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U. S. DEPARTMENT OF AGRICULTURE

Cooperative
**ECONOMIC INSECT
REPORT**

Issued by

PLANT PEST CONTROL DIVISION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearinghouse and does not assume responsibility for accuracy of the material.

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Plant Pest Control Division
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United States Department of Agriculture
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

PEA APHID infestations appear to be increasing on legumes in several areas. Heavy infestations reported in New Mexico, Oklahoma, Arkansas, Tennessee, Georgia, North Carolina, Maryland and Delaware. (pp. 351-352). SPOTTED ALFALFA APHID building up on alfalfa in Oklahoma; generally light elsewhere. (p. 352). ALFALFA WEEVIL larval damage heavy in Georgia and South Carolina. (p. 353). ARMY CUTWORM damage continues in Idaho and Utah; also reported in South Dakota. (pp. 354, 367).

Damage by a THRIPS (Frankliniella occidentalis) continues heavy on several crops in New Mexico. (pp. 355, 357, 359, 361).

PINK BOLLWORM moth trapped in Yuma County, Arizona. No evidence of larval infestation encountered. (p. 361).

BARK BEETLES (Ips sp. and Dendroctonus brevicomis) severely damaging ponderosa pine in several California locations. (p. 361).

LONE STAR TICK heavy on cattle in Oklahoma, several hundred per animal in several counties. (p. 365).

Some First Reports of the Season: First-instar nymphs of Melanoplus bilituratus collected in Kansas. EUROPEAN CORN BORER moths emerged in North Carolina. MEADOW SPITTLEBUG nymphs present in Pennsylvania, New York and Indiana. Bryobia rubrioculus adults on apple in Washington. Adults of COLORADO POTATO BEETLE emerging in New York and Delaware. IMPORTED CABBAGEWORM adults flying in Pennsylvania and larvae present in Delaware. HARLEQUIN BUG present in Knox County, Tennessee. BOLL WEEVIL adults active in South Carolina. EUROPEAN PINE SHOOT MOTH larvae active in Michigan. Larvae of FOREST TENT CATERPILLAR present in Pennsylvania. GYPSY MOTH eggs hatching in Connecticut.

INSECT DETECTION: A new State record was Phyllophaga profunda in Florida. (p. 366). New county records are as follows: Oriental beetle in Hoke County, North Carolina (p. 351); alfalfa weevil in Greene County, Tennessee (p. 353); and Eriophyes insidiosus in Ventura County, California (p. 357).

ADDITIONAL NOTES. (p. 367).

Status of some IMPORTANT INSECTS in the United States. (p. 369).

Reports in this issue are for the week ending April 29, unless otherwise indicated.

WEATHER BUREAU 30-DAY OUTLOOK

MAY 1960

The Weather Bureau's 30-day outlook for May calls for temperatures to average below seasonal normals over the eastern two-thirds of the Nation with coolest weather in the Upper Mississippi Valley. Above-normal temperatures are predicted along the West Coast and near normal in the remainder of the country. Rainfall is expected to be greater than normal in the northern third of the Nation east of the Continental Divide, and also along the Gulf and South Atlantic coasts. Subnormal amounts are indicated in both the Southwest and Pacific Northwest. In areas not specified, near normal amounts are in prospect.

Weather forecast given here is based on the official 30-day "Resume and Outlook," published twice a month by the Weather Bureau. You can subscribe through Superintendent of Documents, Washington 25, D. C. Price \$4.80 a year, \$2.40 a half year.

WEATHER OF THE WEEK ENDING MAY 2

Sharply contrasting air masses left weekly temperatures generally below normal from the Pacific coast eastward to the western Great Lakes, the central Mississippi Valley, and Texas and generally above normal in the eastern third of the Nation. Departures were as much as 12° or more below normal in parts of Montana and north-central Nebraska, and 6° above normal near the Nation's Capital. Polar air moved eastward late in the week to cover most of the Eastern States, however, dropping temperatures sharply from the record or near-record early season levels reached earlier. Freezing temperatures late in the week extended southward to northwestern Texas.

Moderate to heavy precipitation in California greatly benefited crops there. Over the Plateau States, scattered moderate to heavy rain or snow improved soil moisture conditions, and in the Great Plains and Mississippi Valley precipitation ranged from moderate to heavy. In northern sections, snowfall was mixed with showers and general rains. Locally heavy snow fell in eastern Colorado, Nebraska, and South Dakota. Water totals ranged from over 1 inch in parts of Colorado to generally 0.50 to 1.00 inch in Nebraska, western Iowa and Minnesota to near 0.50 inch in the Dakotas.

Heavy precipitation from Texas, Oklahoma, and Louisiana to Wisconsin, and in the central Mississippi Valley was the result of widespread thunderstorms, and several severe squall lines moved over portions of this region. Heavy hail and damaging winds were reported in the southern Great Plains, and several tornadoes skipped across Oklahoma. Precipitation totals ranged up to 7 inches locally in south-central Texas, over 5 inches in Louisiana, and 4 inches in Oklahoma and Missouri.

Rainfall in the Southeast, Middle Atlantic, and New England States was highly variable, ranging from very light to heavy in showers and thunderstorms. Excessive rains in southeastern Florida have caused damage to the vegetable crop, but many sections of the Southeast need additional rain. (Summary supplied by U. S. Weather Bureau).

CEREAL AND FORAGE INSECTS

GRASSHOPPERS - OKLAHOMA - First-instar nymphs of Melanoplus sp. noted in limited numbers, less than 1 per square yard, on 2 rangeland areas checked in Rogers and Nowata Counties. (Robinson). COLORADO - Melanoplus differentialis and M. bivittatus infesting 500 acres of idle land in Arapahoe County. Egg pods range 1 per square yard to 2 per square foot in field; 2 per square foot in fence rows and borders; 90 percent of M. bivittatus and 10 percent of M. differentialis. Thirty percent of eggs had been destroyed by bee fly and blister beetle larvae. (Colo. Ins. Sur.). KANSAS - Very few first-instar nymphs of M. bilituratus collected in sweepings in an alfalfa field in Cheyenne County, northwest area. (Peters). SOUTH DAKOTA - Preliminary grasshopper egg survey in southeastern area revealed most eggs just entering the coagulated stage. One pod found in eye-spot stage. (Mast). NORTH DAKOTA - Grasshopper egg development survey conducted in 9 southeastern counties. M. bivittatus and M. bilituratus eggs recovered had reached segmented stage of development in LaMoire and Emmons Counties. Eggs of these species in early coagulation stage in Ransom, Richland, Sargent, Dickey, McIntosh, Logan and Steele Counties. Some egg development to the eye-spot stage also observed in these counties. (Wilson). WISCONSIN - Overwintering species of Pardalophora apiculata and Chortophaga viridifasciata advanced to fifth instar by April 25, about the same stage as in 1959 at this time in Marquette County. Predatory damage and desiccation of egg pods noted in a Green Lake County field which had a high 1959 adult population. Sound egg pods examined indicated that M. femur-rubrum eggs in clear stage and M. bilituratus eggs in coagulated stage by April 25. (Wis. Coop. Sur.).

GREENBUG (Toxoptera graminum) - OKLAHOMA - Very limited numbers in 1 of 5 wheat fields checked in Kiowa County. (Hudson). Counts 10-20 per linear foot in 4 of 5 fields checked in Hennessey area. None noted in 3 other fields checked in Kingfisher, Major and Dewey Counties. (Owens). Heavy numbers continue to kill plants in limited number of fields along Cimarron River in Payne County. Populations in other fields in central area completely controlled by Aphidius testaceipes; plants recovering nicely. Greenbugs damaging some fields of late-planted grain in upland areas of Pawnee County. (Young). Counts averaged 60 per linear foot in field of oats in Porter area and populations appear to be increasing in bottom land fields along Grand River in vicinity of Fort Gibson; counts averaged 50-200 per linear foot in 2 fields checked in latter area, with damage beginning to show in field of oats. (Robinson). TEXAS - None found in 11 panhandle counties surveyed week of April 18. (Russell, Preston, Hawkins). Only light infestations noted on wheat in Lynn and Scurry Counties. (Whitaker). ARKANSAS - Eighty percent of fields checked showed presence of small numbers, with an average of only about 125 per 100 sweeps of a 15-inch net. Predators present and apparently keeping aphid populations low. (Boyer). ILLINOIS - Survey of 19 small grain and grass fields was negative. (Ill. Ins. Rpt.).

ENGLISH GRAIN APHID (Macrosiphum granarium) - NEBRASKA - Single specimen collected from wheat in Harlan County. (Simpson).

CORN LEAF APHID (Rhopalosiphum maidis) - OKLAHOMA - Light, averaged 5 per linear foot, in 2 barley fields checked in Tillman County. Medium, up to 250-400 per linear foot, in spots in another field in same area. (Hatfield). TEXAS - Heavy infestations on young grain sorghum throughout coastal bend area. (Hawkins). Light infestation in Cameron County. (Hindman, Stephens). NEW MEXICO - Light to heavy, spotty infestations on barley in Eddy and Dona Ana Counties. (N. M. Coop. Rpt.).

BROWN WHEAT MITE (Petrobia latens) - COLORADO - Counts 1-5 per linear foot in wheat in Weld and Adams Counties. (Colo. Ins. Sur.). NEW MEXICO - Light to heavy, spotty infestations on wheat and barley in Curry and Valencia Counties. (N. M. Coop. Rpt.). UTAH - Present, but rare in Box Elder County winter wheat in Collingston-Garland area. Reported much more numerous before recent storms. (Knowlton).

CHINCH BUG (Blissus leucopterus) - OKLAHOMA - An occasional adult, less than 1 per 5 stalks, noted in cornfield in Wagoner County. (Robinson). Beginning to appear in very light numbers in a cornfield in Bryan County. (Vinson). TEXAS - Infestations ranged 2-4 per stalk on young corn in Atascosa and Live Oak Counties. (Hawkins). Light on grain sorghum in Zavala County. (Prucia). ILLINOIS - Averaged 184 per 100 sweeps in grassfields in west-southwest. (Ill. Ins. Rpt.). NORTH CAROLINA - All stages waiting under clods all over field for corn to come up in a Hyde County field. (Kulash).

A FALSE CHINCH BUG (Nysius raphanus) - NEW MEXICO - Heavy on tansymustard in alfalfa field in Eddy County. (N. M. Coop. Rpt.).

A LEAFHOPPER (Dikraneura carneola) - UTAH - Common on winter wheat and roadside grasses in Collingston-Tremonton area, Box Elder County. (Knowlton).

RICE STINK BUG (Oebalus pugnax) - LOUISIANA - Ranged 2-10 per 10 sweeps to 5 per sweep in oats in East Baton Rouge Parish and 32-56 per 100 sweeps in oats in Avoyelles Parish. Fifty collected in 100 sweeps on wheat in Natchitoches Parish and 52 per 100 sweeps in oats in Claiborne Parish. (Spink).

