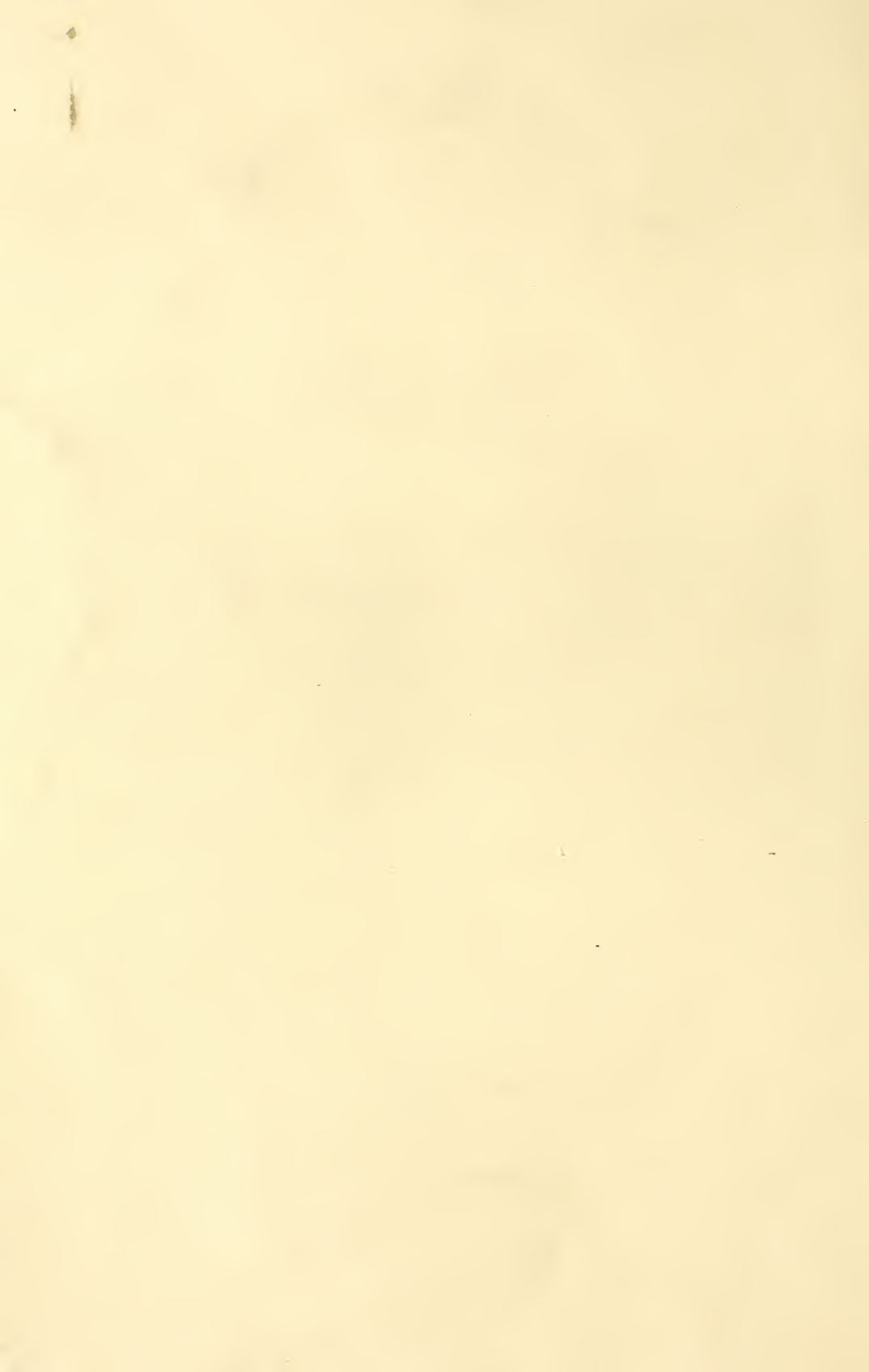


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VOL. 24 NO. 39

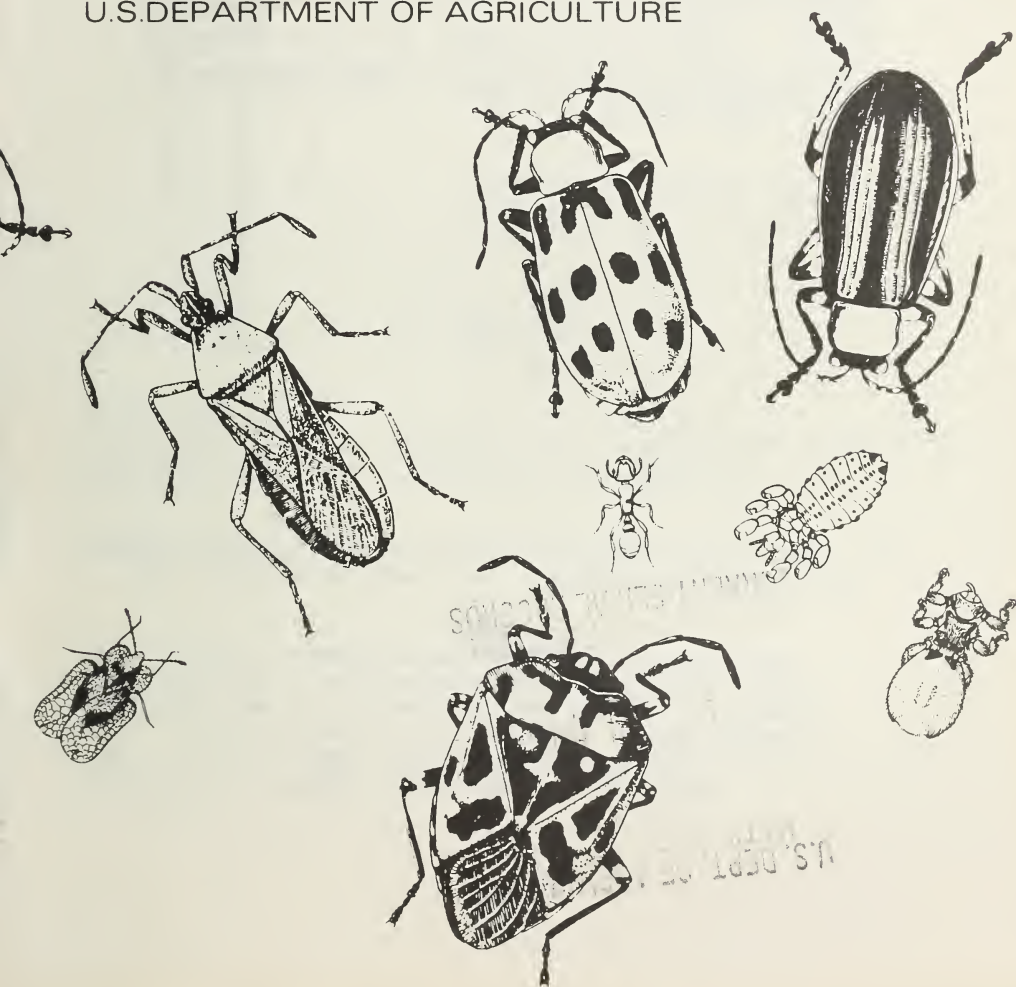
September 27, 1974

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Cooperative Economic Insect Report

Issued by

PLANT PROTECTION AND QUARANTINE PROGRAMS
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
U.S. DEPARTMENT OF AGRICULTURE



ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
PEST SURVEY AND TECHNICAL SUPPORT STAFF

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 Service serves as a clearing house and does not assume responsibility for accuracy of the material.

All reports and inquiries pertaining to this release, including the mailing list, should be sent to:

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COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

Heavy SOD WEBWORM moth flights in southwestern North Dakota, throughout South Dakota, and over northern half of Nebraska indicate major and widespread damage potential for pastures, rangelands, and lawns in 1975. (p. 769).

CALIFORNIA RED SCALE heavy on citrus in Sacramento area of California. (p. 773).

SOUTHERN PINE BEETLE continued to expand in North Carolina. BLACK PINELEAF SCALE epidemic on pines in northern California. (p. 773).

Predictions

Heavy PALE WESTERN CUTWORM moth flights in western Kansas may indicate heavy infestations in wheat in area in spring 1975. (p. 769).

Current adult CORN ROOTWORM activity in eastern South Dakota increases damage potential on first-year corn in 1975. (p. 771).

Detection

For new county records see page 776.

Special Reports

Additional Aphids Collected in the Los Angeles State and County Arboretum (Homoptera: Aphididae). (pp. 778-779).

