be the common banded ash borer.

BIRCH

BIRCH CASE BEARER (Coleophora salrani Heinr.)

- Maine E. P. Felt (March 22): The birch case bearer is reported as occurring in great numbers on birches in the Bar Harbor section, according to a report received from W. Kay Conard of Augusta, Me.

ELDER

AN APHID (Aphis sambucifoliae Fitch)

- Mississippi J. P. Kislanko (March 19): The elder aphid, A. sambucifoliae, is now very abundant on elder in Hattiesburg.

ELM

LEOPARD MOTH (Zeuzera pyrina L.)

Massachusetts E. P. Felt (March 22): The leopard moth is well established on Nantucket Island, some elms being badly infested, according to a report from Mr. W. G. Aborn of Providence.

ELM BORER (Saperda tridentata Oliv.)

Nebraska M. H. Srenk (October 1931 to February 29): During the winter evidences of injury on elm trees in Otoe County were observed and specimens submitted for identification.

EUROPEAN ELM SCALE (Gossyparia souria Mod.)

Colorado G. W. List (March 23): The European elm scale is now quite general over the entire State and reports indicate that it is on the increase.

FIR

AN APHID (Dreyfusia piceae Ratz.)

Maine H. B. Peirson (March 25): A very serious outbreak in which large numbers of trees are being killed was reported on March 9 from Bar Harbor. This insect promises to do considerable damage this year.

LARCH

LARCH CASE BEARER (Coleophora laricella Hbn.)

Vermont H. L. Bailey (March 22): Many cases containing apparently living larvae of the case bearer are to be found on larch trees generally in the State.

MAPLE

COTTONY MAPLE SCALE (Pulvinaria vitis L.)

Colorado G. W. List (March 23): The cottony maple scale was much reduced in numbers during the winter of 1929-30 but some inspection trips have indicated that the infestation is heavier this spring than a year ago.

OAK

OAK KNOT GALL (Andricus punctatus Bass.)

Mississippi C. Lyle (March 21): Infested oak twigs were received from Madden on March 17, with a report that the tree from which they were taken was very heavily infested with these galls.

AN OAK GALL (Kermes sp.)

Rhode Island E. P. Felt (March 22): An oak gall scale, Kermes sp., is abundant on black oak at Providence.

PINE

NANTUCKET PINE SHOOT MOTH (Rhyacionia frustrana Const.)

Massachusetts E. P. Felt (March 22): The Nantucket pine moth has been reported as being epidemic upon Nantucket Island. Up to about four years ago many of the scrub pines were doing very well, but since then this pest has been creating havoc. Acres of dead trees in several well separated sections of the Island appeared very much as though they had been killed by fire.

Nebraska M. H. Swenk (October, 1931, to February 29, 1932): An infestation of pine trees in Rock County with R. frustrana bushnelli Busck was reported in the middle of January.

A PINE SHOOT MOTH (Evetria rigidana Fern.)

Louisiana W. E. Hinds (March 24): Rhyacionia rigidana is the determination given by Mr. C. Heinrich to the species of pine tip moth attacking pine trees at Jeanerette. These moths have caused serious injury to young trees in that location.

A WEBWORM (Tetralopha melanogrammos Zell.)

Maine H. B. Peirson (March 1): A pine webworm. There have been reports of webs on pitch pine from several sections of the State; they are said to be quite numerous.

SOUTHERN PINE SAWYER (Monochamus titillator Fab.)

Mississippi H. Dietrich (March 21): The first adult was taken on long-leaf pine logs in George County on March 4.

PINE BARK APHID (Chermes pinicorticis Fitch)

New York E. P. Felt (March 22): The pine bark aphid is locally abundant in southwestern New England and in southeastern New York. A bad infestation was located at White Plains.

SCOTCH PINE LECANIUM (Toumeyella numismaticum P. & McD.)

Mississippi H. Dietrich (March 21): T. numismaticum were very abundant on young pines along Gaines Creek, Green County, March 3.