ARMYWORM (Pseudaletia unipuncta) - LOUISIANA - Very light infestations found in various areas of State. Less than 1 per 10 sweeps collected on oats in East Baton Rouge Parish and Avoyelles Parish. (Spink). ARKANSAS - Survey of fields of oats in Arkansas, Desha, Chicot, Lincoln and Jefferson Counties showed average of only 1.53 larvae per 100 sweeps of a 15-inch net. Larvae too scarce to find checking by square foot method. (Boyer).

FALL ARMYWORM (Laphygma frugiperda) - LOUISIANA - Whorls of sweet corn 20 percent infested at Diamond. (Spink).

ARMYWORMS - ILLINOIS - Two first-instar larvae collected in wheat fields surveyed in southwest and west-southwest areas. (Ill. Ins. Rpt.).

CORN EARWORM (Heliothis zea) - TEXAS - Damaging sweet corn in lower Rio Grande Valley. (Deer). LOUISIANA - A serious outbreak may occur if favorable conditions continue. In 7 fields of white clover in Avoyelles Parish, counts ranged 1-5 per 25 sweeps and averaged 4 per 25 sweeps. In Rapides Parish, 24 larvae were collected in 100 sweeps. In crimson clover in Washington, St. Helena and East Baton Rouge Parishes, counts averaged 1 per sweep. (Spink).

EUROPEAN CORN BORER (Pyrausta nubilalis) - MARYLAND - Pupation nearing completion on lower Eastern Shore; 90 percent at Hebron, Wicomico County. (U. Md., Ent. Dept.). NORTH CAROLINA - First adults of season emerged on April 25 at Elizabeth City and April 27 at Aurora. (Farrier). WISCONSIN - Overwintering mortality 42.9 percent in Columbia County and 20 percent in Manitowoc County. (Wis. Coop. Sur.). NEW YORK - Corn stalks examined at Poughkeepsie found this species pupated in 4 of about 50. (N. Y. Wkly. Rpt.).

SOUTHWESTERN CORN BORER (Zeadiatraea grandiosella) - OKLAHOMA - One pupa found in 150 overwintered forms taken in a field in Payne County. (Arbuthnot).

SUGARCANE BORER (Diatraea saccharalis) - LOUISIANA - Averaged 22 egg masses per acre at check points in 101 fields in 13 parishes. Dividing 13 parishes into geographical areas, egg mass counts averaged 6 per acre in northern, 16 per acre in southwestern and 31 per acre in southeastern area. (Spink).

SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) - LOUISIANA - Light damage to corn foliage noted in Caddo and Bossier Parishes and light larval damage noted on corn in East Feliciana Parish. (Spink). DELAWARE - Adults present in alfalfa fields over State. (Burbutis, Mason).

CORN FLEA BEETLE (*Chaetocnema pulicaria*) - DELAWARE - Adults present on young sweet corn in Sussex County. (Burbutis, Mason). ILLINOIS - Averaged 72.5 per 100 sweeps in wheat fields in southwest and 4 per 100 sweeps in west-southwest. Averaged 9 per 100 sweeps in grass fields in west-southwest. (Ill. Ins. Rpt.). UTAH - Damaging sweet corn in Santa Clara-Hurricane area, Washington County. (Knowlton, Hughes). NEW YORK - Total of 1,200 sweeps made in grasses at Poughkeepsie and incidental weeds; 106 flea beetles were taken of which 15 were *C. pulicaria* and 23 were *C. confinis*, *C. minuta* and *C. denticulata*. In Stone Ridge and Hurley areas of Ulster County 1,700 sweeps of rye and roadside grasses yielded 54 flea beetles of which 4 were *C. pulicaria* and 19 others were other 3 species previously mentioned. (N. Y. Wkly. Rpt.).

A BILLBUG (*Calendra* sp.) - GEORGIA - Heavy infestations on corn in Dooly, Berrien, Cook, Lowndes, Brooks and Sumter Counties; a 80-acre field in Dooly County destroyed. (Johnson).

ORIENTAL BEETLE (*Anomala orientalis*) - NORTH CAROLINA - Larvae taken in Hoke County in grass sod; a new county record. Det. W. H. Anderson. (Pender).

WIREWORMS - GEORGIA - Moderate infestation of unspecified species on corn in Dooly County. (Fulford). NEBRASKA - Larvae of undetermined species damaging an early planted experimental corn plot. No efforts made to determine extent of infestations. (Weekman).

PEA APHID (*Macrosiphum pisi*) - CALIFORNIA - Medium infestations on horse beans in Vina, Tehama County. (Cal. Coop. Rpt.). NEVADA - Averaged 2-4 per sweep in Las Vegas area and Moapa and Virgin Valleys, Clark County. (Bechtel, Zoller; Apr. 22). NEW MEXICO - Heavy, spotty infestations in Los Lunas-Belen area, Valencia County. Very light in Carlsbad-Artesia area. (N. M. Coop. Rpt.). TEXAS - Counts averaged 5 per sweep on sweetclover in Cameron County (Hawkins, Stephens); ranged 2-5 per sweep on sweetclover in Goliad County (Hawkins); light on alfalfa in Lynn County; medium on vetch in Terry County (Whitaker); and ranged 2-3 per sweep on alfalfa in Wilbarger County (Turney). OKLAHOMA - Heavy populations continue to occur on variety of legumes throughout State. Populations vary from light to heavy in some localities, indicating need of close check by farmers of each field. Treatments continue in several south central and central areas. Plants in some fields have wilted appearance due to heavy feeding. Counts were as follows: 50 per sweep in alfalfa field in Jackson County (Presgrove); 40 per square foot of crown area in field in Tillman County (Hatfield); 400-3,000 per sweep in 9 alfalfa fields in Johnston, Bryan and Carter Counties, with honeydew covering plants (Vinson); 6-900 per sweep in 15 fields of alfalfa, vetch and clover in Choctaw County (Goin); 50-100 per linear foot in 2 fields in Garfield and Kingfisher Counties (Owens); 10 to several hundred per sweep in alfalfa in north central area, averaging about 500 per sweep in most fields (VanCleave); 150-400 per square foot in Payne County; 180-650 per sweep in Muskogee County (James); 300-650 per sweep in 4 fields of alfalfa in Muskogee and Wagoner Counties (Robinson). Populations in some fields in Pawnee County heaviest noted in area in several years (Garlington) and heavy populations in some alfalfa fields in Lake Carl Blackwell area, with some plants showing wilting (Bieberdorf). KANSAS - Counts in alfalfa in northwest less than 1 per sweep. (Peters). NEBRASKA - First specimens of season collected from alfalfa in Harlan, Franklin and Adams Counties. Highest number averaged 3 per 10 sweeps in field in Harlan County. (Simpson). COLORADO - Counts 25-50 per 100 sweeps in alfalfa in Adams, Weld and Larimer Counties. Trace numbers found in Mesa County. (Colo. Ins. Sur.). WYOMING - Averaged less than one per sweep in 8 alfalfa fields checked in Worland-Thermopolis area. (Fullerton). UTAH - Damaging alfalfa in Washington and Kane Counties. Present but not numerous in alfalfa fields in Fielding-Tremonton area, Box Elder County. (Knowlton). WASHINGTON - Survey of nearly 1,000 acres of alfalfa in Palouse region showed decrease in populations over past 2 seasons; heaviest infestations near Penawawa, Whitman County. (Schultheis). LOUISIANA - Very large populations observed in clover and alfalfa week of April 15; however, almost nonexistent by week ending April 28 due to tremendous numbers of predators and parasites, particularly various species of lady beetles. (Spink).

ARKANSAS - Stunting alfalfa in northern area. (Barnes). MISSOURI - Very light infestations present in northeast and northwest areas; counts 3-20 per sweep in alfalfa. (Munson, Thomas, Kyd). ILLINOIS - Present in very small numbers in most areas; counts per 100 sweeps averaged 12 in northwest, 20 in west-southwest and 850 in southwest. (Ill. Ins. Rpt.). WISCONSIN - Counts in alfalfa averaged 4 per 10 sweeps in Rock, Green, Sauk and Crawford Counties. (Wis. Coop. Sur.). PENNSYLVANIA - Two fields of alfalfa heavily infested in Franklin County. (Pepper). MARYLAND - Very heavy on alfalfa on Eastern Shore, averaging 500-1,500 per sweep. Moderate to heavy on alfalfa in central area and light on red clover at Easton, Talbot County. (U. Md., Ent. Dept.). DELAWARE - Populations increased enormously over previous week in alfalfa and clover; counts ranged from 75 per sweep in New Castle County, 200 per sweep in Kent County to 300-400 per sweep in Sussex County. Some fields show signs of severe injury, including wilting, some yellowing and stunting. (Burbutis, Mason). NORTH CAROLINA - Eighty per 200 half-sweeps on alfalfa 4-6 inches tall on April 21 in Henderson County. At another location, on April 25, 3,000 per 100 half-sweeps, with actual estimate of 150-250 per foot of row on alfalfa seeded in fall of 1959 and now 6 inches tall. (Chalfant). TENNESSEE - Heavy on alfalfa in Knox County. (Bennett). GEORGIA - Heavy infestations on alfalfa in Oconee County. (Johnson).

SPOTTED ALFALFA APHID (Therioaphis maculata) - CALIFORNIA - Very light, scattered populations on alfalfa in Lancaster area, Los Angeles County. (D. May). NEVADA - Occasionally found in Virgin Valley, Clark County. Averaged 1 per sweep in Las Vegas area and 0-30 per stem in Moapa Valley, Clark County. (Bechtel, Zoller, Apr. 22). ARIZONA - Infestations low or absent in alfalfa, statewide. (Ariz. Coop. Sur.). NEW MEXICO - Generally light, with moderate spotty infestations in Carlsbad-Artesia area of Eddy County. Large numbers of young nymphs in some fields indicate beginning of rapid buildup. Heavy infestations reported in 100 acres in San Miguel County near Shoemaker. (N. M. Coop. Rpt.). TEXAS - Infestations very heavy on alfalfa in Wilbarger County, ranging 100-1,000 per sweep. (Turney). Light in Lynn and Scurry Counties. (Whitaker). OKLAHOMA - Continuing to build up in heavy numbers in alfalfa in southwest and south central areas, while just beginning to increase in southeast, east central and central areas of State. Counts averaged 250-1,000 plus per square foot of crown area in 10 alfalfa fields in Tillman and Comanche Counties (Hatfield); 100 per sweep in field in Jackson County (Presgrove); heavy in fields checked in Kiowa and Washita Counties, with spraying common in area (Hudson); 10-600 per sweep in 6 fields checked in Johnston and Bryan Counties (Vinson); 3-20 per sweep in 10 fields checked in Choctaw County (Goin); 10-75 per linear foot in 2 fields in Garfield and Kingfisher Counties, respectively (Owens); 50-100 per square foot in fields checked in Muskogee County (James); and light in fields checked in Wagoner and Muskogee Counties (Robinson). UTAH - Small numbers present in Washington and Kane Counties. (Knowlton).

YELLOW CLOVER APHID (Therioaphis trifolii) - ILLINOIS - Appearing in west-southwest and southwestern areas, ranging 0-10 and 0-20 per 100 sweeps. (Ill. Ins. Rpt.).