Reports in this issue are for week ending September 20 unless otherwise indicated.

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WEATHER OF THE WEEK ENDING SEPTEMBER 23

Reprinted from Weekly Weather and Crop Bulletin supplied by
National Weather Service, NOAA.

HIGHLIGHTS: Cool, dry Canadian air swept across the North Central U.S. last week bringing frost to the northern areas. Late in the week, cool air moved into New England displacing warm, moist air and producing heavy rain. Simultaneously, warm, moist air from the Gulf of Mexico moved steadily westward into Texas. Combined with high level Pacific moisture from low over Baja California, heavy rains fell across Texas and New Mexico. Only light precipitation fell in Arizona through the week. Abilene, Texas, recorded 9.43 inches and El Paso got 5 inches. Temperatures were cooler than usual across the Nation last week except in the Far West. Both the Great Lakes area and central New Mexico reported temperatures averaging 9 degrees below normal. California's interior recorded temperatures 8 degrees above normal while many sections of Oregon and Washington rose 9 degrees above normal.

PRECIPITATION: Heavy precipitation in Texas, New Mexico, Oklahoma, and Arkansas last week averaged 2 inches to over 9 inches. Rains triggered widespread flooding in many areas, particularly in western Texas. Major rivers overflowing included Middle and North Concho, Pecos, and Rio Grande. Scattered light precipitation fell across many sections of the Nation. Isolated heavy showers were reported in New England, North Carolina, and Florida. The Far West reported little or no precipitation for the week. Early Monday, a few thunderstorms were locally heavy in parts of south-west and west-central Texas. Streets were flooded and creeks overflowed within a 28-mile radius of Abilene. Early morning rains averaging 4 inches or more caused floods in central Texas on Tuesday. During the afternoon a tornado roared through Flint, Michigan, lifting roofs from homes and damaging a shopping center and 20 cars. Wednesday, scattered showers dampened much of the Atlantic coast, lower Great Lakes, and the Northeast. Some flooding occurred in the San Angelo, Texas, area in the morning. Weather of the week continued on page 780.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

GREENBUG (*Schizaphis graminum*) - SOUTH DAKOTA - No activity noted on emerging wheat seedlings in Winner area, Tripp County. No live greenbugs noted in Presho area, Lyman County. Pest reported infesting new winter wheat in Wood area of Mellette County and Pierre area of Hughes County. Activity light to date. With present weather conditions and with greenbugs blowing into State combining with those found on volunteer grain, infestations expected for next two months. Growers should carefully watch winter wheat fields for activity and damage. (Kantack).

ARMYWORM (*Pseudaletia unipuncta*) - VIRGINIA - Large larvae completely destroyed 15 acres of hay in Dinwiddie County by September 13. (Allen).

CORN EARWORM (*Heliothis zea*) - OREGON - Adults light in central Willamette Valley light trap September 12-18. Single specimens taken at Keizer, Marion County, September 12-15, and at Dever, September 16-18. (Penrose). IDAHO - Peaked on silking corn August 16 at Parma, Canyon County; infestation 100 percent with 190 larvae per 100 ears. This compares with 247, 287, and 250 larvae per 100 ears for 1971, 1972, and 1973, respectively. Infestations for this 4-year period peaked within period of 200 growing degree days. Peak infestations for these 4 years occurred on silking corn August 16, August 6, August 4, and August 16, respectively. (Scott). In Twin Falls County sweet corn, no larvae found in 654 ears checked August 8-10, 1974; 2 larvae found in 783 ears checked August 22-23; 18 found in 876 ears checked August 22. Heaviest infestation this season, 5 percent in silked corn August 22. (Carpenter).

UTAH - Corn earworm larvae unusually light in Weber County corn; well below normal in Cache, Box Elder, and Weber Counties. None noted in corn at Salt Lake City, Salt Lake County, home gardens. Larvae infested 5 percent of tomato fruits in home garden at Salt Lake City. (Knowlton et al.). OKLAHOMA - Averaged one per 2 row feet in 3 fields of soybeans checked in Muskogee County; light to moderate in Wagoner and McCurtain Counties. Averaged 5 per 10 heads in grain sorghum in Jackson and Greer Counties but reported light in sorghum heads in Caddo and Washita Counties. Ranged up to 60 percent of ears infested in corn checked in Texas County in fields where ears nearly dry enough to harvest. Light in peanuts in Caddo and Washita Counties. (Okla. Coop. Sur.).

