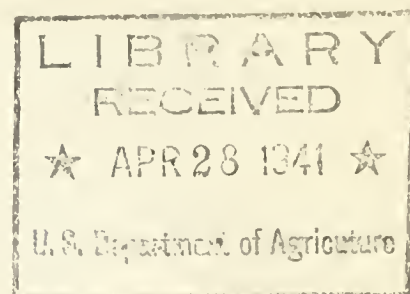


831B

4

THE INSECT PEST SURVEY
BULLETIN



Volume 21

March 1, 1941

Number 1

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

REPORTERS FOR THE INSECT PEST SURVEY

United States The Entomologists of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.

Alabama J. M. Robinson, Alabama Polytechnic Institute, Auburn
 F. S. Arant, Alabama Polytechnic Institute, Auburn
 R. O. Christenson, Alabama Polytechnic Institute, Auburn
 H. L. English, Spring Hill
 H. G. Good, Alabama Polytechnic Institute, Auburn
 F. E. Guyton, Alabama Polytechnic Institute, Auburn
 W. A. Ruffin, Ext. Entomologist, Alabama Polytechnic Institut.
 Auburn

Arizona J. L. E. Lauderdale, State Entomologist, Box 2006, Phoenix
 C. D. Lebert, Asst. State Entomologist, Box 2006, Phoenix
 A. H. Caldwell, Jr. Inspector, Box 2006, Phoenix
 H. G. Johnston, Extension Entomologist, Box 751, Phoenix
 F. H. Parker, Inspector, Box 2006, Phoenix

Arkansas W. J. Baerg, University of Arkansas, Fayetteville
 Dwight Isely, University of Arkansas, Fayetteville
 P. H. Millar, State Plant Board, Little Rock

California D. B. Mackie, Department of Agriculture, Sacramento
 E. O. Essig, University of California, Berkeley
 S. F. Bailey, College of Agriculture, Davis
 W. B. Horns, University of California, Berkeley
 M. L. Jones, Department of Agriculture, Sacramento
 G. Kido, University of California, Deciduous Fruit Field
 Station, Route 1, Box 92, San Jose
 Steward Lockwood, Department of Agriculture, Sacramento
 A. E. Michelbacher, University of California, Berkeley
 H. J. Ryan, County Agricultural Building, Los Angeles
 E. S. Smith, Citrus Experiment Station, Riverside
 L. M. Smith, University of California, Deciduous Fruit Field
 Station, Route 1, Box 92, San Jose
 F. H. Wymore, College of Agriculture, Davis

Colorado F. H. Gates, State Entomologist, 20 State Museum, Denver
 C. R. Jones, Agricultural Experiment Station, Fort Collins
 G. M. List, Agricultural Experiment Station, Fort Collins
 L. B. Daniels, Agricultural Experiment Station, Fort Collins
 L. G. Davis, 20 State Museum, Denver
 C. P. Gillette, State Agricultural College, Fort Collins
 M. T. James, State Agricultural College, Fort Collins
 S. C. McCampbell, Ext. Entomologist, State Agricultural
 College, Fort Collins
 J. H. Newton, 20 State Museum, Denver
 M. A. Palmer, Agricultural Experiment Station, Fort Collins
 C. W. Wade, 20 State Museum, Denver

Connecticut R. B. Friend, State Entomologist, Agricultural Experiment Station, New Haven
R. L. Beard, Agricultural Experiment Station, New Haven
A. DeCaprio, Agricultural Experiment Station, New Haven
E. P. Felt, Bartlett Research Laboratory, Stamford
P. Garman, Agricultural Experiment Station, New Haven
J. P. Johnson, Agricultural Experiment Station, New Haven
G. H. Plumb, Agricultural Experiment Station, New Haven
J. Schread, Agricultural Experiment Station, New Haven
N. Turner, Agricultural Experiment Station, New Haven
B. H. Walden, Agricultural Experiment Station, New Haven
P. Wallace, Agricultural Experiment Station, New Haven
M. P. Zappe, Agricultural Experiment Station, New Haven

Delaware L. A. Stearns, Agricultural Experiment Station, Newark
J. M. Amos, Extension Entomologist, University of Delaware, Newark

Florida Wilmon Newell, Agricultural Experiment Station, Gainesville
J. R. Watson, Agricultural Experiment Station, Gainesville
E. W. Berger, State Plant Board, Gainesville
H. T. Fernald, 1128 Oxford Road, Winter Park
S. O. Hill, Monticello
G. B. Merrill, State Plant Board, Gainesville
A. N. Tissot, Agricultural Experiment Station, Gainesville

Georgia M. S. Yeomans, State Entomologist, Atlanta
Theo. L. Bissell, Georgia Experiment Station, Experiment
C. H. Alden, Office of State Entomologist, Atlanta
L. Anderson, 432 State Capitol, Atlanta
H. I. Borders, Extension Plant Pathologist, Tifton
W. H. Clarke, Georgia Department of Entomology, Thomaston
A. F. Conradi, Manchester
K. Conradi, Georgia Department of Entomology, Savannah
D. F. Farlinger, Georgia Department of Entomology, Tifton
P. W. Fattig, Emory University
R. C. Heslop, Georgia Department of Entomology, Tifton
H. O. Lund, University of Georgia, Athens
M. Murphey, Jr., 432 State Capitol, Atlanta
J. E. Webb, Jr., Cornelia

Idaho W. E. Shull, Department of Entomology, University of Idaho, Moscow
R. A. Fisher, Asst. Extension Entomologist, University of Idaho, Moscow
H. C. Manis, Branch, Agricultural Experiment Station, Parma

- Illinois
W. P. Flint, Chief Entomologist, State Natural History Survey
and Agricultural Experiment Station, Urbana
C. L. Metcalf, Head Entomology Department, Urbana
J. B. Bigger, State Natural History Survey, Urbana
D. V. Chandler, State Natural History Survey, Urbana
C. C. Compton, State Natural History Survey, Urbana
M. D. Farrar, State Natural History Survey, Urbana
T. H. Frison, State Natural History Survey, Urbana
W. E. McCauley, State Natural History Survey, Urbana
L. H. Shropshire, State Natural History Survey, Urbana
- Indiana
F. N. Wallace, Conservation Department, Department of Public
Works, Indianapolis
J. J. Davis, Purdue University, La Fayette
G. E. Lehker, Ext. Entomologist, Purdue University, La Fayette
P. T. Ullman, Asst. State Entomologist, Conservation Department
Department of Public Works, Indianapolis
- Iowa
Carl J. Drake, Iowa State College, Ames
G. C. Decker, Asst. Ext. Entomologist, Iowa State College of
Agriculture, Ames
L. Graham, Asst. Extension Entomologist, Iowa State College of
Agriculture, Ames
H. Gunderson, Ext. Entomologist, Iowa State College of Agri-
culture, Ames
H. E. Jaques, Iowa Wesleyan College, Mount Pleasant
D. D. Millspaugh, Iowa Wesleyan College, Mount Pleasant
- Kansas
G. A. Dean, State Agricultural College, Manhattan
H. R. Bryson, State Agricultural College, Manhattan
H. B. Hungerford, University of Kansas, Lawrence
E. G. Kelly, Ext. Entomologist, Kansas State College of
Agriculture, Manhattan
- Kentucky
W. A. Price, University of Kentucky, Lexington
M. L. Didlake, University of Kentucky, Lexington
- Louisiana
W. E. Anderson, State Entomologist, Box 590, Baton Rouge
C. O. Eddy, Louisiana State University, University
I. J. Becnel, Louisiana State University, University
T. F. Catchings, 4425 Bienville St., New Orleans
A. L. Dugas, Louisiana State University, University
E. H. Floyd, Louisiana State University, University
J. C. Hester, 1111 Busby St., Shreveport
E. Lott, Box 588, Opelousas
S. J. McCrory, Box 762, Alexandria
R. C. Meek, 716 Eighth St., Baton Rouge
C. M. Moss, Box 590, Baton Rouge
L. Neveu, Box 590, Baton Rouge
R. D. Olson, Box 590, Baton Rouge
E. E. Pavy, DeRidder
R. J. Smith, Covington
E. R. Stamper, 716 Eighth St., Baton Rouge
A. B. Weathersby, Box 590, Baton Rouge

- Maine
H. P. Peirson, State Entomologist, State House, Augusta
A. E. Brower, State House, Augusta
J. H. Hawkins, Agricultural Experiment Station, Orono
F. H. Lathrop, Entomologist, Agricultural Experiment Station,
Orono
R. W. Nash, State House, Augusta
G. W. Simpson, Agricultural Experiment Station, Orono
- Maryland
E. N. Cory, University of Maryland, College Park
L. P. Ditman, University of Maryland, College Park
H. L. Dozier, U. S. Fur Animal Field Station, Blackwater
Refuge, 203 Oakley St., Cambridge
C. Graham, University of Maryland, College Park
Paul Knight, University of Maryland, College Park
G. S. Langford, University of Maryland, College Park
H. S. McConnell, University of Maryland, College Park
- Massachusetts
A. I. Bourne, Agricultural Experiment Station, Amherst
- Michigan
Ray Hutson, State College of Agriculture, East Lansing
E. I. McDaniel, State College of Agriculture, East Lansing
R. H. Pettit, State College of Agriculture, East Lansing
C. B. Dibble, Ext. Entomologist, State College of Agriculture,
East Lansing
- Minnesota
A. G. Ruggles, University of Minnesota, University Farm,
St. Paul
A. A. Granovsky, University of Minnesota, University Farm,
St. Paul
C. E. Mickel, University of Minnesota, University Farm,
St. Paul
H. L. Parten, Ext. Entomologist, University of Minnesota,
University Farm, St. Paul
- Mississippi
Clay Lyle, State Plant Board, State College
G. L. Bond, Moss Point
N. L. Douglass, Grenada
L. J. Goodgame, Aberdeen
D. W. Grimes, Durant
M. L. Grimes, Box 134, Meridian
J. G. Hester, State College
J. P. Kislanko, Wiggins
J. E. Lee, Poplarville
Jack Milton, Box 1305, Jackson
T. F. McGehee, Box 472, Gulfport
N. D. Peets, Brookhaven
F. A. Smith, Senatobia