FOXGLOVE APHID (Myzus solani) - CALIFORNIA - Medium to heavy infestations of this species and Macrosiphum sp. on alfalfa and vetch in Sheridan area, Placer County. (Cal. Coop. Rpt.).

MEADOW SPITTLEBUG (Philaenus leucophthalmus) - DELAWARE - Young nymphs present on alfalfa in New Castle and Kent Counties. (Burbutis, Mason). MARYLAND - Light to moderate on red clover, but increasing in eastern and central sections. (U. Md., Ent. Dept.). WEST VIRGINIA - Hatching in alfalfa in Monongalia County. (W. Va. Ins. Sur.). PENNSYLVANIA - Hatching 80 percent complete on legumes in Snyder County on April 26 (Gesell) and 100 percent complete on April 28 in south central area (Pepper). NEW YORK - First-instar nymphs found on forage crops in several western counties on April 29. (N. Y. Wkly. Rpt.). INDIANA - Newly hatched nymphs observed April 15 in Posey County. Nymphs also found in Perry and Vanderburgh Counties April 18 and in Grant County on April 22. Hatching now occurring in all areas of State. (Matthew).

CLOVER LEAFHOPPER (Aceratagallia sanguinolenta) - DELAWARE - Adults generally present in alfalfa, with 2 fields averaging 4-5 per sweep in Kent and Sussex Counties. One field in New Castle County had 20 per sweep. (Burbutis, Mason) MARYLAND - Common on red clover in eastern and central areas. (U. Md., Ent. Dept.). SOUTH DAKOTA - One per 50 sweeps found in a well protected alfalfa field in Bon Homme County. (Mast). UTAH - Moderately numerous in alfalfa in Garland-Fielding area of Box Elder County. (Knowlton).

TARNISHED PLANT BUG (Lygus lineolaris) - NEBRASKA - Most alfalfa fields in Adams, Clay, Nuckolls, Franklin, Kearney, Harlan and Phelps Counties had average of 4 per 10 sweeps. Highest counts were 8 per 10 sweeps in Franklin County. (Simpson). KANSAS - Counts of adults and nymphs less than 1 per sweep in alfalfa in northwestern area. (Peters). OKLAHOMA - Light to medium, 0.25-3 per sweep, in 12 fields of alfalfa and vetch checked in Choctaw County (Goin) and counts averaged up to 2 per square foot and 3 per sweep in some alfalfa fields checked in Carter, Bryan and Johnston Counties (Vinson). LOUISIANA - Nymphal counts were 43 per 100 sweeps in crimson clover in Claiborne Parish and 13 per 100 sweeps in alfalfa in Rapides Parish. (Spink). ILLINOIS - Adults averaged 27.5 per 100 sweeps in west-southwest and 16.7 per 100 sweeps in southwest. (Ill. Ins. Rpt.). DELAWARE - Adults present in alfalfa statewide, with little increase in numbers noted. (Burbutis, Mason).

LYGUS BUGS (Lygus spp.) - WYOMING - Averaged 2 adults per sweep in 100 sweeps per field in each of 8 alfalfa fields in Worland-Thermopolis area. (Fullerton). COLORADO - Counts 12-20 per 100 sweeps in alfalfa in Adams and Weld Counties and 2-8 per 100 sweeps in Garfield County. (Colo. Ins. Sur.). UTAH - L. elisus extremely numerous in alfalfa crowns and moderately numerous in wheat fields in Blue Creek area, Box Elder County. (Knowlton).

PLANT BUGS (Adelphocoris spp.) - ILLINOIS - Average nymphal counts per 100 sweeps 7.5 in west-southwest and 46.7 in southwest. (Ill. Ins. Rpt.).

A FLEAHOPPER (Spanogonicus albofasciatus) - NEVADA - Averaged 3 per sweep and 1 per sweep in alfalfa fields in Las Vegas and Moapa Valley, Clark County, respectively. (Bechtel, Zoller; Apr. 22).

ALFALFA WEEVIL (Hypera postica) - DELAWARE - Adults range from average of 3 per sweep in alfalfa in New Castle County, 7 per 10 sweeps in Kent County to 1 per sweep in Sussex County. Counts very variable in different alfalfa fields. One field in eastern Sussex County had 18 larvae per sweep, most in second and third instars. (Burbutis, Mason). MARYLAND - Larvae averaged 15 per sweep on alfalfa in Wicomico County. Larval injury to untreated alfalfa varies moderate to heavy on Eastern Shore and from light to moderate in central sections. (U. Md., Ent. Dept.). PENNSYLVANIA - All stages except pupa present in alfalfa in south central area (Pepper); and adults plentiful in Snyder County, but no larvae present (Gesell). TENNESSEE - Found for first time in Greene County. (Mullett). SOUTH CAROLINA - Heavy infestations noted in all untreated and many improperly treated alfalfa fields. (Nettles et al.). GEORGIA - Heavy infestations of larvae on alfalfa in Cobb, Stephens, Elbert and Gwinnett Counties. Light infestation in Walker County. Fifty larvae per sweep on treated area and 100 per sweep on untreated area in Oconee County. (Wester, Newman, Beasley, Shackelford, Bergeaux, Johnson). WYOMING - Adults found in crowns of alfalfa plants. Counts were less than 1 per square foot in Worland, Thermopolis, North Portal, Fort Washakie and Lander areas. None found in Missouri River and Hidden Valleys. Height of alfalfa 2-6 inches in areas where adults were found; 1-2 inches where not found. (Fullerton).

CLOVER LEAF WEEVIL (Hypera punctata) - ILLINOIS - Larval counts per square foot averaged 2.6 in northwest, 17.3 in northeast, 48 in east, 21.1 in west-southwest and 9 in southwest. Only 2 fields showed damage which will be outgrown if warm weather continues. (Ill. Ins. Rpt.). MISSOURI - Present in most fields of alfalfa and red clover in northern area; counts 0-5 larvae per crown. (Munson, Thomas, Kyd). KANSAS - Reported from Rice County. (Gates).

LESSER CLOVER LEAF WEEVIL (Hypera nigrirostris) - MARYLAND - Adults averaged 4 per 10 sweeps on red clover at Easton, Talbot County. (U. Md., Ent. Dept.). ILLINOIS - Larvae present in west-southwest area and 10 per square foot in southwest; counts of adults per 100 sweeps were 4.2 in west-southwest and 13.3 in southwest. (Ill. Ins. Rpt.).

CLOVER ROOT CURCULIO (Sitona hispidula) - CALIFORNIA - Medium infestation on white clover in Fresno, Fresno County, and in Apple Valley, San Bernardino County. (Cal. Coop. Rpt.). OREGON - Actively feeding on vetch and clover fields in Marion County. (Capizzi). NEBRASKA - Adult counts ranged 1-4 per 10 sweeps in 2 fields in Adams County. (Simpson). MISSOURI - Adults active throughout State; counts in northeast and northwest ranged 0-5 adults per 10 sweeps. (Munson, Thomas, Kyd). MARYLAND - Adults averaged 1 per 10 sweeps on red clover at Easton, Talbot County. (U. Md., Ent. Dept.).

PEA LEAF WEEVIL (Sitona lineata) - OREGON - Actively feeding on vetch and clover in Marion County. (Capizzi).

A WEEVIL (Sitona scissifrons) - SOUTH DAKOTA - Counts 15 per 50 sweeps in alfalfa in Bon Homme County. Mating observed. (Mast).

WEEVILS (Sitona spp.) - ILLINOIS - Highest populations found in west-southwest; maximum 230 per 100 sweeps and average 70.8 per 100 sweeps. In southwest, average was 26.7 per 100 sweeps. (Ill. Ins. Rpt.).

A WEEVIL (Hypera sp., probably meles) - LOUISIANA - Larvae totaled 101 per 50 sweeps in crimson clover at Franklinton. (Spink).

BEAN LEAF BEETLE (Cerotoma trifurcata) - DELAWARE - Adults present in clover and alfalfa in New Castle and Kent Counties. (Burbutis, Mason).

FLEA BEETLES - ILLINOIS - Several species in west-southwest and southeastern areas feeding on legumes; average population ranged 18.2-26.7 per 100 sweeps. (Ill. Ins. Rpt.).

ALFALFA CATERPILLAR (Colias philodice eurytheme) - PENNSYLVANIA - Larvae 5 per 10 sweeps on alfalfa in Franklin County. (Pepper). COLORADO - Larvae 0-8 per 100 sweeps in alfalfa and adults 0-4 per 100 sweeps in Adams, Weld and Larimer Counties. (Colo. Ins. Sur.).

GREEN CLOVERWORM (Plathypena scabra) - LOUISIANA - Averaged 20 per 100 sweeps on alfalfa in Rapides Parish. (Spink). OKLAHOMA - Counts averaged 0.1-3 per sweep in alfalfa in Choctaw County. (Goin). Counts averaged up to 2 per square foot and 1 per sweep in some alfalfa fields in south central area. (Vinson).

FORAGE LOOPER (Caenurgina erechtea) - ILLINOIS - Averaged 3.3 per 100 sweeps in southwestern area. (Ill. Ins. Rpt.).

ARMY CUTWORM (Chorizagrotis auxiliaris) - UTAH - Damaging 100 acres of alfalfa at Promontory, Box Elder County. (Knowlton). COLORADO - Larvae 1 per square foot in idle land in Arapahoe County. (Colo. Ins. Sur.). KANSAS - Very few fourth and sixth-instar larvae found in an alfalfa field in Cheyenne County, northwest area. (Peters). SOUTH DAKOTA - Populations varied 1-6 larvae per square foot in alfalfa in Pennington County; some damage observed. (Hantsbarger).

VARIEGATED CUTWORM (Peridroma margaritosa) - LOUISIANA - Larvae, almost ready for pupation, found in white clover in Avoyelles Parish; averaging 1 per square foot. (Spink). CALIFORNIA - Medium infestation damaging alfalfa, especially first-year plantings, in Holtville-Brawley areas, Imperial County. (V. Roth).

CUTWORMS - NEVADA - Averaged 2-5 per square foot in seedling alfalfa field in Kings River Valley, Humboldt County. (Day, Lauderdale; Apr. 22).

SEED-CORN MAGGOT (Hylemya cilicrura) - DELAWARE - Adults average 4 per sweep in cover crops in Kent County. (Burbutis, Mason).

THRIPS - UTAH - Requiring control on alfalfa in Washington County. (Knowlton).
NEVADA - Very abundant and causing light damage to alfalfa in Moapa Valley, Clark County. (Bechtel, Zoller; Apr. 22). NEW MEXICO - Frankliniella occidentalis moderate to heavy in alfalfa and barley in Eddy, Dona Ana and Luna Counties. (N. M. Coop. Rpt.). TEXAS - F. occidentalis adults average 3 per peanut terminal in Frio County. (Harding).

FRUIT INSECTS

CODLING MOTH (Carpocapsa pomonella) - ILLINOIS - Moths emerged in Randolph County. (Meyer, Apr. 27). INDIANA - Pupation practically complete at Vincennes. (Cleveland, Apr. 19-25). MICHIGAN - Overwintering numbers very low in all orchard areas. (Hutson, Apr. 26).