PINE NEEDLE SCALE (Chionaspis pinifoliae Fitch)

Mississippi H. Dietrich (March 21): Chionaspis pinifoliae heterophyllae Cooley (det. by A. L. McLanahan) were very abundant on young pines along Gaines Creek, Greene County, on March 3.

Utah G. F. Knowlton (January 7): This scale insect is attacking Colorado blue spruce southwest of Salt Lake City. The infestation is rather heavy. Det. H. Morrison.

WILLOW

BEE TL ES (Coleoptera)

Mississippi H. Dietrich (March 21): Flea beetles (Disonycha alternata Ill. and Chalcoides helxines L.) and the weevil Dorytomus brevicollis Lec. are very abundant defoliating willows along Gaines Creek, in Green County, on March 4.

I N S E C T S A F F E C T I N G G R E E N H O U S E A N D
O R N A M E N T A L P L A N T S A N D L A W N S

GREENHOUSE LEAF TIER (Phlyctaenia rubigalis Guen.)

Connecticut W. E. Britton (March 22): P. ferrugalis has been reported attacking geranium in a greenhouse at Clintonville.

THRIPS (Thysanoptera)

Connecticut N. Turner (January and February): Thrips are either attracting more attention or are more abundant than usual. Severe injury to calla lilies was reported, the species being Heliothrips haemorrhoidalis Bouche and Frankliniella tritici Fitch. Injury was done to carnations by Thrips tabaci Lind. and severe damage to cucumbers by the same species. Numerous collections have been made from water hyacinth, begonia, palm, rubber plants, and corn.

Illinois C. C. Condon (January 7): H. femoralis Reut. was found to be severely damaging smilax and stevia in a greenhouse at Des Plaines.

PRAYING MANTIDS (Mantidae)

Maryland

E. N. Cory (February): One or two reports of egg masses of Tenodera sinensis Sauss. and an unusual abundance of egg masses of Stagmomantis carolina Johan. have been reported.

A CAMEL CRICKET (Ceuthophilus sp.)

Illinois

C. C. Compton (March 22): Camel crickets are becoming more generally distributed in Illinois greenhouses. Growers report them feeding on seedlings.

MEXICAN MEALYBUG (Phenacoccus gossypii Towns. & Ckll.)

Ohio

E. W. Mendenhall (March 14): The Mexican mealybug is very destructive to chrysanthemum and geranium plants in one of the greenhouses in Kenton. (March 23): A severe outbreak has been found in a greenhouse in central Ohio. This species has only recently been discovered in some of the northern greenhouses and is particularly destructive to chrysanthemum, geranium, coleus, fuchsia, pelargonium, lantana, heliotrope, impatiens, German ivy, salvia, vinca, ageratum, verbena, and Boston fern.

CITRUS MEALYBUG (Pseudococcus citri Risso)

Nebraska

M. H. Swenk (March 1 to 20): Reports of infestations of house plants with the common mealybug were received from various counties during the period here covered.

CANNA

LESSER CANNA LEAFROLLER (Geshna cannalis Quaint.)

Mississippi

H. Dietrich (March 21): The lesser canna leaf roller larvae were found on cannas at Lucedale on February 27. Freezing has since killed the cannas back to the ground, no doubt affecting the leaf roller.

DRACAENAS

BLACK VINE WEEVIL (Brachyrhinus sulcatus Fab.)

Illinois

C. C. Compton (March 22): The black vine weevil has seriously damaged Dracaenas in a greenhouse at Cicero. (February 5, 1932). The adults cut irregular notches in the leaf margins. The larvae feed on the roots.

FERN

FERN SCALE (Hemichionaspis aspidistrae Sign.)

North Dakota J. A. Munro (March 26): The fern scale was reported as causing serious injury to several varieties of ferns at Drake, McHenry County, during the early part of March.

GLADIOLI

GLADIOLUS THRIPS (Taeniothrips gladioli M. & S.)