- Missouri H. H. Baker, State Department of Agriculture, Jefferson City
L. Haseman, University of Missouri, Columbia
A. C. Burrill, Missouri Resources Museum, Jefferson
Eugenia H. Clardy, Missouri Resources Museum, Jefferson
J. C. Dawson, University of Missouri, Columbia
G. D. Jones, Ext. Entomologist, University of Missouri, Columbia
L. Rackers, Missouri Resources Museum, Jefferson City
- Montana H. B. Mills, Head of Entomology Department, Montana State
College, Bozeman
D. J. Pletsch, Montana State College, Bozeman
- Nebraska M. H. Swenk, University of Nebraska, Lincoln
O. S. Bare, Ext. Entomologist, University of Nebraska, Lincoln
L. M. Gates, Department of Agriculture, Lincoln
H. D. Tate, University of Nebraska, Lincoln
D. B. Whelan, University of Nebraska, Lincoln
- Nevada G. G. Schweis, State Department of Agriculture, Box 1027, Reno
L. M. Burge, State Department of Agriculture, Box 1027, Reno
G. M. Shogren, State Department of Agriculture, Box 1027, Reno
E. W. Lowrance, Department of Biology, University of Nevada, Reno
- New Hampshire W. C. O'Kane, University of New Hampshire, Durham
J. G. Conklin, Department of Entomology, University of New
Hampshire, Durham
L. C. Glover, University of New Hampshire, Durham
- New Jersey H. B. Weiss, Department of Agriculture, Trenton
T. J. Headlee, University of New Jersey, New Brunswick
B. F. Driggers, University of New Jersey, New Brunswick
M. D. Leonard, 213 Rhoads Ave., Haddonfield
F. A. Soraci, Department of Agriculture, Trenton
- New Mexico J. R. Eyer, College of Agriculture, State College
- New York R. D. Glasgow, State Entomologist, State Museum, Albany
P. J. Parrott, Dept. of Entomology, Agricultural Experiment
Station, Geneva
R. W. Leiby, Cornell University, Ithaca
F. L. Bambrell, Agricultural Experiment Station, Geneva
W. E. Blauvelt, Ext. Entomologist, Cornell University, Ithaca
L. A. Carruth, Agricultural Experiment Station, Geneva
P. J. Chapman, Vassar College, Box 51, Poughkeepsie
D. M. Daniel, Agricultural Experiment Station, Geneva
R. W. Dean, Agricultural Experiment Station, Geneva
J. A. Evans, Ext. Entomologist, Cornell University, Ithaca
O. H. Hammer, Agricultural Experiment Station, Geneva
S. W. Harman, Agricultural Experiment Station, Geneva
F. Z. Hartzell, Agricultural Experiment Station, Geneva
G. E. R. Hervey, Agricultural Experiment Station, Geneva
R. E. Horsey, 440 Highland Ave., Rochester

(Continued on next page)

- New York
(Cont'd.)
- H. C. Hockett, Agricultural Experiment Station, Geneva
Theodore W. Kerr, Jr., Asst. Entomologist, Dept. of
Entomology, Cornell University, Ithaca
R. Matheson, N. Y. State College of Agriculture, Ithaca
K. E. Maxwell, Farm Bureau Office, Court House, Mineola
C. E. Palm, Head of Department of Entomology, Cornell
University, Ithaca
W. A. Riemen, N. Y. State School of Agriculture, Cobleskill
- North Carolina
- C. H. Brannon, Department of Agriculture, Raleigh
Z. P. Metcalf, North Carolina State College, Raleigh
C. S. Brinley, Department of Agriculture, Raleigh
B. B. Fulton, North Carolina State College, Raleigh
F. B. Meacham, North Carolina State College, Raleigh
T. B. Mitchell, North Carolina State College, Raleigh
J. O. Rowell, Ext. Entomologist, North Carolina State College,
Raleigh
C. F. Smith, North Carolina State College, Raleigh
- North Dakota
- J. A. Munro, North Dakota Agricultural College, Fargo
F. Gray Butcher, North Dakota Agricultural College, Fargo
H. S. Telford, North Dakota Agricultural College, Fargo
- Ohio
- J. S. Houser, Agricultural Experiment Station, Wooster
T. H. Parks, Ohio State University, Columbus
N. D. Blackburn, Agricultural Experiment Station, Wooster
C. R. Cutright, Agricultural Experiment Station, Wooster
D. M. DeLong, Ohio State University, Columbus
H. L. Gui, Agricultural Experiment Station, Wooster
J. N. Knull, Ohio State University, Columbus
E. W. Mendenhall, Department of Agriculture, 97 Brighton Road,
Columbus
C. R. Neiswander, Agricultural Experiment Station, Wooster
H. Osborn, Ohio State University, Columbus
J. P. Slesman, Agricultural Experiment Station, Wooster
M. A. Vogel, Agricultural Experiment Station, Wooster
- Oklahoma
- F. A. Fenton, Agricultural and Mechanical College, Stillwater
R. G. Dahms, Experiment Station, Lawton
J. M. Goin, State Entomologist, State Board of Agriculture,
Oklahoma City
J. M. Maxwell, Asst. Ext. Entomologist, Agricultural and
Mechanical College, Stillwater
C. F. Stiles, Ext. Entomologist, Agricultural and Mechanical
College, Stillwater
F. E. Whitehead, Agricultural and Mechanical College, Still-
water

- Oregon Don C. Mote, Head, Department of Entomology, Oregon State Agricultural College, Corvallis
W. J. Chamberlin, Oregon State Agricultural College, Corvallis
J. E. Davis, Oregon State Agricultural College, Corvallis
K. W. Gray, Oregon State Agricultural College, Corvallis
S. C. Jones, Oregon State Agricultural College, Corvallis
H. E. Morrison, Oregon State Agricultural College, Corvallis
R. L. Post, Curator, and Technician in Entomology, Oregon State Agricultural College, Corvallis
R. G. Rosenstiel, Oregon State Agricultural College, Corvallis
Joe Schuh, Oregon State Agricultural College, Corvallis
H. A. Scullen, Oregon State Agricultural College, Corvallis
B. G. Thompson, Oregon State Agricultural College, Corvallis
- Pennsylvania T. L. Guyton, Department of Agriculture, Harrisburg
H. E. Hodgkiss, Pennsylvania State College, State College
E. J. Anderson, Pennsylvania State College, Harrisburg
C. F. Campbell, Department of Agriculture, 354 North River St., Wilkes-Barre
A. B. Champlain, Department of Agriculture, Harrisburg
B. F. Coon, Tobacco Research Station, Lancaster
L. E. Dills, Department of Agriculture, Harrisburg
B. D. Gleissner, Pennsylvania State College, State College
H. B. Kirk, Department of Agriculture, Harrisburg
J. O. Pepper, Department of Agriculture, Harrisburg
E. A. Richmond, Department of Agriculture, Harrisburg
G. B. Slesman, Department of Agriculture, 49-51 Curran Arcad., Norristown
J. R. Stear, Koppers Experiment Station, Ligonier
H. M. Steiner, Fruit Research Laboratory, Arendtsville
C. A. Thomas, Pennsylvania State College, Kennett Square
H. N. Worthley, Pennsylvania State College, State College
- Rhode Island Brayton Eddy, State Department of Agriculture, Providence
C. C. Jennings, State Department of Agriculture, Providence
A. J. Lannon, State Department of Agriculture, Providence
A. E. Stene, State Department of Agriculture, Providence
- South Carolina Franklin Sherman, Head, Dept. of Zoology and Entomology, Clemson College, Clemson
W. C. Nettles, Ext. Entomologist, Clemson College, Clemson
J. A. Berly, Crop Pest Commission, Clemson
O. L. Cartwright, Agricultural Experiment Station, Clemson College, Clemson
D. Dunavan, Clemson College, Clemson
W. M. Upholt, Agricultural Experiment Station, Clemson College
J. G. Watts, Edisto Experiment Station, Blackville