EYE-SPOTTED BUD MOTH (Spilonota ocellana) - WASHINGTON - Larvae found in apple, pear, peach and apricot foliage at Wawawai, April 16, and at Pullman, April 28. (Johansen).

FRUIT TREE LEAF ROLLER (Archips argyrospila) - NEW YORK - Egg masses nearly all hatched April 28 in Ulster County, with an occasional egg mass still showing larvae emerging. (N. Y. Wkly. Rpt.).

OMNIVOROUS LEAF TIER (Cnephasia longana) - CALIFORNIA - Heavy larval populations on apple leaves in Watsonville area, Santa Cruz County. (Cal. Coop. Rpt.).

ORIENTAL FRUIT MOTH (Grapholitha molesta) - NORTH CAROLINA - First adults of season found April 18 in bait pail in Wilkes County. (Turnipseed).

RED-BANDED LEAF ROLLER (Argyrotaenia velutinana) - NEW YORK - Moths observed in Claverack, Columbia County, April 22, and in a Wayne County orchard on April 29. Egg masses observed in Columbia County April 27. No moths observed in Orleans County as of April 29. Egg masses scarce in Ulster County, but can be found in an occasional orchard. (N. Y. Wkly. Rpt.). PENNSYLVANIA - Egg masses observed on trunks of apple trees in Snyder County April 26 (Gesell) and most eggs have been deposited in south central area by April 28, but none have hatched. (Pepper). WEST VIRGINIA - Becoming active on apple in eastern panhandle area. (W. Va. Ins. Sur.). NORTH CAROLINA - First adult of season taken in bait pail on April 25 in Wilkes County; apples in very early petal fall at time. (Turnipseed). INDIANA - Activity has been light in Vincennes area; eggs have hatched. (Cleveland, Apr. 19-25). ILLINOIS - Egg masses generally difficult to find in Carbondale area. Only a few orchards and some problem areas in other orchards will require controls. (Meyer, Apr. 27). MICHIGAN - No eggs noted as of April 22. (Hutson).

LESSER PEACH TREE BORER (Synanthedon pictipes) - GEORGIA - Spring-brood moths emerging from peach trees at Ft. Valley April 21. (Snapp).

PEACH TWIG BORER (Anarsia lineatella) - WASHINGTON - Larvae flagging tips of peaches and apricots at Wawawai April 16. (Johansen).

PLUM CURCULIO (Conotrachelus nenuphar) - ILLINOIS - Expected to be normal for 1960; numbers increasing in Carbondale area. (Meyer, Apr. 27). INDIANA - None bumped from peach trees in Vincennes area as of April 25. (Cleveland). LOUISIANA - Last larval instar observed on plums in East Baton Rouge Parish. (Spink). GEORGIA - Adults depositing eggs in recently exposed peaches at Ft. Valley; these will result in "wormy" peach drops in May. (Snapp).

A ROUNDHEADED WOOD BORER (Neoclytus conjunctus) - CALIFORNIA - Heavy infestation of weakened pear trees in Gilroy, Santa Clara County. (Cal. Coop. Rpt.).

APPLE APHID (Aphis pomi) - ILLINOIS - Quite variable in Carbondale area; difficult to find in many orchards, but quite numerous in several locations. High populations of lady beetles were found in 2 orchards. Controls will be required in areas where predaceous insects are absent. (Meyer, Apr. 27). INDIANA - Curling leaves, considerable honeydew present, in some blocks in Vincennes area. (Cleveland, Apr. 19-25). NEW YORK - Numerous April 19 and 20 in Monroe County. (N. Y. Wkly. Rpt.). MASSACHUSETTS - Few found on fruit buds. (Crop Pest Cont. Mess., Apr. 26).

ROSY APPLE APHID (Anuraphis roseus) - MASSACHUSETTS - Some on fruit buds. (Crop Pest Cont. Mess., Apr. 26). NEW YORK - Hatched and active in Ulster County April 20, observed in Columbia County April 20 and in Clinton County April 21. First specimens noted in Orleans County April 22 and on April 21 and 22 in Wayne County. Hatched April 22 in Oswego County. Scarce in Monroe County, first being observed in Hilton April 22. Only a single specimen found in Niagara County as of May 2. (N. Y. Wkly. Rpt.). MARYLAND - Common and causing leaf curl on apples at Hancock, Washington County. (U. Md., Ent. Dept.). CALIFORNIA - Heavy on peach trees in Chico, Butte County. (Cal. Coop. Rpt.).

WOOLLY APPLE APHID (Eriosoma lanigerum) - OKLAHOMA - Light numbers appearing on apple trees in Stillwater area, Payne County. (VanCleave).

GREEN PEACH APHID (Myzus persicae) - COLORADO - Colonies light in Mesa County. (Colo. Ins. Sur.). WASHINGTON - Winged spring migrants on peach trees appear to be fewer than usual; start of spring flight is at about usual time in Parker area, Yakima County. (Landis).

MEALY PLUM APHID (Hyalopterus arundinis) - CALIFORNIA - Medium on prune in Red Bluff, Tehama County. (Cal. Coop. Rpt.).

APHIDS (unspecified) - NEW YORK - None hatching from tagged apple twigs in Orange County on April 16 and 17; unusually scarce in Niagara County. (N. Y. Wkly. Rpt.). INDIANA - Difficult to find in orchards in La Grange, St. Joseph, Elkhart and La Porte Counties. Attack will be light in most orchards in Orleans area. Eggs hatched over entire State. (Marshall, Apr. 26). MICHIGAN - Very few of any species present on apples, despite very careful survey in southern portion of State. (Hutson, Apr. 26). UTAH - Becoming numerous on pecan trees at St. George and Hurricane. (Knowlton, Hughes).

LYGUS BUGS (Lygus spp.) - COLORADO - Counts ranged 10-25 per 100 sweeps on cover crop and weeds in Mesa County orchards. (Colo. Ins. Sur.). UTAH - Several species, largely L. elisus, common in cherry orchards in Box Elder County. (Knowlton).

TARNISHED PLANT BUG (Lygus lineolaris) - INDIANA - Populations decreasing in peach orchards at Vincennes. (Cleveland, Apr. 19-25). Weather ideal in Orleans area for attacks by this pest. (Marshall, Apr. 26). NEW YORK - Active in peach orchards throughout the week of April 18 in Ulster County. (N. Y. Wkly. Rpt.).

STINK BUGS - ILLINOIS - Numbers increasing at present time; expected to be about normal for the coming season in Carbondale area. (Meyer, Apr. 27). INDIANA - Populations increasing in Vincennes area. (Cleveland, Apr. 19-25).

PEAR PSYLLA (Psylla pyricola) - NEW YORK - Egg deposition normal to heavy in Orleans County, depending on orchards; buds about in dormant stage. Eggs prevalent in Wayne County orchards where carryover is evidently high from 1959. (N. Y. Wkly. Rpt.) WASHINGTON - Eggs and all nymphal stages present at Wawawai, April 16. (Johansen).

A THRIPS (Frankliniella occidentalis) - NEW MEXICO - Heavy on apple trees on Flying H Ranch, Chaves County; being controlled. (N. M. Coop. Rpt.). CALIFORNIA - Medium populations on lemon in Concord, Contra Costa County. (Cal. Coop. Rpt.).

EUROPEAN RED MITE (Panonychus ulmi) - MICHIGAN - Large numbers present on susceptible apple varieties, particularly Delicious. Just beginning to hatch April 22. (Hutson). ILLINOIS - Laying eggs at Belleville, April 27. Conditions very favorable for mites so far this season. (Meyer). INDIANA - Eggs hatching in La Porte County, but not hatching in apple and cherry orchards in La Grange, St. Joseph and Elkhart Counties. (Marshall, Apr. 26). MARYLAND - Becoming common on apple at Hancock, Washington County. (U. Md., Ent. Dept.). DELAWARE - Hatching on apple statewide. (Burbutis, Mason). NEW YORK - Carryover of eggs generally light and spotty in Clinton County; difficult to find in Monroe County April 25; and appears to be very low in Ulster County. (N. Y. Wkly. Rpt.). NORTH CAROLINA - Hatching on apple April 10, with trees in delayed dormant. Most mites through first molt by April 18. (Turnipseed). MASSACHUSETTS - Eggs beginning to hatch. (Crop Pest Cont. Mess.).

FOUR-SPOTTED SPIDER MITE (Tetranychus canadensis) - ILLINOIS - Moving about on trees in Carbondale area. Sufficient abundance to indicate conditions will be as serious in 1960 as in 1959. (Meyer, Apr. 27).

TWO-SPOTTED SPIDER MITE (Tetranychus telarius) - MICHIGAN - Few heavy infestations in orchards around Grand Rapids, Battle Creek and Monroe. (Hutson, Apr. 26). DELAWARE - Hatching statewide on apple. (Burbutis, Mason).

A FRUIT TREE MITE (Bryobia rubrioculus) - WASHINGTON - First adults found on apple in Pullman area. Cold weather during past several weeks has brought season development back to normal. (Johansen). UTAH - Present, but not numerous, in commercial apple and cherry orchards in Brigham-Willard area, Box Elder County. (Knowlton). Numerous in some apple orchards at Hurricane and Rockville, Washington County. (Knowlton, Hughes). NEW MEXICO - Eggs hatching in unsprayed orchards throughout the State. (N. M. Coop. Rpt.).

AN ERIOPHYID MITE (Eriophyes insidiosus) - CALIFORNIA - Heavy populations of this vector of peach mosaic disease present on a backyard peach tree in Fillmore, Ventura County. This is the first record of this mite in the county. The area is negative for the virus disease and is several miles from the nearest known infestation in Los Angeles County. (Cal. Coop. Rpt.).

ORCHARD MITES - INDIANA - Highest population noted to April 25 at Vincennes was 60 per 100 leaves on a block of Golden Delicious apples. (Cleveland). ARIZONA - Infestations of unspecified species present on apple trees in Elfrida area, Cochise County. (Ariz. Coop. Sur.).

FORBES SCALE (Aspidiotus forbesi) - MICHIGAN - Quite a number of mature sour cherry trees in Coloma, Eau Claire and Paw Paw areas show infestations. (Hutson, Apr. 26). NEW YORK - Serious infestation present in a sour cherry orchard in Chautauqua County. (N. Y. Wkly. Rpt., Apr. 25).

BROWN SOFT SCALE (Coccus hesperidum) - OREGON - Abundant on home plantings and untreated orchards in Willamette Valley. (Larson).

SAN JOSE SCALE (Aspidiotus perniciosus) - MICHIGAN - Infestations very sparse on apples and cherries. (Hutson, Apr. 26).

FIG SCALE (Lepidosaphes ficus) - CALIFORNIA - Light infestation on fig in Jackson, Amador County. First record of occurrence in the county. (Cal. Coop. Rpt.).

FILBERT APHIDS - OREGON - Building up, with adults (some winged) averaging 6-8 per leaf examined in the more heavily infested orchards. (Capizzi).

APPLE MEALYBUG (Phenacoccus aceris) - OREGON - Previously found in a very localized area of Marion County; has now been observed in a filbert orchard near Labish Village, also in Marion County. Females laying eggs April 28. (Capizzi, Larson).