Pennsylvania T. L. Guyton (March 23): The gladiolus thrips has been reported in the State from the following localities: Pittsburgh, Wesleyville, Erie, Glenside, Jersey Shore, and Oalmont.

Florida J. R. Watson (March 21): The gladiolus thrips has been found at Winter Haven.

HOLLY

HOLLY LEAF MINER (Phytomyza ilicis Curt.)

Ohio J. S. Houser (March 11): This is the first time this insect has been observed by the writer and it had not been noticed before by the officials of the Cincinnati Park Department. The attack was severe inasmuch as every leaf of a dozen or more 10-foot trees bore one or more mines.

NARCISSUS

A BULB FLY (Eumerus narcissi Smith)

New York F. S. Blanton and E. J. Spruijt (March 4): Prior to this E. narcissi was reported only from California. During the year 1931 one male and one female were found in a greenhouse on Long Island where narcissus bulbs had been forced.

IVY SCALE (Aspidiotus hederæ Vallot)

Mississippi J. Milton (March 25): The oleander scale is present on many oleanders in Corinth. The damage is moderate.

ROSE

POTATO APHID (Illinoia solanifolii Ashm.)

Maryland W. E. McBath (January 25): Aphids were collected on rose January 25 at Brookmont. There was quite a cluster on the tip. There was a frost the night before. Det. by P. J. Mason.

INSECTS ATTACKING MAN AND
DOMESTIC ANIMALS

MAN

CLOVER MITE (Bryobia praetiosa Koch)

Colorado G. M. List (March 23): Several inquiries were received during some warm weather in February in regard to the clover mite in dwellings.

BOXELDER BUG (Lentocoris trivittatus Say)

North Dakota J. A. Munro (March 26): Carl F. Albrecht, Smith-Hughes instructor at Velva (McHenry County), reports that boxelder bugs have been a household pest of late in his community.

Iowa C. J. Drake (March): The boxelder bug is extremely abundant over almost the entire State. Many people are complaining about it in their homes.

Nebraska M. H. Swenk (March 1 to 20): Complaints of boxelder bugs bothering in houses continued to be received from housewives during the month of March. (October to February 29): During early November, and again during the last half of February, there were reports of boxelder bugs proving quite a nuisance in houses. These reports came from Boone and Platte Counties southeast to Otoe County.

Utah G. F. Knowlton (March 24): Boxelder bugs are becoming more annoying in houses, at Logan and Hyrum.

California A. E. Michelbacher (March 19): From time to time throughout the winter hibernating forms of the boxelder bug have been observed, but on March 19 several were found mating, showing definitely that they were leaving hibernation. The females had well developed abdomens.

CATTLE

STABLE FLY (Stomoxys calcitrans L.)

Kansas H. R. Bryson (March 25): E. G. Kelly reports larvae of S. calcitrans out as early as February 28-29 in localities in southeastern Kansas. Adults and larvae of this species were taken at Chanute and other localities of southeastern Kansas.

SHORT-NOSED CATTLE LOUSE (Haematovinus eurysternus Nitz.)

Nebraska

M. H. Svent (October to February 29): Two reports, one from Grant County and one from Webster County, of cattle feed yards badly infested with the short-nosed cattle louse were received during January.

HORSES

BUFFALO GNATS (Simuliidae)

Mississippi

C. Lyle and assistants (March): These insects continued to be somewhat serious in parts of Grenada, Carroll, Tallahatchie, Yalobusha, Tunica, Leflore, Attala, and Holmes Counties. A few mules have been reported as killed in Tallahatchie and Tunica Counties. (Abstract, J.A.H.)

SHEEP

SHEEP BOTFLY (Oestris ovis L.)

North Dakota

J. A. Munro (March 26): Recently a larva of the sheep botfly taken from the head of an infested sheen, was brought to this office by Leo W. Henry, local veterinarian; Dr. Henry reports that according to his observations only a very small percentage of sheep received from western areas of the State by a local packing plant were infested with the pest.

POULTRY

STICKTIGHT FLEA (Echidnophaga gallinacea Westw.)