- South Dakota H. C. Severin, State Entomologist, State College of Agriculture and Mechanic Arts, Brookings
G. I. Gilbertson, Ext. Entomologist, State College of Agriculture and Mechanic Arts, Brookings
N. P. Larson, State College of Agriculture and Mechanic Arts, Brookings
G. B. Spawn, State College of Agriculture and Mechanic Arts, Brookings
- Tennessee G. M. Bentley, University of Tennessee, Knoxville
A. C. Cole, Jr., University of Tennessee, Knoxville
O. E. Couch, 2404 Inga Ave., Nashville
J. C. Moser, 1519 South Willett St., Memphis
- Texas F. L. Thomas, Agricultural Experiment Station, College Station
R. K. Fletcher, Agricultural Experiment Station, College Station
C. Siddall, Ext. Entomologist, Agricultural Experiment Station, College Station
- Utah G. F. Knowlton, Agricultural Experiment Station, Logan
F. C. Harmsen, Agricultural Experiment Station, Logan
W. W. Henderson, Agricultural Experiment Station, Logan
C. J. Sorenson, Agricultural Experiment Station, Logan
- Vermont H. L. Bailey, State Department of Agriculture, Montpelier
M. B. Cummings, State Nursery Inspector, Burlington
- Virginia G. T. French, State Entomologist, Department of Agriculture, Richmond
W. J. Schoene, Agricultural Experiment Station, Blacksburg
L. B. Anderson, Virginia Truck Experiment Station, Norfolk
S. B. Fenne, Ext. Entomologist, Blacksburg
F. R. Freund, Department of Agriculture, Richmond
L. A. Hetrick, West Point
W. S. Hough, 523 Fairmont Ave., Winchester
H. G. Walker, Virginia Truck Experiment Station, Norfolk
C. R. Willey, Division of Plant Industry, 1112 State Office Building, Richmond
A. M. Woodside, 9 Bagby St., Staunton
- Washington R. L. Webster, State College of Washington, Pullman
A. J. Hanson, Dept. of Entomology, Western-Washington Experiment Station, Puyallup
M. H. Hatch, University of Washington, Seattle
R. D. Shenefelt, State College of Washington, Pullman
L. G. Smith, Ext. Entomologist, State College of Washington, Pullman

- West Virginia L. M. Peairs, West Virginia University, Morgantown
F. W. Craig, Department of Agriculture, Charleston
- Wisconsin E. L. Chambers, State Department of Agriculture, Madison
C. L. Fluke, University of Wisconsin, Madison
J. A. Callenback, University of Wisconsin, Madison
J. H. Lilly, University of Wisconsin, Madison
- Wyoming C. L. Corkins, Office of State Entomologist, Powell
M. Greenwald, Office of State Entomologist, Powell
W. D. Owen, University of Wyoming, Laramie
- Puerto Rico G. N. Wolcott, Insular Experiment Station, Rio Piedras
- Hawaii Ashley C. Browne, Horticulturist, Agricultural Extension
Service, University of Hawaii, Honolulu
F. G. Holdaway, Dept. of Entomology, Hawaii Agricultural
Experiment Station, Honolulu
O. H. Swezey, Hawaiian Sugar Planters' Association, Honolulu
- Mexico Alfonso Dampf, Avenida Insurgentes 171, San Jacinto, Mexico,
D. F.
- Venezuela C. H. Ballou, Departamento de Entomologia, Estacion Experi-
mental de Agricultura, Hacienda "Sosa", El Valle, Distrito
Federal, Caracas
- Brazil E. J. Hambleton, Servicio Contra a Praga do Cafe, Instituto
Biologico, Caixa Postal, 75, Campinas, Sao Paulo
- Egypt A. H. Rosenfeld, Botanical and Plant Breeding Section,
Ministry of Agriculture, El Giza
- Costa Rica Luis Angel Salas F., Assistant of the Agricultural Experiment
Service, San Pedro de Oca

THE MORE IMPORTANT RECORDS FOR FEBRUARY

The winter over the greater part of the country has not, apparently, affected insects severely and, unless conditions early in the spring are unfavorable, most insects will come through in good condition. In Florida the dry weather during the fall checked fungus growth, permitting scale insects to build up greater populations.

A general infestation of greenbug was reported during the latter part of February in the South Atlantic and Gulf States and damage is already being reported from several areas.

In the extreme South the usual cutworm infestations are starting to attract attention.

The European earwig in Salt Lake County, Utah, has built up populations and is now becoming annoying around homes.

Chinch bug has survived thus far with rather low mortality; however, the critical months are still to come.

The vegetable weevil has been reported as damaging truck crops from South Carolina to Florida and around the Gulf to Texas, damage being particularly severe in cruciferous crops.

Flights of moths of the green clover worm were reported from Mississippi and Louisiana.

The screwworm has increased in population and extent of infested area in the Southwest.

GENERAL FEEDERS

CUTWORMS (Phalaenidae)

Mississippi. C. Lyle (February 21): Specimens of the clay-backed cutworm (Feltia gladiaria Morr.) were received from Hancock County, where they were feeding on vegetables in December. Specimens of the granulate cutworm (F. annexa Treit.) were received from three properties in Jackson and Hancock Counties in December, where they were feeding on turnip and other vegetables. Specimens of the black cutworm (Agrotis ypsilon Rott.) were received from Jackson County in December with the report that turnips were being destroyed.

Nebraska. H. D. Tate (February 19): Specimens of army cutworm (Chorizagrotis auxiliaris Grote) submitted from Hitchcock County. Large numbers of caterpillars observed migrating along roadside.

BEEF ARMYWORM (Laphygma exigua Hbn.)

Arizona. L. L. Stitt (January 15): Larvae found on alfalfa and Sisymbrium irio on January 15 at Yuma.

WIREWORMS (Elateridae)

Louisiana. E. K. Bynum (February 10): Specimens collected near Edgard in the southern part of the State. Reported as doing considerable damage to sugarcane and other field crops. (Det. by W. H. Anderson.)

California. M. W. Stone (January 31): Male and female adults of the sugar-beet wireworm (Limonius californicus Mann.) began to emerge from cages at Ventura on January 31, 1 week earlier than in 1940.

EUROPEAN EARWIG (Forficula auricularia L.)

Utah. G. F. Knowlton (January 6): Reported as annoying in and around homes in the Holladay-Cottonwood-Granite area of Salt Lake County.

California. H. J. Ryan (February 18): Intercepted in two shipments of ornamentals originating in Eureka, Humboldt County, and San Jose, Santa Clara County, shipped to Tarzana and Los Angeles, in Los Angeles County.

RING-LEGGED EARWIG (Euborellia annulipes Lucas)

Mississippi. C. Lyle (February 21): Reported as injuring stored Irish potatoes in Lincoln County in October.

SAY'S STINKBUG (Chlorochroa sayi Stal)

Arizona. E. E. Russell (January 10): Overwintered adults swept freely during December and up to the present from alfalfa and from mixtures of alfalfa and small grain in open fields in the Salt River and Buckeye Valleys, in south-central Arizona. One female found in the Buckeye Valley on January 8 contained practically fully developed eggs. Second winter in succession

that members of this species have been swept from open field crops during January.

A CORTID (Leptoglossus occidentalis Heid.)

Utah. G. F. Knowlton (December 31): Specimens picked up in offices and laboratories at the College at Logan, causing annoyance to humans.

ANTS (Formicidae)

Texas. R. K. Fletcher (January 20): Pogonomyrmex barbatus F. Smith found in Jefferson County today. (February 2): Atta texana Buckley found in Harris County today. (February 21): Ants were killing trees, shrubs, and small plants in Harris County on February 1.

A MITE (Tetranychus sp.)

Mississippi. C. Lyle (February 21): Specimens of beans, sweet peas, azalea, and camellia plants infested with red spider mites were received from Harrison County in November and January, from Sunflower County in October, and from Washington County in December. Reports of injury to arborvitae were also received from Covington County in December.

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 AND OTHER GRAINS

GREEN BUG (Toxoptera graminum Rond.)

Virginia. S. B. Fenne (February 17): General infestation of aphids on wheat, barley, and small grains.

South Carolina. J. G. Watts (February 24): Aphid damage common in Barnwell County section, appreciable damage having been done in occasional oat fields.

Georgia. O. I. Snapp (January 20): Abundant on oats at Fort Valley in the central part of the State. (February 21): Still abundant on oats and wheat at Fort Valley.

T. L. Bissell (February 20): Mild outbreak on oats this winter. Reported from Taylor County on January 9 and 15; from Spalding County on January 31; and from Pike County on February 7. Estimated loss on one farm on January 31 was 10 percent. The parasite Lysiphlebus testaceipes Cress. has been at work since January 9, when it was reported for the first time.

P. M. Gilmer (January 29): Reported on January 27 as seriously attacking winter oats throughout the State. Infestation rather heavy in vicinity of Tifton and in several other counties of southern Georgia. Some fields observed in which all of the plants have been killed over areas as large as half an acre. (February 11): Observations at Adel indicate that heavy infestations are rapidly disappearing. Very little indication of parasitization noted.

Mississippi. C. Lyle (February 21): Infested specimens of oats received from Lowndes County in November and from Newton County in January. About 200 acres were infested in each case with about half the acreage a complete loss. Barren spots in Lowndes County were replanted but were quickly destroyed by the aphids. Serious damage to oats reported in Scott County in December.

HESSIAN FLY (Phytophaga destructor Say)

Virginia. S. B. Fenne (February 17): Fifty percent of the wheat plants in one field in Wythe County were killed along the edge. Damage was moderate in another field.