A LEAF ROLLER (Archips rosana) - OREGON - Causing leaf injury in scattered filbert orchards in Willamette Valley. As many as 66 larvae found per 50 terminal leaf clusters in Benton County; similar numbers observed in Marion County, but some orchards are only lightly infested. (Capizzi).

CIGAR CASEBEARER (Coleophora occidentis) - GEORGIA - Light to moderate infestations on pecan trees in Tift, Berrien, Cook and Lowndes Counties. (Johnson).

PECAN NUT CASEBEARER (Acrobasis caryae) - OKLAHOMA - Heavy, 30 percent of shoots infested, in a grove of improved pecan varieties in Carter County. (Vinson).

PECAN LEAF CASEBEARER (Acrobasis juglandis) - GEORGIA - Light to heavy infestations on pecan trees in Tift, Berrien, Cook and Lowndes Counties. (Johnson).

PECAN BUD MOTH (Gretchena bolliana) - NORTH CAROLINA - Causing severe injury to pecans in a nursery in Wayne County; plants apparently growing out from under insecticide applications. (Farrier).

A MAY BEETLE (Phyllophaga sp.) - GEORGIA - Light to heavy infestations on pecan trees in De Kalb and Jackson Counties. (Blasingame, Welborn).

A SAWFLY - GEORGIA - Light larval infestation of an unspecified species on pecan trees in Atkinson County. (Daniel).

A FLEA BEETLE (Altica torquata) - CALIFORNIA - Heavy populations occurring on young grapevines in Palm Desert, Riverside County. (Cal. Coop. Rpt.).

GRAPE ERANIUM MITE (Eriophyes vitis) - CALIFORNIA - Occurring as spotty, medium infestation on grape in the Modesto area, Stanislaus County. No predator activity noted. (Cal. Coop. Rpt.).

TRUCK CROP INSECTS

BEAN LEAF BEETLE (Cerotoma trifurcata) - DELAWARE - Adults present and feeding on young snap beans in Sussex County. (Burbutis, Mason). GEORGIA - Moderate to heavy infestations on beans in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas and Grady Counties. (Johnson). LOUISIANA - Damage heavy on lima beans in East Feliciana Parish. (Spink).

MEXICAN BEAN BEETLE (Epilachna varivestis) - GEORGIA - Light to moderate infestations on beans in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas and Grady Counties. (Johnson).

ALFALFA LOOPER (Autographa californica) - CALIFORNIA - Light on garbanzo beans in Palo Verdes, Los Angeles County. (Cal. Coop. Rpt.).

PEA APHID (Macrosiphum pisi) - DELAWARE - Alate forms present on young pea plants, with very small colonies of young nymphs started, in New Castle and Sussex Counties. (Burbutis, Mason). NORTH CAROLINA - Counts of 50 alates and 250 apterae per 25-foot row of peas 3 inches high in one field in Henderson County. (Chalfant).

BEET ARMYWORM (Spodoptera exigua) - NEVADA - Occasional specimens found in sugar beet fields. (Bechtel, Zoller; Apr. 22).

GREEN PEACH APHID (Myzus persicae) - NEVADA - Populations in sugar beet fields greatly reduced by predators. (Bechtel, Zoller; Apr. 22).

LYGUS BUGS (Lygus spp.) - NEVADA - Averaged 0-1 per 10 sweeps in most sugar beet seed fields in Moapa Valley, Clark County, and 2 per sweep in margins of some weedy fields. (Bechtel, Zoller; Apr. 22).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - DELAWARE - Adults averaged 2-3 per potato plant on small truck farm in Sussex County; egg masses were present. (Burbutis, Mason). NEW YORK - Numerous reports of adults emerging from fences and hedgerows in Suffolk County. (N. Y. Wkly. Rpt.). GEORGIA - Light on tomatoes in Berrien and Thomas Counties. (Johnson).

POTATO FLEA BEETLE (Epitrix cucumeris) - DELAWARE - Adults common on potatoes on a small truck farm in Sussex County. (Burbutis, Mason).

THREE-LINED POTATO BEETLE (Lema trilineata) - DELAWARE - Adults averaged 1-2 per plant in a small potato field in Sussex County; fairly heavy feeding injury evident. (Burbutis, Mason).

POTATO PSYLLID (Paratrioza cockerelli) - COLORADO - None present on Lycium at La Salle, Gilcrest and Platteville in Weld County. (Colo. Ins. Sur.).

TOMATO FRUITWORM (Heliothis zea) - TEXAS - Large numbers of eggs and larvae present in untreated tomato fields in the lower Rio Grande Valley. (Deer).

ONION THRIPS (Thrips tabaci) - NEVADA - Caused heavy damage to green onions in Moapa Valley, Clark County, before adequate controls were taken. (Bechtel, Zoller; Apr. 22). TEXAS - Light infestation on 25 acres of onions in Lubbock County. (Weigle).

IMPORTED CABBAGEWORM (Pieris rapae) - PENNSYLVANIA - Numerous adults flying in south central area on April 28. (Pepper). DELAWARE - First and second-instar larvae averaged about one per plant in a small patch of cabbage in Sussex County. (Burbutis, Mason).

HARLEQUIN BUG (Murgantia histrionica) - TENNESSEE - Found in Knox County on a cruciferous flowering plant. (Mullett). TEXAS - Heavy on turnips and wild mustard in Zavala County. (Harding).

FLEA BEETLES - NEW YORK - Counts ranged 3-4 per plant on broccoli in Orange County April 28. (N. Y. Wkly. Rpt.). MARYLAND - Phyllotreta spp. heavily infesting turnip greens near Baltimore. (U. Md., Ent. Dept.). SOUTH CAROLINA - Heavy damage by unspecified species noted in home gardens in Union County. (Nettles et al.).

ASPARAGUS BEETLE (Crioceris asparagi) - DELAWARE - Adults numerous in all counties and causing noticeable feeding injury. Eggs common. (Burbutis, Mason).

A THRIPS (Frankliniella occidentalis) - NEW MEXICO - Heavy infestations damaging lettuce in Dona Ana and Eddy Counties; being controlled by most growers. Infesting one tomato planting in Luna County. Heavy on onions in Luna and Dona Ana Counties. (N. M. Coop. Rpt.).

CABBAGE LOOPER (Trichoplusia ni) - CALIFORNIA - Light to severe damage to young watermelon and cantaloup plantings in the Calexico area of Imperial County. (Cal. Coop. Rpt.). NEW MEXICO - Light to heavy, spotty infestations present in Hatch-Las Cruces area, Dona Ana County, and Artesia area, Eddy County. (N. M. Coop. Rpt.).

CUCUMBER BEETLES (Acalymma spp.) - GEORGIA - Light infestation of A. vittata on watermelon in Pulaski County. (Alligood). SOUTH CAROLINA - Moderate numbers of A. vittata present in a field of cantaloup near Allendale. (Nettles et al.). UTAH - Acalymma spp. generally numerous in lower elevation agricultural areas of Washington County. (Knowlton).

MELON APHID (Aphis gossypii) - TEXAS - Heavy, widespread infestations on water-melons in Frio County. Controls being applied. (Harding).

STRAWBERRY LEAF ROLLER (Ancyliis comptana frageriae) - MARYLAND - Light to moderate foliage injury observed on strawberries in western Wicomico County. (U. Md., Ent. Dept.).

STRAWBERRY WEEVIL (Anthonomus signatus) - MARYLAND - Light to moderate injury to strawberry buds noted at Salisbury, Wicomico County. (U. Md., Ent. Dept.).

A STRAWBERRY WEEVIL (Brachyrhinus sp.) - CALIFORNIA - Medium local infestation in strawberries in Walteria, Los Angeles County. (Cal. Coop. Rpt.).

TARNISHED PLANT BUG (Lygus lineolaris) - MICHIGAN - Adults have overwintered in sufficient numbers to cause trouble on strawberries in all strawberry-producing areas of the State, principally in Berrien County. (Hutson, Apr. 26). NEW YORK - Adults present in Erie County strawberries as of April 28. (N. Y. Wkly. Rpt.).

SPITTLEBUGS - NEW YORK - Nymphs of unspecified species present in strawberries in Erie County April 28. (N. Y. Wkly. Rpt.).

LEAFHOPPERS - NEW YORK - Several species present in strawberries in Erie County April 28. (N. Y. Wkly. Rpt.).

SPIDER MITES - MARYLAND - Moderate numbers of unspecified species observed on strawberries at Salisbury, Wicomico County. (U. Md., Ent. Dept.). NEW YORK - Two bad infestations of Tetranychus telarius on strawberries observed April 15 in Suffolk County. A number of eggs had already been laid and some young mites were active. (N. Y. Wkly. Rpt.). TEXAS - T. telarius averaged 3 per young cantaloup leaf in Dimmit County; infestation is spotty. (Harding). Very few on potato leaves in Cameron County. (Day, Kachtik).

TOBACCO INSECTS

A TOBACCO BUDWORM (Heliothis sp.) - GEORGIA - Moderate on tobacco in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas, Grady and Mitchell Counties. (Johnson).

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - GEORGIA - Light to heavy infestations on tobacco in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas, Grady and Mitchell Counties. (Johnson). MARYLAND - Light to moderate numbers noted on edges of tobacco beds in Calvert, St. Marys and Prince Georges Counties. (U. Md., Ent. Dept.).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - MARYLAND - Larvae noted feeding on weeds near tobacco bed at Barstow, Calvert County. (U. Md., Ent. Dept.).

A WIREWORM - GEORGIA - Moderate infestation of an unspecified species on tobacco in Emanuel County. (Varner, Apr. 20).

GREEN PEACH APHID (Myzus persicae) - GEORGIA - Light on tobacco in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas, Grady and Mitchell Counties. (Johnson).

SPRINGTAILS - MARYLAND - Unspecified species caused light injury to tobacco plants in beds in Calvert County. (U. Md., Ent. Dept.).

COTTON INSECTS

PINK BOLLWORM (Pectinophora gossypiella) - ARIZONA - One female moth collected April 8 in a light trap near San Luis in Yuma County. Catch was three-fourths mile north of Mexico and 20 miles south of California. This is first known collection of pink bollworm in Yuma County. (Ariz. Coop. Sur.). Stalk destruction and discing of field completed on April 23. Adjacent fields are also being reworked. There has been no evidence of an established pink bollworm infestation in Yuma County. (PPC).

THRIPS - ARIZONA - Infestations heavy, averaging at least 4 per cotton plant in Cochise and Graham Counties. In central area, infestations generally lower; however, some areas have infestations which average 1-2 per plant. (Ariz. Coop. Sur.). LOUISIANA - Frankliniella fusca light on seedling cotton in East Feliciana Parish. (Spink). GEORGIA - Light infestations in Sumter County. Light to heavy infestations on cotton in Tift, Irwin, Berrien, Cook, Lowndes, Brooks, Thomas, Grady, Mitchell, Dougherty and Lee Counties. (Johnson). NEW MEXICO - Frankliniella occidentalis heavy on seedling cotton in Hatch-Las Cruces area, Dona Ana County, and Deming area, Luna County; averaging 48.6 per plant on 10 plants picked at random in one field. Larval stage predominates. (N. M. Coop. Rpt.).