MISSISSIPPI - Corn earworm light in all soybean fields examined in Oktibbeha, Clay, Monroe, and Lee Counties. (Robinson). ALABAMA - Larvae as "podworms" still generally light in all one million acres of soybeans in State. (Henderson et al.). TENNESSEE - Surveys in Haywood, Madison, and Hardeman Counties indicate no larval buildup has occurred in soybeans to date. No damage observed. (Patrick). WISCONSIN - Moth catches in blacklight traps heavy at few sites until night of September 12 when counts decreased to near zero. (Wis. Ins. Sur.). NEW HAMPSHIRE - Infestations practically nonexistent in corn in most of State. Not detected until late August, then only in Dover Point area, Strafford County. (Bowman).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - SOUTH DAKOTA - Light to moderate infestations noted in several east-central counties. Amount of corn being cut for silage should reduce populations. (Kantack). WISCONSIN - Moths heavy in blacklight traps at few sites until night of September 12 when catches decreased to near zero. (Wis. Ins. Sur.). NEW HAMPSHIRE - First brood only threat encountered on sweet corn crop. Second brood remained light. (Bowman). MAINE - Infestations evident in corn. Pest more evident past few years where corn followed corn. In fields planted to corn for first time, infestation ranged 1-2 percent; averaged about 10 percent in other fields. Heaviest infestation of 25+ percent found this season in field of corn following corn and where stalks remained after cutting for silage until late spring 1974. (Gall).

FALL ARMYWORM (Spodoptera frugiperda) - OKLAHOMA - Infested 25 percent of heads of grain sorghum checked in Jackson County. (Okla. Coop. Sur.). NEW HAMPSHIRE - Late-season damage to late-corn planting detected in Dover, Strafford County. (Bowman).

WESTERN BEAN CUTWORM (Loxagrotis albicosta) - IDAHO - Damaged ears, outer flags of ears, and stalks of sweet corn in scattered spots in Twin Falls County. Five larvae found in 876 ears of sweet corn checked September 12 and 13. (Carpenter).

WESTERN CORN ROOTWORM (Diabrotica virgifera) - UTAH - Moderate damage noted in some Weber County cornfields. Most corn cropland treated before planting in spring. (Sjoblom). INDIANA - Adults collected from corn in following counties: Adams, Preble Township near junction of county roads 500W and 750N August 28, 1974, by T.W. Stiles; Montgomery, near junction of county road 700E and northern county boundary near Kirkpatrick September 4, 1974, by J.M. Thieme; Parke, one mile north of Marshall September 5, 1974, by J.M. Thieme; Boone, near junction of county road 725N and State road 39, north of Mechanicsburg September 4, 1974, by J.M. Thieme; Jay, in Penn Township near junction of county roads 100 and 25 August 28, 1974, by T.R. Peck. Determinations by F.T. Turpin. These are new county records. (Meyer).

CORN ROOTWORMS (Diabrotica spp.) - WISCONSIN - Still numerous in few late-maturing, unfrosted cornfields as far north as Dunn County. Beetles often buried deep in ear tips feeding on tender silks and milky kernels. At midday beetles common on ground, presumably still laying some eggs. (Wis. Ins. Sur.).

CHINCH BUG (Blissus leucopterus leucopterus) - KANSAS - Adults and nymphs averaged 20-30 per stalk on maturing corn in field in east-central Marshall County. Most behind leaf sheaths on lower third of plants. (Bell).

SORGHUM MIDGE (Contarinia sorghicola) - OKLAHOMA - Average of 40 percent damage found in field of grain sorghum in Jackson County. (Okla. Coop. Sur.). MISSISSIPPI - Noneconomic on 75 acres of silage sorghum in Oktibbeha County. (Robinson).

SMALL GRAINS

PALE WESTERN CUTWORM (Agrotis orthogonia) - KANSAS - Heavy moth catches recently taken in blacklight trap at Tribune Experiment Station, Greeley County. Total of 1,750 moths trapped night of September 16. Similar population trapped during same period in 1967 at Garden City Experiment Station, Finney County, and heavy infestations experienced in wheat in area in spring of 1968. (Bell).