Missouri. L. Haseman (February 22): Rather heavy infestations built up in scattered fields of wheat, particularly throughout the Missouri River Valley; also in scattered fields elsewhere throughout western and north-western Missouri, where fall rains permitted prompt germination of wheat.

CHINCH BUG (Blissus leucopterus Say)

Indiana. C. Benton (February 25): Examination made of eight samples of bunchgrass (Andropogon spp.) collected in 4 different places in Tippecanoe, Benton, and Warren Counties showed an average mortality of 16.8 percent, based on a total of 1,338 live and 270 dead bugs recovered from the samples.

Illinois. W. P. Flint (February 20): As the weather has been very mild, the few examinations made thus far indicate little mortality of hibernating insects.

Nebraska. H. D. Tate (February 24): Frequent periods of comparatively low temperatures, alternating with "thawing temperatures" and accompanied by an abundance of moisture, probably is causing considerable mortality in eastern Nebraska.

ALFALFA

ALFALFA WEEVIL (Hypera postica Gyll.)

Utah. F. V. Lieberman (February 24): Incidental observations of abundance in winter sampling for alfalfa-seed insects indicated economic damage to first-crop hay in the Delta area of Millard County, in the central part of the State.

California. A. E. Michelbacher (February 27): In the most heavily infested area of the San Joaquin Valley on January 3, I found that 2.6 percent of the alfalfa stems contained eggs of the alfalfa weevil. In the same field on January 28 I found but 1 percent of the stems infested; however, nearly all the developing buds contained very young larvae. They were feeding within the terminal buds and for that reason they could not be picked up by sweeping. The number of larvae collected per 100 sweeps of an insect

net in different fields ranged from 0 to 400. The latter figure would have been much greater had it been possible to dislodge the very small larvae. Adults of Bathyplectes curculionis Thoms. were making their appearance and based on rearing the parasite from last-stage weevil larvae, it was found that 5 percent of the larvae were parasitized. On February 13 the larval count ranged from 0 to 600 and the adult count from 0 to 130. Parasitization by B. curculionis had increased to 20 percent. Only 1 survey has been conducted in the area adjacent to the San Francisco Bay. On January 29 the number of alfalfa weevil larvae collected per 100 sweeps ranged from 0 to 9. Only 1 adult weevil was taken.

A WEEVIL (Hypera brunneipennis Boh.)

Arizona. W. C. McDuffie (February 28): Regular observations in the infested area of Yuma Valley, throughout January and February have shown a steady increase in abundance of H. brunneipennis larvae on alfalfa, bur-clover and sourclover. On the whole, larval survival has been comparatively high, owing to the absence of freezing night temperatures, and larvae have attained greater abundance and development has progressed somewhat more normally than in 1940. By the latter part of February considerable injury was being done to two fields of bur-clover, numerous patches of volunteer sourclover, and one thin stand of alfalfa situated in a citrus grove. Very little damage to other alfalfa is anticipated this season, however, since virtually all fields contain subinjurious populations.

ALFALFA CATERPILLAR (Colias eurytheme (Bdv.))

California. A. E. Michelbacher (February 27): Larvae of the alfalfa butterfly have been found all season. In the San Joaquin Valley the number collected per 100 sweeps has ranged from 0 to 12. Some parasitization by Apanteles flaviconchae Riley has been noted. In the area adjacent to the San Francisco Bay the number collected per 100 sweeps ranged from 1 to 22. Some of these were also parasitized by A. flaviconchae.

PLANT BUGS (Lygus spp.)

Utah. F. V. Lieberman (February 24): Very little reduced by winter weather in the Delta tract of Millard County, central part of the State. Active, though not flying, in alfalfa fields during mid-February.

Arizona. L. L. Stitt (January 13): Nymphs in second to fourth instars of the first generation for 1941 were found on January 13 on optimum growth of Chenopodium murale at different locations in the Salt River Valley.

CLOVER

GREEN CLOVER WORM (Plathypena scabra F.)

Mississippi. C. Lyle (February 21): Adults received from Jones County in January. Swarming by hundreds at dusk in the vicinity of State College about January 20.

Louisiana. R. C. Gaines (January): Adults were very abundant in buildings at Tallulah during the latter part of January. (Det. by J. F. G. Clarke.)

GARDEN SLUG (Agriolimax agrestis L.)

Oregon. B. G. Thompson (November 1): Very serious on crimson clover and hairy vetch, several thousand acres having been attacked in the lower Willamette Valley. Several fields entirely destroyed. (February 24): Between 15,000 and 20,000 acres of hairy vetch and crimson clover damaged in the Willamette Valley. Damage done during November, December, and January. Still causing damage but at this time it is more serious on red and alsike clover planted in February.

SUGARCANE

SUGARCANE BORER (Diatraea saccharalis F.)

Louisiana. A. L. Dugas (February 22): Extremely light infestation, owing to weather conditions; perhaps the lightest injury of this century.

SUGARCANE ROOTSTOCK WEEVIL (Anacetrinus subnudus Buch.)

Louisiana. A. L. Dugas (February 22): Quite active at present time. All stages are being found in the field, but adults appear to be more numerous.

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

EASTERN TENT CATERPILLAR (Malacosoma americana F.)

Mississippi. C. Lyle (February 21): Egg masses on twigs received from Lee County in January.

LEAF CRUMPLER (Mineola indigenella Zell.)

Texas. W. S. McGregor (February 11): Collected in Harris County, where there was a heavy infestation on plum.

SAN JOSE SCALE (Aspidiotus perniciosus Const.)

Michigan. R. Hutson (February 20): Of no commercial importance anywhere in the State.

Illinois. W. P. Flint (February 20): Survey carried on in southern part of the State showed a considerable increase in the number of moderate to heavy infestations in apple and peach orchards.

Georgia. O. I. Snapp, (February 21): Infestation at Fort Valley is heavier than that of an average year.

Alabama. J. M. Robinson (January 26): Observed infesting peach trees at Montgomery.

Mississippi. C. Lyle (February 21): Specimens on cherry and a shrub were received from Bolivar and Harrison Counties in October and December.

Missouri. L. Haseman (February 22): Practically no complaints from fruit growers indicating any tendency toward a build-up in commercial orchards.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Mississippi. C. Lyle (February 21): Adults collected on peach in Madison County in October.

Texas. R. K. Fletcher (January 25): Collected in Irion County on peach.

FLOWER THRIPS (Frankliniella spp.)

Florida. J. R. Watson (February 26): F. cephalica Crawford, unusually scarce since the freeze of mid-November killed most flowers.

California. S. F. Bailey (February 26): F. moultoni Hood rather scarce this spring in northern California, owing to weather conditions. Normally rather large numbers are found on the cover crops in orchards. Infestation usually moves up into the trees, especially plums, peaches, and nectarines in full bloom, causing fruit scarring.

APPLE

CODLING MOTH (Carpocapsa pomonella L.)

Missouri. L. Haseman (February 22): Larvae surviving winter with very little mortality, owing to very favorable weather.

FRUIT TREE LEAFROLLER (Cacoecia argyrospila Walk.)

Illinois. W. P. Flint (February 20): Eggs present in about the same numbers in the heaviest infested areas in western Illinois as in 1940. Somewhat heavier infestation in Adams and Pike Counties, with moderate infestation extending at least as far north as Galesburg. Examination of overwintered eggs has failed to show presence of parasites; nearly all eggs in good condition.

Missouri. L. Haseman (February 22): About same number of overwintered egg packets on fruit, forest, and shade trees as last year in the area extending from St. Louis west to the middle of the State, along the Missouri River, and a rapid dropping off of egg-packet abundance from Boonville, west.

CHERRY SCALE (Aspidiotus forbesi Johns.)

Delaware. J. M. Amos (February 4): Occurred on apples in several Delaware orchards last season. (Det. by H. Morrison.)

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

Michigan. R. Hutson (February 20): Winter surveys indicated widespread and heavy accumulations on practically all orchard fruits.

Oregon. J. Schuh (February 20): Eggs abundant on many nursery plants at Portland.

A SPIDER (Tetranychus sp.)

West Virginia. G. H. Geissler (January 25): Early last fall tremendous number of a red spider were found beneath bark of trees in an orchard at Paw Paw, causing the foliage to suddenly become bronzed and discolored, severely impairing the finish of fruit at harvest time. Now found hibernating in clusters beneath the bark on the trunk and main scaffold limb. (Det. E. A. McGregor.)

PEACH

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Georgia. O. I. Snapp (February 19): Unusually heavy oviposition is anticipated early in the 1941 season as the overwintered females did not deposit any eggs in peaches in 1940. No appearance of adults from hibernation to date.

A BORER (Oberea tripunctata Swed.)

Texas. W. S. McGregor (January 10): Collected in Grimes County in peach twigs

ORIENTAL FRUIT MOTH (Grapholitha molesta Busck.)

Mississippi. C. Lyle (February 21): Injured peach twigs received from Attala, Leake, and Rankin Counties, and quince twigs from Adams County.

PEACH TWIG BORER (Anarsia lineatella Zell.)