BOLL WEEVIL (Anthonomus grandis) - SOUTH CAROLINA - Adult observed Spartanburg County and captured April 20 in Union County. (Sparks).

BEET ARMYWORM (Spodoptera exigua) - ARIZONA - Infestations on seedling cotton light to medium in a few central area fields. (Ariz. Coop. Sur.).

COTTON APHID (Aphis gossypii) - LOUISIANA - Light infestations on seedling cotton in East Feliciana Parish. (Spink).

GREEN PEACH APHID (Myzus persicae) - LOUISIANA - Light infestations on seedling cotton in East Feliciana Parish. (Spink).

Cotton Insect Situation in Texas - In lower Rio Grande Valley, light infestations of APHIDS and SPIDER MITES noted, with only a few infestations warranting treatment. FLEAHOPPER nymphs and some adults appearing in fields. Heavy population of nymphs noted on other host plants. BOLLWORMS and BOLL WEEVIL (Anthonomus grandis) feeding in terminals in some fields. Few CABBAGE LOOPER (Trichoplusia ni) larvae noted feeding on leaves in scattered fields. (Bente, Day, Kachtick, Stephens, Hindman, Phillips, Deer). Light infestations of THRIPS, APHIDS, CUTWORMS and SPIDER MITES observed in Zavala County. (Prucia). Light populations of THRIPS, CUTWORMS and a LEAF MINER in fields in Bee County, with APHIDS ranging from light to heavy. (Edgar). In central area; THRIPS - none to light, APHIDS - light to heavy, and SPIDER MITES - none to light. Earliest cotton in first true-leaf stage. (Parencia). In south central area, THRIPS plentiful on evening primrose and other weeds and moving into seedling cotton. Light infestations of APHIDS noted in fields in area. (Hanna, Gaines).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

BARK BEETLES (Ips sp. and Dendroctonus brevicomis) - CALIFORNIA - Severely damaging ponderosa and Jeffrey pines, single trees and groups, in a 250-acre stand on Converse Mountain, 600 acres in Needles Creek and 600 acres in Dillon Canyon areas of the Sequoia. (Flynn). Severely damaging pines at the 6,000-foot elevation in Black Mountain area. (Fox). Severe on 40 acres, killing up to 200 ponderosa pines per acre in the Round Mountain area on Highway 299 E. (Wickman). Top fading and complete kill of ponderosa pine in groups of 50 in a 200-acre stand on the Burney Springs Mountain in the Lassen National Park. (Marshall).

EUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana) - MICHIGAN - Larvae beginning activity and observed at Paw Paw, Benton Harbor, Pontiac and Cadillac. (Hutson). WISCONSIN - Mortality in Manitowoc, Sheboygan and Kenosha was 33.9 percent, considerably below that for the winter of 1958-59. (Wis. Coop. Sur.).

LARCH CASEBEARER (Coleophora laricella)-PENNSYLVANIA - Feeding on larch foliage and flowers in Cumberland and Schuylkill Counties, April 15. (Drooz).

PINE BARK APHID (Pineus strobi) - MARYLAND - Heavy on ornamental white pines at Quantico, Wicomico County. (U. Md., Ent. Dept.).

A SPRUCE NEEDLE MINER - DELAWARE - Larvae completed development and all pupated by April 25. Injury was moderate but not as severe as last year. (Burbutis, Mason).

A PINE NEEDLE MINER - PENNSYLVANIA - Common on pitch pine, Cumberland County, April 15. (Drooz).

PINE SPITTLEBUG (Aphrophora parallela) - FLORIDA - Fairly abundant on a few sapling-size loblolly pines southwest of Otter Creek. Newly emerged adults present. Det. L. A. Hetrick. (Fla. Coop. Sur.).

SPRUCE SPIDER MITE (Oligonychus ununguis) - DELAWARE - Abundant with heavy webbing on spruce trees in Newark area of New Castle County. (Burbutis, Mason).

EASTERN TENT CATERPILLAR (Malacosoma americanum) - MARYLAND - Heavy in all sections on wild cherry and neglected fruit trees. Larvae leaving trees in many sections. (U. M., Ent. Dept.). PENNSYLVANIA - Very numerous and much more abundant than last year; mostly on cherry trees in Snyder, Union and Northumberland Counties. (Gesell). WISCONSIN - A colony of second-instar larvae feeding in a plum tree in Rock County. (Wis. Coop. Sur.). NORTH CAROLINA - Numerous in many deciduous trees in the Coastal Plain and eastern Piedmont. (Jones).

FOREST TENT CATERPILLAR (Malacosoma disstria) - PENNSYLVANIA - Initial issuance from eggs on oaks in Cumberland County, April 15. (Drooz). WEST VIRGINIA - Damaging various hardwoods in Monongalia County. (W. Va. Ins. Sur.).

TENT CATERPILLARS - ARIZONA - Infestations of a tent caterpillar heavy on cottonwood and other trees in the Miami area of Gila County. (Ariz. Coop. Rpt.). NEW YORK - Tent caterpillars caused feeding damage to ornamental cherry, apple, and crabapple, April 25; hatched April 14 at Poughkeepsie and by April 20 had nests up to 4 inches wide in wild cherry; numerous in Nassau County, April 25. (N. Y. Wkly. Rpt.). TENNESSEE - Malacosoma spp. scattered over the State, heavy in some areas. (Mullett). OKLAHOMA - Heavy on native plums, Major Co. (Coppock).

FALL CANKERWORM (Alsophila pomataria) - MARYLAND - Stripping the foliage of oaks and maples on Sugar Loaf Mountain, Frederick County. (U. Md., Ent. Dept.).

SPRING CANKERWORM (Paleacrita vernata) - DELAWARE - Fairly common on elms in an area of Sussex County. (Burbutis, Mason). MISSOURI - Heavy on elms in north central and northwest areas. Mostly second-instar larvae. (Munson, Thomas, Kyd). OKLAHOMA - Defoliating some elms in Major and Pawnee Counties. (Coppock, Garlington).

GYPSY MOTH (Porthetria dispar) - NEW YORK - Scouting around positive trap sites in Westchester area negative to March 31. No additional egg masses found on Long Island. In upstate area, scouting around positive trap sites in Otsego and Herkimer Counties continues, with small infestations being found. NEW JERSEY - Scouting of Morristown National Park completed, with no evidence of infestation encountered other than on Sugar Loaf Hill. PENNSYLVANIA - Survey of more than 5,000 acres by State personnel in Perry County has been negative. (PPC, East. Reg., March Rpt.). CONNECTICUT - Egg clusters hatching at South Windsor, Hartford County, April 27 on trees. (Phillips).

ELM LEAF BEETLE (Galerucella xanthomelaena) - INDIANA - Appearing on Chinese elms at Lafayette. (Schuder). OKLAHOMA - Adults attacking elms throughout the north central area where oviposition has begun. (Howell, VanCleave). Oviposition started in Oklahoma City area. (Pennington). Heavy on elms in McAlester area. (Meharg). OREGON - Adults in small numbers in the Salem area April 28. (Capizzi).

IMPORTED WILLOW LEAF BEETLE (Plagioder a versicolora) - DELAWARE - Adults and eggs very abundant on willows in one area of Sussex County. Most of leaves show some feeding injury. (Burbutis, Mason).

COTTONWOOD BORER (Plectrodera scalator) - OKLAHOMA - Heavy on some poplars in Stephens County. (Hatfield). Adults active throughout State. (Drew).

ELM LEAF MINER (Fenusa ulmi) - DELAWARE - Fairly common on elms in an area of Sussex County. Larvae one-half to fully grown. Few emerged. (Burbutis, Mason).

A SCARAB (Cotalpa sp.) - NEVADA - Moderate damage to cottonwood trees by partial defoliation in Virgin Valley, Clark County. (Bechtel, Apr. 22).

MAY BEETLES (Phyllophaga spp.) - TENNESSEE - Damaging oak. (Mullett).

AN ERIOPHYID MITE - UTAH - Poplar trees at Woodruff, Rich County, severely damaged by galls associated with eriophyid mites. Damage also occurring at Manila in Daggett County. (Knowlton).

AN ASH PLANT BUG (Neoborus illitus) - CALIFORNIA - Medium populations on ash trees in Milton, Copperopolis and Angels Camp, Calaveras County. (Cal. Coop. Rpt.).

EUROPEAN FRUIT LECANIUM (Lecanium corni) - DELAWARE - On elm in Sussex County. (Burbutis, Mason).

APHIDS - OKLAHOMA - Several species light on elms, oaks, pecans, pines and other trees throughout most of State. (Howell, VanCleave, Drew). UTAH - Cinara sp. infesting arborvitae in St. George-Santa Clara area. Aphids, largely Macrosiphum and Amphorophora, are abundant on roses in Washington County. (Knowlton, Hughes). CALIFORNIA - Myzocallis elegans medium on street elms in Auburn, Placer County. Heavy infestation of adults of Cinara curvipes on Deodar cedar in Santa Ana, Orange County. Macrosiphum pisi heavy on native lupine in Crockett area, Contra Costa County. Eriosoma lanigerum heavy on pyracantha in Fresno, Fresno County. (Cal. Coop. Rpt.).

SCALE INSECTS - WYOMING - Unidentified species reported to be infesting caragana hedges in Lander, Fremont County. (Duncan). OREGON - Lecanium sp. infesting maple in a Portland nursery April 26. The same scale in a Marion County filbert orchard was found April 28. (Larson, Capizzi). MARYLAND - Unaspis euonymi heavy on euonymus locally in Calvert County, April 22. (U. Md., Ent. Dept.). OKLAHOMA - Heavy populations of Lecanium corni complex on hackberry and elm in Stillwater area of Payne County and Pond Creek area of Grant County. Heavy honeydew deposits causing spotting of car finishes. Eggs hatching in the area. (Howell).

THRIPS - CALIFORNIA - Heavy adult populations of Dactuliothrips xerophilus on native yucca in Apple Valley, San Bernardino County. Frankliniella occidentalis heavy in rose blossoms in Springville, Tulare County. Frankliniella sp. heavy on native lupine in the Crockett area, Contra Costa County. (Cal. Coop. Rpt.).

ROSE-SLUG (Endelomyia aethiops) - OREGON - Oviposition in Marion County, April 27. (Goeden).

OYSTERSHELL SCALE (Lepidosaphes ulmi) - INDIANA - Unusually abundant on common lilac, redbud and redbud-dogwood at Lafayette. (Schuder).

GALL INSECTS - INDIANA - Dryocosmus palustris common on oaks at West Lafayette. Adults of Pachypsylla celtidis-mamma emerging from hibernation and common on hackberry trees at Lafayette. (Schuder).

A BARBERRY LOOPER (Coryphista meadii) - CALIFORNIA - Heavy larval infestation. Defoliating a flame pea (Chorizema sp.) in Sacramento, Sacramento County. (Cal. Coop. Rpt.).