Mississippi

C. Lyle and assistants (March 25): Complaints in regard to the sticktight flea have been received several times recently. Poultry growers state that in some cases this pest injured their flocks greatly. (Abstract, J.A.H.)

HOUSEHOLD AND STORED-PRODUCTS

INSECTS

TERMITES (Reticulitermes spp.)

General

T. E. Snyder (February): During the month of February 87 cases of termites were reported to the Bureau of Entomology. The following list gives the number of cases reported from each section: New England, 2; Middle Atlantic, 27; South Atlantic, 26; East Central, 6; West Central, 3; Lower Mississippi, 14; Southwest, 1; Pacific Coast, 7.

Connecticut

M. P. Zappe (March 22): A library in Union County was attacked by R. flavipes Kollar. Considerable injury was done to ash wainscoting and to larger timbers in the building. A large dwelling in New Haven was attacked by termites in timbers under the sun porch. A business block in the city of New Haven was reported by an exterminating company as being attacked; the extent of injury is unknown as yet.

Ohio

T. H. Parks (March 24): Termites were reported coming out in several Columbus homes. One of the largest banks in the city of Columbus is undergoing reconstruction where studding and baseboards in the basement have been injured. Apparently the mild winter has aggravated the termite problem.

Kentucky

T. J. Price (March 24): Termites were reported from Lexington, Louisville, and Fort Thomas.

Mississippi

C. Lyle and assistants (March 25): Termites continue to damage buildings in Corinth and other towns in northeastern Mississippi. Many houses are infested with this pest. (Abstract, J.A.H.)

Nebraska

M. H. Swenk (March 1 to 20): Additional reports of damage in houses by termites (R. tibialis Bks.) were received from Douglas County during the period here covered.

ARGENTINE ANT (Iridomyrmex humilis Mayr)

Alabama

J. M. Robinson (March 21): There are heavy infestations of the Argentine ant at Monroeville and Auburn.

PEA WEEVIL (Bruchus pisorum L.)

North Dakota

J. A. Munro (March 26): A serious infestation of the pea weevil in stored seed peas was reported from Fargo under date of March 10. The weevils were in the adult stage and numerous in the sample examined.

A CURCULIONID (Cleonus frontalis Lec.)

North Dakota

J. A. Munro (March 10): A beetle caused damage to growing plants and to the stored seed. Last year when the beans were about 2 or 3 inches high some of them wilted and died. Upon examination a small white worm about one-half inch long was found to have worked up through the center of the stem. This winter I found a bug in the bean bin. I have not found a live one since about the first of the year.



INSECT CONDITIONS IN PORTO RICO DURING FEBRUARY, 1932.

G. N. Wolcott

Insular Experiment Station, Isabela, Porto Rico.

A few bean pod borers (Maruca testulalis Geyer) are beginning to appear again in lima beans. During January none of these insects were found in lima beans although some were seen in snap beans.

A leaf beetle, Cerotoma denticornis Fab., has been more abundant in the sprayed fields than in those where no attempt has been made at insect or fungus control.

I planted some Crotalaria incana beside my own lima beans here, and am just beginning to collect the seed now. Not a single pod is infested, and indeed I have no record of finding Etiella zinckenella caterpillars in lima beans, either my own or those on the Station grounds, since last December. I can not imagine what has happened to the insect, as our minimum temperatures are not nearly so low as in southern California, the means for December and January being 65° F.

A lace bug, Corythucha gossypii Fab., has been present for several weeks in the more wind-swept corner of one lima bean field, but is just now becoming sufficiently numerous to cause appreciable damage.

The midges (Sciara sp.) appeared in small numbers at light on the night of February 24, but none had been noted before, and I saw none on the night, of February 25.

COSTA RICA

C. H. Ballou

The coffee aphid (Toxoptera aurantiae Boyer) is abundant in the plantations now (February 9), but is doing relatively little damage because the season is not very dry, and the trees are holding the old leaves well.