California. S. F. Bailey (February 26): Parasite activity on the peach twig borer has continued during the winter in the hibernacula. The grain mite (Pediculoides ventricosus Newp.) parasitic hymenoptera, and predaceous beetle larvae have all been active in reducing the overwintering population. The overwintering larvae of the twig borer are now beginning to emerge on almonds, somewhat earlier than usual.

PEACH BORER (Conopia exitiosa Say)

Mississippi. C. Lyle (February 21): Reported as injuring peach trees in Covington, Lamar, and Warren Counties.

PEAR

PEAR THRIPS (Taeniothrips inconsequens Uzel)

California. S. F. Bailey (February 26): Now emerging. Light infestation, owing to weather conditions.

PECAN

A BORER (Conopia scitula Harr.)

Mississippi. C. Lyle (February 21): Larvae that probably belong to this species were sent in from Neshoba County, where they were feeding on pecan in January.

OBSCURE SCALE (Chrysomphalus obscurus Comst.)

Georgia. T. L. Bissell (February 20): Pecan trees in an orchard at Meansville reported as heavily infested on January 27. Found only in occasional orchards.

Mississippi. C. Lyle (February 21): Infested pecan twigs received from Lauderdale County in February.

FILBERT

FILBERT BUD MITE (Eriophyes avellanac Nal.)

Oregon. B. G. Thompson (February 24): Unusually severe in one variety of filberts in the Willamette Valley. Leaf buds become distorted and die. Distorted buds first noticed about February 5.

CITRUS

SCALE INSECTS (Coccidae)

Florida. J. R. Watson (February 26): Unusual fall weather conditions checked fungus growth, allowing a marked increase of the Florida red scale (Chrysomphalus aonidum L.), the dictyospermum scale (Chrysomphalus dictyospermi Morg.), and the purple scale (Lepidosaphes beckii Newm.). An unusually heavy infestation of the snow scale (Chionaspis citri Comst.) observed on mulberries and persimmons. Killed some Japanese persimmons in Alachua County.

GREEN CITRUS APHID (Aphis spiraeicola Patch)

Florida. J. R. Watson (February 26): Very scarce owing to unusual weather.

CITRUS RED MITE (Paratetranychus citri McG.)

Louisiana. I. J. Becnel (February 22): Especially abundant on leaves and tender branches of citrus in the extreme southern part of Plaquemines Parish.

RED SPIDERS (Tetranychus spp.)

California. R. S. Woglum (February): Continues active over a wide area, both coastal and interior, owing to mild weather. Eggs are very abundant at present in Los Angeles County and in many cases active spiders are numerous on the fruit, especially inside fruit, the undersides of leaves, and the wood.

CITRUS RUST MITE (Phyllocoptes oleivorus Ashm.)

Louisiana. I. J. Beemel (February 22): Fruit on untreated Valencia trees seriously damaged.

AVOCADO

PYRIFORM SCALE, (Protopulvinaria pyriformis Ckll.)

Florida. H. H. Flournoy (November 4): Specimens of insects and leaf from avocado tree submitted from Miami.

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

VEGETABLE WEEVIL (Listroderes obliquus Klug.)

South Carolina. W. J. Reid, Jr. (February 13): What are apparently larval specimens of the vegetable weevil reported as injuring a spring-crop planting of cabbage at Charleston. First report received by writer since February 1937.

Florida. F. S. Chamberlin (February 10): Abundant in Gadsden County.

Mississippi. C. Lyle (February 21): Larvae and adults received from Marion County in December, from Jefferson County in January, and from Kemper County in February.

Louisiana. C. E. Smith and P. K. Harrison (January 17): Reported as causing considerable damage to untreated turnip and mustard plantings, and less damage to other hosts at Baton Rouge. (February 12): Heavy damage to untreated plantings of turnip and mustard, also to some untreated plantings of cabbage.

I. J. Beemel (February 22): Unusually abundant on carrots, mustard, and turnips in Plaquemines Parish.

Texas. W. S. McGregor (February 21): Severe outbreak at College Station, Brazos County, in January, on cabbage and turnip greens. Severe damage to leaves and roots of turnip. Reported as causing severe damage to tender greens in Burleson and Robinson Counties in February.

CUCUMBER BEETLES (Diabrotica spp.)

Georgia. T. L. Bissell (February 20): Two live specimens of Diabrotica duodecimpunctata F. collected at Newman from dead grass.

Florida. M. D. Leonard (February 27): D. balteata Lec. and D. duodecimpunctata commonly observed on bean and tomato plants in a number of fields examined, but apparently doing little or no damage.

Louisiana. C. O. Eddy (February 22): Spotted cucumber beetle (D. duodecimpunctata) and banded cucumber beetle (D. balteata) active on warm days. Adults of western 12-spotted cucumber beetle (D. sonor Lec.) observed flying in the Willamette Valley from February 16 to 22, normal condition for any warm day this time of year.

FLEA BEETLES (Halticinae)

Florida. M. D. Leonard (February 27): Leaves of purple-top turnips nearly ready to harvest, in the Homestead area, considerably riddled by a very small black flea beetle with yellowish stripes.

Mississippi. C. Lyle (February 21): Specimens of Phyllotreta vittata descendens Weise received from Issaquena County in November and from Hancock County in December. Plants injured were turnips, rape, and other vegetables.

Louisiana. P. K. Harrison (February 12): Striped flea beetle (P. vittata F.) attacking turnip and mustard at Baton Rouge. Damage light.

A. L. Dugas (February 22): Severe winter of last year seemed to have little effect on the striped flea beetle, P. vittata descendens, as they have been very numerous on turnips, radish, and mustard throughout the fall and winter.

SEED CORN MAGGOT (Hylemya cilicrura Rond.)

Florida. J. R. Watson (February 26): Many complaints received for the last 2 months. First appeared in lupines planted as a cover crop from Gainesville north, but recently complaints have come from the Bradenton section, where it is attacking cucumbers and beans which are just sprouting.

STRAWBERRY FRUITWORM (Cnephasia longana Haw.)

Oregon. R. Rosenstiel (February 24): Drifting from hibernation quarters in the Willamette Valley from February 16 to 22.

A LEAFHOPPER (Oncometopia costalis F.)

Georgia. T. L. Bissell (February 20): Five live specimens collected from dead grass at Newman in 10 minutes.

A LYGAEBID (Orthaea longulus Dall.)

Georgia. T. L. Bissell (February 20): One live specimen collected from dead grass at Newman.

POTATO

POTATO APHID (Macrosiphum solanifolii Ashr.)

Florida. M. D. Leonard (February 27): Observations in many potato fields in the South-Miami to Homestead section (about 7,000 acres) during the past week showed a moderate general infestation. On tomatoes (a considerably larger acreage) it is reported that infestation occurred earlier this season than usual--starting, I believe, in January--but was greatly reduced by unseasoned rains about 2 or 3 weeks ago. Infestation increasing generally last week, with moderate to fairly heavily infested fields in some sections. Ladybird beetles, including Ceratonegilla fuscilabris Muls. and Cycloneda sanguinea L., fairly common on infested plants.

BEANS

POTATO LEAFHOPPER (Empoasca fabae Harr.)

Florida. M. D. Leonard (February 27): Reported that in the big bean section along the East Shore of Lake Okechobee a considerable infestation had developed for a couple of weeks just prior to heavy rains, which occurred around the tenth. General light to moderately heavy infestation in a number of beanfields, in the South-Miami-to-Homestead area, although the latter type of infestation was observed by me personally only in a large planting of pole beans which have grown over head-high.

BEAN APHID (Aphis runcidis L.)

Florida. M. D. Leonard (February 27): Several large bean plantings observed in the Homestead-Redlands section, with light to moderate infestations during the last week. I understand that a number of plantings were infested more or less prior to recent heavy rains, which greatly reduced the infestation. In several of the latter plantings nearly all of the aphids had been killed by fungi.

PEAS

PEA APHID (Macrosiphum pisi Kltb.)

Georgia. P. M. Gilmer (February 11): Heavy aphid infestation reported on Austrian field peas at Adel. (Tentatively identified.)

Louisiana. C. O. Eddy (February 22): The pea aphid is rare.

Oregon. K. Gray (February 24): More abundant than usual on fall-sown legumes in the Willamette Valley, owing to ideal weather conditions.

CABBAGE

IMPORTED CABBAGE WORM (Pieris rapae L.)

Louisiana. C. E. Smith et al. (January 17): Damage to untreated Brassicae crops was severe at Baton Rouge. Population is gradually increasing.

CABBAGE LOOPER (Autographa brassicae Riley)

Louisiana. C. E. Smith et al. (January 17): Damage to untreated Brassicae crops severe at Baton Rouge. More abundant than usual at this season.

DIAMONDBACK MOTH (Plutella maculipennis Curt.)

Utah. G. F. Knowlton (January 28): Larvae damaged broccoli in experimental greenhouse at Logan.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Mississippi. C. Lyle (February 21): Reported as injuring collards in Jasper County in November.

Louisiana. P. K. Harrison (February 21): One adult and one batch of eggs observed on collard on February 12 and February 19. No damage.

Texas. R. K. Fletcher (February 21): Collected in Zavalla County on February 16. - Caused injury to greens all winter.

CABBAGE APHID (Brevicoryne brassicae L.)

Mississippi. C. Lyle (February 21): Specimens received from Webster County in January. Reported as destroying collards.