INSECTS AFFECTING MAN AND ANIMALS

FACE FLY (Musca autumnalis) - DELAWARE - Several reports on horses (around eyes mainly) in New Castle County. (Burbutis, Mason). NEW YORK - On April 16, one Tompkins County herd with 25 per head on heifers, but most with about 10. Horses with 2-5 per head. Counts of 1-5 per head on several herds in Tompkins and Seneca Counties April 21-22. Annoyance to cattle and horses expected this summer. (N. Y. Wkly. Rpt.).

HORN FLY (Siphona irritans) - INDIANA - On unsprayed dairy cattle in Perry County, April 18, and on cattle in Dubois County during week of April 22. Counts averaged about 5 flies per animal. (Matthews). KANSAS - Several reports of species this year. (Peters). OKLAHOMA - Counts 600-1000 per animal on 150 beef cows in a herd in Major County. (Coppock). Counts averaged 600-900 per animal on mature cows and 1500 per animal on bulls in 200 head of beef cattle in Payne and Noble Counties. Counts averaged 75-100 per animal on 110 dairy cows in Payne County. (Howell). Counts averaged 70-80 per animal on 110 head of beef cattle from 3 herds in Pushmataha County. (Goin). WYOMING - Infesting cattle in the Wheatland area, Platte County, ranging approximately 20-30 per animal. (Haws).

STABLE FLY (Stomoxys calcitrans) - OKLAHOMA - Average of 1-2 per animal on 110 dairy cows in Payne County. (Howell).

MOSQUITOES - NEVADA - Adults of Aedes dorsalis and A. vexans numerous and biting in Virgin Valley, Clark County. (Bechtel, Apr. 22). NEBRASKA - Unidentified mosquito larvae (first instar) in Shelby area of Polk County. Larvae of Culiseta inornata breeding in sewage lagoons near Juniata, Adams County. (Rapp). DELAWARE - Second-instar larvae of Aedes sollicitans and fourth instars and pupae of A. cantator found in eastern Kent County. (Darsie). NORTH CAROLINA - Adults of Aedes mitchellae numerous in Edgecombe County and Culex sp. adults emerging in same county. Moderate flight of A. sollicitans in Carteret County. (Ashton).

COMMON CATTLE GRUB (Hypoderma lineatum) - TENNESSEE - Averaged 2.6 grubs per cow for 100 cows in Cumberland County. (Stanley). OKLAHOMA - Averaged 1-2 per animal on 110 dairy cows in Payne County. (Howell).

A DEER FLY (Silvius sp.) - NEVADA - Moderate numbers of adults in Virgin Valley, Clark County. (Bechtel, Apr. 22).

AN EYE GNAT (Hippelates collusor) - NEVADA - Light to moderate populations in Moapa Valley, Clark County. (Bechtel, Zoller; Apr. 22).

CATTLE LICE - OKLAHOMA - Heavy infestations of Linognathus vituli and Bovicola bovis on some cattle in Pawnee County. (Young). Unidentified species continued to heavily infest 110 head of beef cows in Pushmataha County. (Goin). UTAH - Haematopinus suis numerous on swine at Ogden, Weber County. (Knowlton).

AMERICAN DOG TICK (Dermacentor variabilis) - DELAWARE - Very abundant. Many dog owners reported numerous ticks on their pets. (Burbutis, Mason). MARYLAND - Very active. Found on humans frequently in the central and southern sections. (U. Md., Ent. Dept.). OKLAHOMA - Number annoying pets and humans much heavier than normal this year in northeastern area. (Howell).

LONE STAR TICK (Amblyomma americanum) - OKLAHOMA - Farmers and stockmen reported heavy numbers (up to several hundred per animal) on cattle in Pontotoc, Murray, Johnston, Carter, Coal and Atoka Counties. (Howell). Counts averaged 25, 30, 32 per animal on 110 beef cattle checked in 3 herds in Pushmataha County. (Goin).

TICKS - WISCONSIN - Wood ticks on humans in Juneau County, April 26. (Wis. Coop. Sur.).

TROPICAL RAT MITE (Ornithonyssus bacoti) - CALIFORNIA - Medium infestation in houses in Riverside; annoying residents in Riverside County. (Cal. Coop. Rpt.).

BENEFICIAL INSECTS

LADY BEETLES- DELAWARE - Coleomegilla maculata lengi very abundant in alfalfa and clover fields throughout the State. (Burbutis, Mason). ILLINOIS - Adults of several species now appearing over the State; C. maculata most common. (Ill. Ins. Rpt.). MISSOURI - Adult counts of Hippodamia convergens, H. tredecimpunctata and C. maculata lengi ranged 1-5 per 10 sweeps in northern area alfalfa. (Munson, Thomas, Kyd). OKLAHOMA - Despite large numbers of H. convergens larvae and adults in most fields of alfalfa over the State and some wheat fields in the Perkins-Paradise area of Payne County, this predator has not materially reduced aphid damage to plants. (Okla. Coop. Sur.). KANSAS - H. convergens averaged less than one per sweep in northwest area alfalfa. (Peters). SOUTH DAKOTA - Hippodamia spp. observed in alfalfa and corn fields in southeastern area of State. (Mast). COLORADO - Hippodamia spp. averaged 2-4 per 100 sweeps in Weld and Larimer Counties. (Colo. Ins. Rpt.). UTAH - Present in northern area alfalfa fields; largely Hippodamia spp. (Knowlton). NEVADA - Adults and larvae of unspecified species numerous in all alfalfa and sugar beet fields checked and mostly responsible for aphid reductions in these fields in Clark County. Highest counts averaged 8 larvae and/or adults per sweep. (Bechtel, Zoller; Apr. 22). WASHINGTON - Mostly adults observed in peach orchards; also on weeds and spring annuals. (Landis).

BIG-EYED BUGS (Geocoris spp.) - NEVADA - Very numerous in fields of alfalfa and sugar beets in Clark County. (Bechtel, Zoller; Apr. 22).

A FLOWER BUG (Orius insidiosus) - OKLAHOMA - Present in light to medium numbers over the State. (Okla. Coop. Sur.).

MINUTE PIRATE BUGS - NEVADA - Numerous in Clark County alfalfa and sugar beet fields. (Bechtel, Zoller; Apr. 22).

NABIDS (Nabis spp.) - ILLINOIS - Adults appearing statewide. (Ill. Ins. Rpt.). MISSOURI - Counts in northern area alfalfa ranged 0-4 per 10 sweeps. (Munson, Thomas, Kyd). OKLAHOMA - Light to medium numbers reported throughout State. (Okla. Coop. Sur.). KANSAS - Counts less than one per sweep in alfalfa in northwest area. (Peters). NEVADA - Very numerous in alfalfa and sugar beet fields in Clark County. (Bechtel, Zoller; Apr. 22).

LACEWINGS (Chrysopa spp.) - ILLINOIS - Adults of C. oculata beginning to appear statewide. (Ill. Ins. Rpt.). OKLAHOMA - Adults and larvae reported in light to medium numbers over the State. (Okla. Coop. Sur.). NEVADA - Populations in alfalfa and sugar beets fields in Clark County numerous. (Bechtel, Zoller; Apr. 22). WASHINGTON - Mostly adults present at this time in peach orchards, weeds and spring annuals. More abundant than previously observed at this time of year. (Landis).

SYRPHIDS - NEW YORK - Eggs observed on apple in Orange County April 15 and fairly common in Ulster County orchards. (N. Y. Wkly Rpt.). OKLAHOMA - Light to medium numbers of larvae reported throughout the State. (Okla. Coop. Sur.). NEVADA - Larvae of unspecified species very numerous in fields of sugar beets and alfalfa in Clark County (Bechtel, Zoller; Apr. 22). WASHINGTON - Mostly adults present in orchards and on weeds and spring annuals. Not previously observed as being so abundant at this time of year. (Landis).

SPOTTED ALFALFA APHID PARASITES - NEVADA - Cocoons of Praon palitans and Trioxys utilis found in Moapa Valley, but not in Virgin Valley or Las Vegas, Clark County. (Bechtel, Zoller; Apr. 22).

HYMENOPTEROUS PARASITES - OKLAHOMA - Heavy numbers of Aphidius testaceipes have controlled severe greenbug infestations in Perkins area, Payne County; found in approximately two-thirds of fields which had heavy to severe greenbug infestations in the area. In fields without this parasite, aphids continue to cause damage despite large numbers of predators. (VanCleave). WASHINGTON - Various species present in peach orchards; mostly adults. (Landis).

MISCELLANEOUS INSECTS

ARMY CUTWORM (Chorizagrotis auxiliaris) - ARIZONA - Large numbers of moths are a problem around and in homes in the Tucson area of Pima County. (Ariz. Coop. Sur.).

CARPET BEETLE (Anthrenus scrophulariae) - NORTH DAKOTA - Reports of larval infestations in homes have been more numerous than usual during the period April 25-29. (N. D. Ins. Sur.).

MAY BEETLES (Phyllophaga spp.) - FLORIDA - One male adult of P. profunda collected at blacklight trap at Florida Caverns State Park, Jackson County, April 13 by H. A. Denmark. This is first record of species in the State. (Woodruff). P. floridana collected at light at Sanford, Seminole County, April 24 by C. O. Youtsey. This is a rare species known from Georgia and Florida. Species has previously been collected in June, thus these are early records. These are the first specimens of this latter species for the State Plant Board Collection. (Fla. Coop. Sur.). INDIANA - Heavy flights of Phyllophaga sp. observed in Ripley County. (Chandler). DELAWARE - New adults of unspecified species present in lawns in New Castle County. (Bray).

A WEEVIL - UTAH - Larvae and adults of an unspecified species are numerous in roots of rabbitbrush (Chrysothamnus nauseosus) in the Lost Creek area on rangelands near Salina, Sevier County. Large areas of this plant are being killed out. (Knowlton, Harrison).

A LITTLE HOUSE FLY (Fannia sp.) - CALIFORNIA - Medium to heavy populations observed dead or dying on peach trees, grapevines, shrubs, grasses and clothes lines in many locations over the State. Apparently the fungus Entomophthora muscae is effective again this season. This is considerably earlier than the fungus disease was noticed in 1959. (Cal. Coop. Rpt.).

EASTERN SUBTERRANEAN TERMITE (Reticulitermes flavipes) - MARYLAND - Numerous reports from various localities in central and southern sections of State during period April 23-28. (U. Md., Ent. Dept.).

CARPENTER BEE (Xylocopa virginica) - WEST VIRGINIA - Damaging structural parts of a house in Charleston. (W. Va. Ins. Sur.).

CARPENTER ANTS - DELAWARE - Heavy flights of unspecified species noted in New Castle County on April 23. (Burbutis, Mason).

PAINTED HICKORY BORER (Megacyllene caryae) - PENNSYLVANIA - Swarming from hickory lumber in basement of home, April 19, Susquehanna County. (Gesell).

A SCARAB (Paracotalpa sp.) - NEVADA - Adults numerous on Artemesia tridentata (big sagebrush) in Orovada, Humboldt County. (Lauderdale, Apr. 22).

ORIENTAL COCKROACH (Blatta orientalis) - SOUTH DAKOTA - Infesting dwellings in Davison and Walworth Counties. (Hantsbarger).