AN APHID (Penphigus lactucae Fitch)

Texas. R. K. Fletcher (February 4): Aphids collected on cabbage roots at Carrizo Springs, Tex., on January 7. Causing considerable damage. (Det. by P. W. Mason.)

TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

Louisiana. P. K. Harrison (February 12): Untreated plantings of turnip and mustard severely damaged at Baton Rouge.

CARROT

CARROT RUST FLY (Psila rosae F.)

Pennsylvania. L. E. Dills (February 3): Specimens of maggots in injured carrot obtained from a garden in Reynoldsville, Jefferson County, in November 1940. No records obtained in this section of the State previously. Almost negligible in western part of Pennsylvania during last 10 years. (February 10): Infested carrot sent in from Mill Village, Erie County.

C O T T O N I N S E C T S

BOLL WEEVIL (Anthonomus grandis Boh.)

Georgia. T. L. Bissell (February 20): Eleven live weevils found in cotton seed in December 1940, and January 1941, at the Experiment Station. Each one was inside a seed, which had been hollowed out and the contents consumed by the grub. Larval skin found in several seeds. A twelfth seed contained a parasite cocoon. Seeds seemed to have developed to normal size and were covered with a normal amount of lint, indicating that the seed must have been well grown when it was attacked by the weevil grub. Found in cotton seed rather commonly, even from bolls selected for good growth.

Florida. C. S. Rude (February 1): Total of 18 active boll weevils observed in the hibernation cages at McIntosh during week ended February 1. One live weevil was observed in the cages at Fruitland Park late last week. (February 13): Eleven active weevils observed in the hibernation cages at McIntosh on February 13.

PINK BOLLWORM (Pectinophora gossypiella Saund.)

Texas. A. J. Chapman (January 18): Very light overwintering population found in the surface debris collected from representative fields in Presidio County. Population in the individual fields ranged from 0 to 3 larvae per square yard, the 17 fields averaging 0.46 larva per square yard. (January 25): Ten square yards of surface trash was collected from each of 27 representative fields in the Presidio Valley, selected to determine the number of larvae overwintering in this environment. Average number of larvae per square yard in the individual fields ranged from 0 to 3.0, the 27 fields averaging 0.33. Examination showed that approximately 16 percent of the worms were in bolls and locks of cotton, and 84 percent in leaf trash and squares.

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

CANKERWORMS (Geometridae)

New York. E. P. Felt (February 20): Moths, probably Alsophila ponetaria Harr., reported as locally abundant in Westbury, Long Island, and vicinity.

Illinois. W. F. Flint (February 20): Examinations made late in fall showed overwintered pupae in soil in good condition, with little indication of parasitization.

Missouri. L. Haseman (February 22): Male moths seen on wing for first time on February 11 in southwest Missouri. Few male moths observed on February 12 between Kansas City and St. Joseph. Reported that first moth was taken on bands at Columbia on February 16.

A LOOPER (Ellopia athasaris Walk.)

Connecticut. J. V. Schaffner, Jr. (February 24): Records indicate that moths will emerge at comparatively low temperatures. On October 22, 1940, a collection of 118 pupae gathered from the duff beneath defoliated hemlock trees at Woodbridge was stored in some of the duff in cages in a cool basement room in the laboratory at New Haven. During January and up to date the temperature ranged from about 42° to 55° F. Moths began emerging the fourth week of December and have continued to date. Thus far 48 moths and 2 hymenopterous parasites have emerged.

RUSTY TUSSOCK MOTH (Notolophus antiqua L.)

Vermont. C. H. Blasberg (January 30): Eggs received from Burlington. (Det. by C. Heinrich.)

BAGWORM (Thyridopteryx ephemeraeformis Haw.)

Ohio. E. W. Mendenhall (February 25): Quite numerous on elms, other deciduous trees, fruit trees, evergreens, and shrubbery, and seem to have overwintered in good condition. No doubt some of the bags will be destroyed by parasites, but there will be enough left to increase the infestation, which at present covers the southern half of the State.

Texas. R. K. Fletcher (January 24): Collected on Arizona cypress in Tarrant County on January 24.

A BORER (Xylotrechus quadrimaculatus Hald.)

New York. E. P. Felt (February 20): Four-spotted wood-runner work in birch received from Purchase early in November. A gallery had been run around a $2\frac{1}{2}$ -inch stem and about $\frac{1}{2}$ inch below the surface, causing the breaking of the stem at the point of injury. Causes same type of damage to medium-sized beech limbs.

AMBROSIA BEETLES (Platypus spp.)

Mississippi. C. Lyle (February 21): Specimens of P. compositus Say were taken on oak in Jackson County and of P. flavicornis F. from pine in Oktibbeha County in October.

ASH

CARPENTER WORM (Prionoxystus robiniae Peck)

Nebraska. H. D. Tate (February 24): Specimen of insect larva found boring in an ash tree received from Holt County on February 5.

BEECH BLIGHT APHID (Prociphilus imbricator Fitch)

C. Lyle (February 21): Adults and young that probably belong to this species were taken from a beech tree in Carroll County in November.

CYPRESS

TWIG BORER (Phloeosinus cristatus Lec.)

Arizona. C. D. Lebert (January 2): Several Arizona cypress trees observed to be dying as a result of these beetles; in the Phoenix area, during January. Arborvitae trees close by showed considerable twig injury. Seems to be more abundant each year.

ELM

ELM LEAF BEETLE (Galerucella xanthomelana Schr.)

Massachusetts. E. P. Felt (February 20): Found in large numbers in several houses in the Boston area. Leaves showing characteristic feeding and remains of larvae were received from Cambridge early last November.

New York. E. P. Felt (February 20): Reported as being found in large numbers in the lower Hudson Valley.

Connecticut. E. P. Felt (February 20): Found in large numbers in several localities.

Massachusetts. A. I. Bourne (February 19): Numerous complaints received from housewives. Reported as extremely abundant. This report coincides with the increased abundance over the State the last two summers.

MAPLE

JAPANESE MAPLE SCALE (Leucaspis japonica Kll.)

Pennsylvania. G. B. Slesman (February): New to this area. Found on Norway maples, privet, and dogwood. Prevalent in lower Merion Township, and severe damage reported on the above-mentioned plants. Reporter visited an estate in Narberth on February 13 and found several Norway maples severely damaged.

OAK

GIANT APHID (Longistigma caryae Harr.)

Mississippi. C. Lyle (February 21): Adults taken from oak in Washington County in November and in Marion County in February.

TWIG PRUNER (Hypermallus villosus F.)

Connecticut. E. P. Felt (February 20): Reported last December as somewhat abundant in vicinity of Hartford.

WHITE OAK CLUB GALL (Andricus clavulus O.S.)

New York. E. P. Felt (February 20): Reported as rather common in the White Plains area.

PINE

A SCALE (Matsucoccus gallicolus Morr.)

New York. E. P. Felt (February 20): Limited infestation of the pitted pine scale was found in midwinter in Long Island.

AN APHID (Cinara sp.)

Louisiana. E. H. Floyd (February 22): Large black aphid abundant on several loblolly pines near Baton Rouge.

WILLOW AND BIRCH

POPLAR AND WILLOW BORER (Sternochetus lapathi L.)

Oregon. J. Schuh (February 20): Evidences of feeding of the young larvae on willow and birch are beginning to show externally at Portland.

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

GREENHOUSE LEAF TIER (Phlyctaenia rubigalis Guen.)

Virginia. C. R. Willey (January 15): Florist reported that larvae were ruining calendula, snapdragon, and chrysanthemum in greenhouse in Richmond. Specimens submitted January 15. Observations at greenhouse indicated that a great deal of damage had occurred. First report on this insect.

A MAGGOT (Hylemya sp.)

Alabama. J. M. Robinson (January 8): Have greatly reduced the stand of blue lupine in Ozark, Geneva, and Auburn.

SCALE INSECTS (Coccidae)

Alabama. J. M. Robinson (November 28): Pine scale insect, Toumeyella parvicornis Ckll., observed to be infesting evergreen at Florence. (Det. by H. Morrison.)

L. L. English (February 22): Specimens of a barnacle scale, Ceroplastes cirripediformis Comst., on gardenia sent in from Spring Hill. (Det. by H. Morrison.)

Mississippi. C. Lyle (February 21): Florida red scale (Chrysomphalus aonidum L.) received from Yazoo County in November on palm. Barnacle scale (C. cirripediformis) reported in February from Lauderdale County, where garden plants were infested. Specimens of the camellia scale (Lepidosaphes camelliae Hoke) received from Harrison County in October and December. Reported as injuring camellia in Jackson County in December. Specimens of the tea scale (Fiorinia theae Green) received from three localities in Harrison County, where camellia and Japanese holly were said to be the host plants. Reported as injuring camellia in Jackson County. Specimens of Parlatoria camelliae Comst. were received from Lauderdale County in February. Specimens of the peony scale (Pseudonidia paeoniae Ckll.) on camellia twigs were received from Jackson County in January.

Texas. R. K. Fletcher (February 19): Begonia leaves infested with a soft scale. Coccus hesperidum L., were received from Hubbard, Hill County. (Det. by H. Morrison.)

Arizona. F. H. Parker (February 5): Scale insects, Aspidiotus lataniae Sign., received from Phoenix, Ariz. (Det. by H. Morrison.)

Nebraska. H. D. Tate (February 1): Leaves from a gardenia plant submitted from Gage County on February 1 were found to be infested with the soft brown scale, (C. hesperidum).

ARBORVITAE

AN APHID (Cinara tujafilina Del G.)

Mississippi. C. Lyle (February 21): Plant lice that probably belong to this species were sent from Harrison County in January, where they were feeding on arborvitae. Report of similar injury received from Greene County.

Texas. E. W. Laake (February 20): Aphid attacking arborvitae cedars very abundant throughout the city of Dallas. Swarms of blowflies are attracted to the trees by the honeydew which covers the lower limbs of the trees.

A MITE (Tenuipalpus sp.)

California. L. M. Smith (February 24): Found hibernating as adult females clustered gregariously under bracts of arborvitae at San Jose. Probably T. erythreus Ewing. (Det. by E. A. McGregor.)

AZALEA

AZALEA SCALE (Eriococcus azalea Const.)

Mississippi. C. Lyle (February 21): Specimens sent in from two localities in Harrison County in December and February and reported in January from another property in this county.

Louisiana. C. O. Eddy (February 22): Abundant this year.

BOXWOOD

BOXWOOD LEAF MINER (Monarthropalpus buxi Laboulb.)

Connecticut. E. P. Felt (February 20): Larvae found exceptionally abundant on box at North Stamford.

HEMISPHERICAL SCALE (Saissetia hemisphaerica Targ.)

Mississippi. C. Lyle (February 21): Infested boxwood twigs received from Lauderdale County in February.

CHRYSANTHEMUM

CHRYSANTHEMUM APHID (Macrosiphoniella sanborni Gill.)

Arizona. C. D. Lebert (February 15): Observed in scattered areas over the entire Phoenix area. Terminal growth of plants heavily clustered with aphids at this date.

EUONYMUS

EUONYMUS SCALE (Chionaspis euonymi Const.)

Mississippi. C. Lyle (February 21): Specimens received from Lauderdale and Lee Counties, where euonymus plants were being injured in December.

Texas. R. K. Fletcher (January 30): Collected on euonymus in Dallas County on January 30.

FERN

FERN SCALE (Pinnaspis aspidistrae Sign.)

Virginia. Miriam B. Nock (February 7): Severe infestation on foliage of Ophiopogon jaburan (snakebeard) at Accomac on February 7. (Det. by H. Morrison.)

Mississippi. C. Lyle (February 21): Specimens received from Harrison County in December.

GLADIOLUS

GLADIOLUS THRIPS (Taeniothrips simplex Morison)

Florida. J. R. Watson (February 26): Becoming common in the Bradenton and, especially, Fort Myers sections.

CORN EAR WORM (Heliothis armigera Hbn.)

Florida. J. R. Watson (February 26): Boring stems of gladioli in the Bradenton and Fort Myers sections.

HOLLY

JUMPING PLANT LICE (Paurocephala ilecis Ashm.)

Mississippi. C. Lyle (February 21): Jumping plant lice that probably belong to this species were received from Pike County in December and from Harrison County in January. Plant infested was Yaupon (Ilex vomitoria).

Texas. R. K. Fletcher (January 25): Collected on evergreen yaupon in Harris County on January 25.

JUNIPER

SPRUCE NEEDLE MINER (Taniva albolineana Kearf.)

New York. R. E. Horsey (January 21): Large number of leaves webbed together on a small Swedish juniper were found in an ornamental planting at Rochester. Believed to have been caused by this insect, which caused the same injury to spruce in the planting a few years ago.

DEODAR WEEVIL (Pissodes nemorensis Germ.)

Mississippi. C. Lyle (February 21): Number of adults taken from deodar trees in Attala County in November and December.

JUNIPER SCALE (Diaspis carueli Targ.)

Massachusetts. E. P. Felt (February 20): Found to be extremely abundant early last November in the Boston area.

MAGNOLIA

A SCALE (Toumeyella turgida O'kell.)

Mississippi. C. Lyle (February 21): Scale insects that probably belong to this species were received on magnolia from Bolivar County in November and from Coahoma County in December on Japanese magnolia.

RHODODENDRON

RHODODENDRON LACEBUG (Stephanitis rhododendri Horv.)

Connecticut. E. P. Felt (February 20): Eggs found at Darien. Somewhat abundant last October in rhododendron leaves.

ROSE

APHIDS (Aphidae)

Georgia. J. E. Webb, Jr. (February 19): Numerous aphids (probably the pink and green rose aphid (Macrosiphum rosae L.)) observed in clusters on a few live leaves of a rose bush in a yard at Cornelia. Microscopic examination revealed a colony of 35 individuals, including only 1 adult wingless female, which was in the process of giving birth to living young. Low temperature was 27° F.

SPANISH BROOM

A PYRALIDID (Tholeria reversalis Guen.)

Arizona. R. A. Fock (December 5): Damage very severe at times, killing ornamental Spanish broom plants in the Tucson-Phoenix area. (Det. by C. Heinrich.)

I N S E C T S A T T A C K I N G M A N A N D

D O M E S T I C A N I M A L S

MAN

BEDBUG (Cimex lectularius L.)

Texas. R. K. Fletcher (January 31): Found infesting trailer in Bexar County.

Utah. G. F. Knowlton (February 26): Causing annoyance in a home at Salt Lake City.

MASKED HUNTER (Reduvius personatus L.)

Massachusetts. A. I. Bourne (February 17): Immature specimen of what appears to be this species received from West Brookfield, Worcester County. Reported as biting a human.

A FOWL MITE (Acarina)

Massachusetts. A. I. Bourne (February 19): Reported as attacking an invalid at Fitchburg, in the north-central part of the State, early in February. Caused considerable irritation and itching, which lasted for several days.

TROPICAL RAT MITE (Liponyssus bacoti Hirst.)

Texas. E. W. Laake (February 5): Reported as being annoying in a local residence.

BROWN DOG TICK (Rhipicephalus sanguineus Latr.)

Illinois. C. L. Metcalf (February 21): Reported from a dog kennel at Skokie, in the extreme northeastern part of the State late in December.

AMERICAN DOG TICK (Dermacentor variabilis Say)

Massachusetts. M. M. Cole (February 19): Last recorded activity on Martha's Vineyard was December 19 for larvae and August 20 for nymphs on meadow mice and October 31 for adults on a dog.

CHINCHE (Ornithodoros talaje Guer.)

New York. R. Matheson (February): Specimen taken from a house in Ransomville on December 13, 1940. Still alive on February 18. The species has been present in the home since about 1925.

CATTLE

SCREWORM (Cochliomyia americana C. & P.)

General. D. C. Farman (February 15): Fall infestations considerably above normal and over more than normal area throughout the Southwestern States. Infestations in southern Arizona and California were high. In California infestations were reported as far north as Redding, considerably farther north than has been reported before. Infestations were above normal in the western half of Texas, and in and about Laredo they were the highest ever recorded. Along the lower Gulf coast through eastern Texas, Louisiana, and Mississippi, infestations were low or entirely absent. Reports from South-eastern States indicated that infestations were low.

CATTLE GRUBS (Hypoderma spp.)

Missouri. L. Haseman (February 22): Examinations made the last week in January in central Missouri showed a few of the ox warbles almost ready to leave the backs of cattle, though most of the larvae had only recently arrived in the backs of the hosts.

Texas. E. W. Laake (January 15): Abundance and seasonal development of H. lineatum (DeVill.) in 100 cows of an average dairy herd in the vicinity of Dallas were as follows: 13 percent of the animals uninfested; 71 percent, 1 to 10 grubs each; 9 percent, 11 to 20 grubs; 5 percent, 21 to 30 grubs; 1 percent, 31 to 40 grubs; and 1 percent, 41 to 50 grubs. Of 491 cattle grubs, 24.2 percent were in the second stage and 75.8 percent were in the third stage. (February 15): Abundance and seasonal development in 227 dairy cows at Dallas were as follows: 70.9 percent of the animals uninfested, but most of them had scars on their backs, from which grubs had recently dropped; 28.6 percent had from 1 to 5 grubs each, and 0.4 percent had from 6 to 10 grubs. All of the 130 grubs still present in these animals were in the third stage and most of them were near maturity.

Colorado. F. C. Bishopp et al. (January 23): About 50 percent of the cattle in a herd at Virginia Dale were found to be infested with H. lineatum, ranging from 1 to 25 per head.