ADDITIONAL NOTES

IDAHO - ARMY CUTWORM (Chorizagrotis auxiliaris) causing considerable damage to alfalfa fields in Mayfield area, Elmore County. Fields with southern exposure being kept completely down by larval feeding. On rangeland between King Hall and Bliss, large areas with southern slopes eaten bare of grass. (Edwards). Also reported infested, 5 acres of barley in Burley area. (Bodily). Fairly general and occasionally severe over 20 acres of new seeding of clover near Shoshone. (Manning). Heavily damaging margin of a 200-acre field of barley near Bonida, Franklin County. Larval population 6-8 per 10-15 shovel samples. (Tovey). ALFALFA WEEVIL (Hypera postica) adult populations moderate in 2 alfalfa fields in southern Canyon County, but no larvae noted. (Bechtolt). Larvae infesting 30 acres of alfalfa in Washington County. Populations, however, not abundant and damage considered light. (Hackler). Adults of a CURCULIONID (Rhinoncus castor) common in Canyon County alfalfa fields and adults and nymphs of Lygus hesperus and L. elisus continue to be abundant on all alfalfa fields checked in Canyon County. (Bechtolt). SWEETCLOVER WEEVIL (Sitona cylindricollis) adults numerous, with light to moderate damage noted on all sweetclover stands checked in Lewiston area. A KLAMATHWEED BEETLE (Chrysolina gemellata) is abundant on all klamathweed stands in lower Clearwater area drainage. (Gittins). NABIDS and LADY BEETLES are very numerous in all alfalfa fields checked in Canyon County and BIG-EYED BUGS are light. (Bechtolt). A SUBTERRANEAN TERMITE (Reticulitermes sp.) infestation reported in a basement in a home in Nampa. (Weight).

NEVADA - Adults of a GRASSHOPPER (Trimerotropis sp.) more or less discontinuously distributed from Pioche, Lincoln County, to the southern end of Pahrangat Valley, Lincoln County. In areas of higher concentrations, counts averaged 3-5 per square yard. Dissected females revealed that most specimens had previously laid their eggs. (Del Curto, Maloney). SMALLER EUROPEAN ELM BARK BEETLE (Scolytus multistriatus) - Over 95 percent of adults have emerged from elms checked in Reno area, Washoe County. ELM LEAF BEETLE (Galerucella xanthomelaena) adults active and causing minor leaf damage by feeding in Reno-Sparks, Washoe County. No eggs have been observed. BOXELDER APHID (Periphyllus negundinis) infestations increasing on boxelder in Reno-Sparks, Washoe County. Leaves of many trees now partially covered with honeydew. (Bechtel). Adults of SUBTERRANEAN TERMITE (Reticulitermes sp., hesperus or tibialis) swarming in Reno-Sparks, Washoe County. (Coop. Rpt.)

LIGHT TRAP COLLECTIONS

	Pseud. unip.	Agrot. ips.	Feltia subterr.	Prod. ornith.	Perid. marg.	Helio. zea	Laphy. frug.
ARKANSAS							
Fayetteville 4/21-27	66	186			103	39	
Kelso 4/21-27	4	4			1		
Morrilton 4/21-27	2	7				4	
FLORIDA							
Quincy 4/18		13	10			3	
ILLINOIS							
Urbana 5/22-28	36			2			
INDIANA (Counties)							
Lawrence 4/19-22	34	6		2			
Tippecanoe 4/22-28	23	4		8	1		
LOUISIANA							
Baton Rouge 4/22-28	12	12	8	15		1	
Franklin 4/19,21,26	6	6	15	7		4	
MISSISSIPPI							
*Stoneville 4/22-28	145	15	5	3	17	10	
MISSOURI							
Columbia 4/23-29	72	17					9
SOUTH CAROLINA							
Clemson 4/23-29	20	14	3	13	1	1	
TENNESSEE (Counties)							
Blount 4/19-25	51	39		41	7		
Cumberland 4/19-25	8	8		13	8		
Greene 4/19-25	1			5			
Johnson 4/19-25	5	1		1			
Madison 4/19-25	69	3				4	
Mauzy 4/19-25	65	4		3	3		
Monroe 4/19-25	95	12		14	10		
Robertson 4/19-25	14	3		10	2		
TEXAS							
Brownsville 4/18-22		10	1			2	3
Waco 4/23-29	5	2	5	3	10	3	
WISCONSIN							
Middleton 4/22-24	2	2			1		

Additional Collections

TEXAS - (Brownsville, 4/18-22); Protoparce quinque maculata - 3.

* Two traps - Stoneville

STATUS OF SOME MORE IMPORTANT INSECTS IN THE UNITED STATES

ALFALFA PLANT BUG (Adelphocoris lineolatus (Goeze))

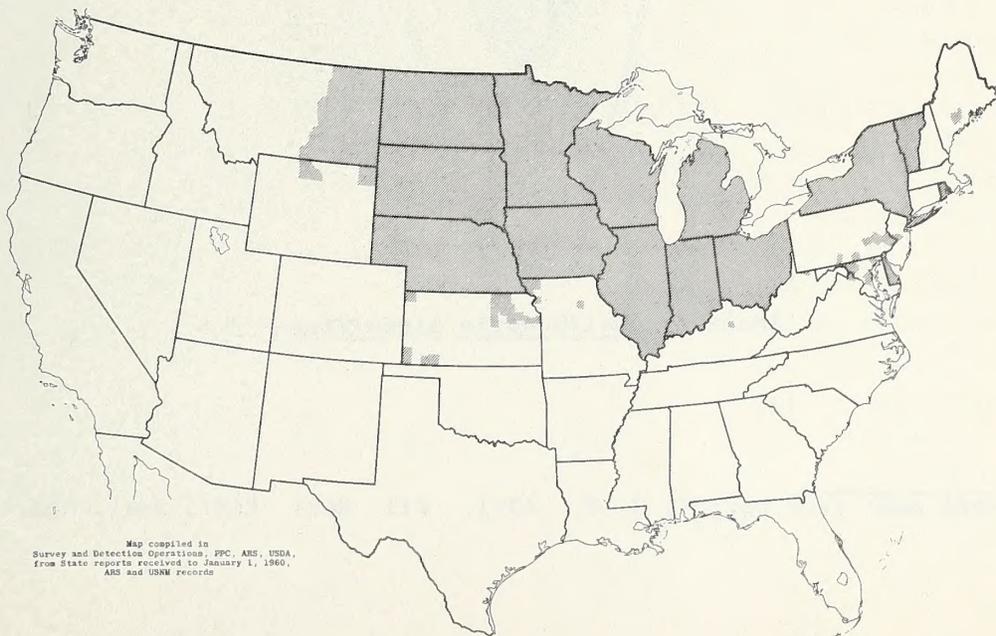
Economic Importance: This plant bug of European origin was first recorded in North America at Cape Breton, Nova Scotia, Canada, in 1917. The first record of the pest in the United States was at Ames, Iowa, on June 18, 1929. The insect was probably introduced into the United States as eggs in packing material, as about 700 seed samples were imported and grown at the agronomy farm at Ames in 1926 and 1927. Alfalfa plant bug can be very destructive to alfalfa seed. During 1955 in Illinois, counts of the species reached as high as 440 per 100 sweeps in some alfalfa fields; and in southeastern Nebraska in 1956, nymphs of this pest could be collected at the rate of 40 to 50 per 10 sweeps during early June.

Distribution: Algeria, Austria, Canada, China, Finland, France, Germany, Great Britain, India, Iran, Japan, Sweden, Tunisia, United Arab Republic (Syria), USSR (including Siberia) and the United States (see map).

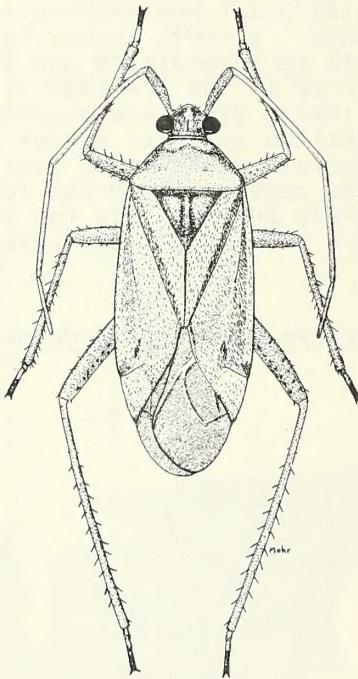
Hosts: Alfalfa and sweetclover are the preferred hosts. A limited number of other legumes and many succulent herbaceous plants, such as, chrysanthemum, thistle, beets, sugar beets, cotton, castorbean, potato and buckwheat, are recorded hosts.

Life History and Habits: Alfalfa plant bug prefers to feed on flower buds and newly formed seeds of host plants. Feeding injury is believed to be phytotoxic. The pest also injures the plants in oviposition and is attracted to lights at night. Only two generations occur in the latitude of St. Paul, Minnesota, and these overlap considerably. Alfalfa plant bug overwinters in the egg stage in Minnesota and other forms are killed with the advent of cold weather. Overwintering eggs are laid singly in the less-succulent stems near the soil surface of the host plants and begin hatching by the middle of May the following year. Nymphs pass through 5 instars in approximately 30 days. In two weeks adults begin to lay eggs, as early as June 22. Thus there is a second generation by late August or early September in Minnesota.

DISTRIBUTION OF ALFALFA PLANT BUG (Adelphocoris lineolatus)



Description: EGG - Length 1.36 mm. and 0.33 mm. at greatest diameter. Clear when first laid, yellowish when older; slightly curved, thickest near base, compressed at apex and obliquely truncate. NYMPH - Fifth instar - Length 5.5 mm., width 2.4 mm. Color uniformly yellowish-green, third and fourth antennal segments reddish-brown, tips of wing pads becoming uscou. Legs uniformly pale yellowish and marked with black spots as in the adult. Dorsum and legs set with short, stiff black setae, antennae clothed with black pubescence. ADULT - Male - Body 8 mm. long, 2.8 mm. wide. Head 1.36 mm. wide, vertex 0.42 mm. Antennae 7.35 mm. long; first segment 0.98 mm., second 2.87 mm., third 2.20 mm., and the fourth segment 1.30 mm. long. Pronotum 1.30 mm. long and 2.25 mm. wide at base. General coloration pale yellowish with a tinge of brown and dusky. Scutellum with two fine, longitudinal, fuscous marks on middle; corium usually with triangular fuscous area on apical half; a fine line along costal edge black; cuneus yellowish; membrane fuscous. Antennae yellowish to brown, apical half darker and usually reddish-brown. Legs yellowish; femora with many black dots, anterior aspect with two rows of somewhat larger spots; tibial spines black, without distinct spots at bases. Body clothed with simple, pale yellowish pubescence; legs with black pubescence. Female - Body 7.50 mm. long, 2.90 mm. wide. More robust than male and usually somewhat paler in color, but otherwise very similar in form and coloration. Alfalfa plant bug can be separated from rapid plant bug (A. rapidus) by its paler color and slightly larger size. (Prepared in Survey and Detection Operations in cooperation with other ARS agencies). CEIR 10(19):5-6-60.



Adult of Adelphocoris lineolatus

UNITED STATES DEPARTMENT OF AGRICULTURE
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