Wyoming. F. C. Bishopp et al. (January 24): Dairy herd of 40 head at Laramie found to be lightly infested with grubs. Only 1 animal raised locally. The other infested animals were from Casper, Wyo., and Johnstown, Colo. (February 27): Three herds were examined near Buffalo. One had only 4 animals which carried 2, 3, 16, 17 grubs. All extracted were H. lineatum, except 1, which was a second-instar H. bovis Deg. The second herd of 34 head had 2 animals uninfested and the others with from 1 to 63 grubs. All but 1 of those extracted were H. lineatum, and the 1 was a second-instar H. bovis. In the third dairy herd 12 animals were examined. One had no grubs and the other had from 1 to 27, all H. lineatum. A few grubs were approaching maturity in this locality. A group of about 125 head of calves and bulls near Parkman were examined. Most of those old enough to have grubs were infested, the number ranging from 1 to about 40. All but 2 of these were H. lineatum; these were second-instar H. bovis. A few were nearing maturity, probably beginning to leave the host in about 10 days. Four dairy herds were examined near Casper. In 1 of these 38 animals were grub-free and 9 were infested with from 1 to 10 grubs, all H. lineatum. In the second herd all were infested with from 1 to 17 grubs, 27 of which were extracted and all were H. lineatum except 1, which was a second-instar H. bovis. In the third herd all of the 13 animals examined were infested with from 1 to 10 grubs, all H. lineatum. In the fourth herd 4 animals were examined. Two were full and the other 3 carried 1, 1, and 20 grubs. All extracted were H. lineatum. Only 4 of the grubs were approaching maturity. One herd of 15 dairy cattle was examined near Douglas. Seven of these were free of H. lineatum grubs, the others carried from 1 to 20 grubs, only 4 of which were in the third instar (early). Two herds of 4 animals each were examined near Wheatland. These carried the following numbers of H. lineatum grubs: 0, 15, 19, 25 and 0, 1, 2, 21. Only 1 of those extracted was approaching maturity.

STABLEFLY (Stomoxys calcitrans L.)

Texas. E. W. Laake (February 15): Breeding has continued uninterrupted in nature all winter in the vicinity of Dallas. As many as 50 flies per animal observed feeding at 1 time on the forelegs of cattle on balmy days during January. Considerable annoyance to dairy cows and especially to calves in corrals observed on warm days throughout the winter.

BLACK BLOW FLY (Phormia regina Meig.)

Wyoming. F. C. Bishopp (February 27): One adult found in a store at Laramie. Fairly active specimen taken in room at Sheridan.

SHORT-NOSED CATTLE LOUSE (Haematopinus eurytarnus Nitz.)

Texas. E. W. Laake (February 20): Reported that about 9,000 cattle in Hemphill County were dipped during the winter for the control of long-nosed and short-nosed cattle lice. Generally, the short-nosed cattle louse is apparently less abundant this winter than last year, but reports have been

received from several western and northern counties of very heavily infested animals on some ranches. Heavily infested animals observed in Denton and Dallas Counties during January.

Wyoming. F. C. Bishopp et al. (February 27): Reported from Buffalo and Sheridan areas. One bull examined near Buffalo literally covered with lice and eggs.

LONG-NOSED CATTLE LOUSE (Linognathus vituli L.)

Texas. E. W. Laake (December 30): Light to medium infestations, particularly on calves, reported by ranchmen at Seymour, Baylor County. One report indicated that at least 50 percent of the animals on a ranch were infested. (January 3): Heavily infested herd observed in Anderson County, eastern Texas.

Wyoming. F. C. Bishopp (February 27): Few found on calves in a dairy near Laramie. Caused considerable trouble on calves late in winter.

HORSE

A HORSE BOTFLY (Gasterophilus sp.)

Missouri. L. Hosenan (February 22): Autopsy made in late January at Columbia showed larvae almost full grown, although an occasional larva was found to be scarcely half grown.

BIRDS

TICKS (Ixodes spp.)

Arkansas. W. J. Baerg (February 26): Reported commonly found on birds at North Little Rock.

HOUSEHOLD AND STORED-PRODUCTS INSECTS

Termites (Isoptera)

Massachusetts. J. V. Schaffner, Jr. (February 24): Winged termites swarmed in basement room in eastern Massachusetts early in December 1940.

New York. J. V. Schaffner, Jr. (February 24): Specimens of winged termites sent in from dwelling house in New Rochelle late in January.

Pennsylvania and District of Columbia. R. A. St. George (February 10): Specimens of Reticulitermes flavipes Kol. received from Philadelphia, Pa., and Washington, D. C. recently. Were making flights in heated buildings.

Nebraska. H. D. Tate (February 24): R. tibialis Banks reported from Saline and Hall Counties in January and February.

Utah. G. F. Knowlton (February 20): Termites causing serious damage to wood structures in a house in Salt Lake City. (February 28): Termites damaging a house at Logan.

ANTS (Formicidae)

Virginia. F. W. Poos (February 11): Tetramorium caespitum L. found feeding on corn below the surface of the soil and on the leaf sheath just above the surface in our greenhouse at Arlington.

Illinois. C. L. Metcalf (February 21): Several reports on Pharaoh's ant (Monomorium pharaonis L.) received.

Mississippi. C. Lyle (February 21): M. pharaonis specimen received from Stone County in November. Ants (probably Prenolepis imparis Say) were received from Hancock County in January. Specimens of Iridomyrmex humilis Mayr were received from Hinds County in January. Reported as causing annoyance in homes. Specimens of Solenopsis xyloni McCook received from Bolivar, Leake, Lee, and Washington Counties. Several cases of trouble from this species observed around State College.

Nebraska. H. D. Tate (February 24): Specimens of Lasius interjectus Mayr were sent in from Douglas County on January 13 and February 17.

Texas. R. K. Fletcher (February 21): Ants found in Victoria County on January 11 and in Dallas County on January 18.

E. W. Laake (January and February): I. humilis, M. pharaonis, and Camponotus herculeanus pennsylvanicus Deg. reported as annoying in residences in Dallas.

Utah. G. F. Knowlton (February 5): Ants causing annoyance in one fruit room and two basement apartments at Logan.

GERMAN COCKROACH (Blattella germanica L.)

Mississippi. C. Lyle (February 21): Reported as annoying in a house in Marshall County in December.

Nebraska. H. D. Tate (February 24): Specimens received from Platte, Custer, and Saunders Counties during the period from January 1 to February 20.

Utah. G. F. Knowlton (January 20): Causing annoyance in a restaurant at Ogden and at Logan.

BROWN-BANDED COCKROACH (Supella supellectilium Serv.)

Illinois. C. L. Metcalf (February 21): Reported from Urbana.

LARGE BROWN ROACH (Periplaneta brunnea Burn.)

Louisiana. E. H. Floyd (February 22): Large colony discovered in Baton Rouge.

HOUSE CRICKET (Gryllus domesticus L.)

Mississippi. C. Lyle (February 21): Reported as being present in a residence in Harrison County.

CAMEL CRICKETS (Ceuthophilus sp.)

Mississippi. C. Lyle (February 21): Adults received in November from Lauderdale County, where they were causing annoyance in a house.

BOXELDER BUG (Leptocoris trivittatus Say)

Illinois. C. L. Metcalf (February 21): Prevalent and troublesome in many sections of the State throughout the winter.

Nebraska. H. D. Tate (February 24): Reported as present in Lancaster, Cuming, Washington, and Burt Counties during the period from January 12 to February 14.

Utah. G. F. Knowlton (February 26): Reported as causing serious annoyance in school buildings and one cafeteria at Logan and in homes at Brigham.

WEEVILS (Curculionidae)

Texas. R. K. Fletcher (January 24): Sitophilus oryza L., Tribolium sp., and Tenebrio sp. found in corn in Macogdoches County on January 24. Corn stored in the shuck was seriously injured.

Nebraska. H. D. Tate (January 11): Considerable number of adults and a few larvae of Tribolium confusum Duv. found in sample of rye received from Brown County. (February 8): Larvae of Tenebrio molitor L. collected from a grain bin in Dakota County. (February 24): Specimens of larvae of Attagenus piceus Oliv. submitted from Howard County on February 14. Reported found in alfalfa seed.

North Dakota. J. A. Munro (January 21): About 90 percent of the reports on stored-grain pests pertain to Laemiphloeus minutus Oliv. Grain-storage-pest problem reported as very serious.

Montana. H. B. Mills (February 21): Tribolium madens Charp. reported at Savage. This is the second report for the State. Laemiphloeus sp. reported from Baker, Broadview, Cascade, Conrad, Denton, Farmington, Hardin, Haure, Lewistown, Ulm, and Williams Counties. Most abundant of grain insects found to date. Oryzaephilus surinamensis L. found in stored wheat at Baker, Bozeman, and Farmington in February. Sitophilus granarius L. found in stored wheat at Cascade and Haure in February. Cathartus advena Waltl. reported as attacking stored grain at Bozeman.

Oregon. J. Davis (February 14): C. quadricollis Guer. reported as attacking Mexican basket in a home at Portland.

POWDER POST BEETLES (Lyctus spp.)

Illinois. C. L. Metcalf (February 21): Lyctus sp. continue to cause many reports of damage from all sections of the State.

New Jersey. M. K. Beyer (February 3): Specimens of L. planicollis Lec. reported taken at Teaneck from a bookcase said to be constructed of mahogany. (Det by W. S. Fisher.)

A WEEVIL (Gibbium psylloides Czemp.)

Georgia. T. L. Bissell (January 21): Found in house at Griffin on January 21. First one collected by reporter.

DRUG STORE WEEVIL (Stegobium paniceum L.)

New York. R. E. Horsey (February 22): Caused slight damage to dried flowers and leaves in a herbarium at Rochester. One live and active adult found on December 17 and another on February 5.

A MUSEUM PEST (Anthrenus muscorum L.)

Massachusetts. E. P. Felt (February 20): Reported as practically destroying an amateur collection of insects at Hopkinton.