BEE T ARMYWORM (Spodoptera exigua) - OKLAHOMA - Light to moderate in young wheat in Jackson and Greer Counties. (Okla. Coop. Sur.).

FALL ARMYWORM (Spodoptera frugiperda) - MISSOURI - Larvae light in wheat in southeast area; ranged 0-4 per foot of drill row. (Munson).

TURF, PASTURES, RANGELAND

SOD WEBWORMS (Crambus spp.) - NORTH DAKOTA - Heavy moth flights observed in Sioux, Stark, and Golden Valley Counties. (Brandvik, Carlson). SOUTH DAKOTA - Moth activity very heavy since last week of August and first week of September throughout State. Large numbers of moths noted in towns as well as on pasture or rangeland. Heavy flights observed in Yankton, Brookings, Meade, Lawrence, Pennington, and Hughes Counties. Several species have spordically caused serious injury to lawns and golf courses. No reports made of widespread damage to range and pastures until 1974. Localized damage observed in several "West River" counties during May and June 1974. Moths were collected in light traps beginning first week in June. Activity continued light during July and early August and then populations "exploded." Periodic surveys during summer indicated less than one larva per square foot; it was believed population was declining in heavily infested areas of Dewey and Ziebach Counties. Moth populations observed to date indicate major and widespread damage potential for pasture, rangeland, and lawns in 1975. (Kantack). NEBRASKA - Heavy moth flights continue over entire northern half of State. (Koinzan, Keith).

FALL ARMYWORM (Spodoptera frugiperda) - ALABAMA - Larvae damaged several fields of Coastal Bermuda grass in Mobile County. (Vickery). MISSISSIPPI - Larvae decreased on hybrid Sudan grass grown for hay in Clay, Oktibbeha, and Monroe Counties. (Robinson).

NORTHERN MOLE CRICKET (Gryllotalpa hexadactyla) - NORTH CAROLINA - Heavy infestation and extensive damage occurred to 4 hybrid Bermuda grass greens at golf course at Raleigh, Wake County. Riggs made by this insect cause rough greens plus "scalped" places when greens mowed. (Robertson).

GRASSHOPPERS - KENTUCKY - Adults and nymphs of various species averaged 40 per 100 sweeps in Bourbon County in roadside grasses, mostly fescue. (Barnett).

FORAGE LEGUMES

ALFALFA CATERPILLAR (*Colias eurytheme*) - KANSAS - Larvae ranged 7-12 per 10 sweeps in alfalfa in Haskell County and 0-4 per 10 sweeps in Finney County. (Bell). NEW MEXICO - Larvae ranged 8-10 per 25 sweeps in forage crops, with up to 35 per 25 sweeps noted in one field in Eddy County. (N.M. Coop. Rpt.).

BEET ARMYWORM (*Spodoptera exigua*) - OKLAHOMA - Heavy in alfalfa and weeds in and around fields in Jackson and Greer Counties. (Okla. Coop. Sur.).

ALFALFA WEEVIL (*Hypera postica*) - KANSAS - Larvae averaged 3 and adults one per 10 sweeps in 20-inch alfalfa in Haskell County. No larvae taken in other fields swept in Haskell, Finney, Gray, Sherman, and Decatur Counties. No adults taken in Finney, Gray, Sherman, and Decatur Counties except trace count in one Finney County field. (Bell). NEBRASKA - Adult activity light in alfalfa in Otoe County. In 11 fields sampled, 100 sweeps per field showed adults averaged 1.3 per field. (Stevens, Manglitz).

THREECORNERED ALFALFA HOPPER (*Spissistilus festinus*) - NEW MEXICO - Ranged up to 250 per 25 sweeps in Virden Valley, Grant County, forage crops; some girdling noted. (N.M. Coop. Rpt.). OKLAHOMA - Moderate to heavy in alfalfa in Muskogee County. (Okla. Coop. Sur.). MISSOURI - Light in alfalfa throughout south-east area; ranged 0-14 per 100 sweeps. (Munson).

PEA APHID (*Acyrtosiphon pisum*) - KANSAS - Averaged from trace to 10 per 10 sweeps in alfalfa in Finney, Gray, Haskell, and Decatur Counties. (Bell). UTAH - Ranged 3-75 per 10 sweeps in alfalfa at Richmond, Cache County. (Knowlton).

MEADOW SPITTLEBUG (*Philaenus spumarius*) - ILLINOIS - Populations light and noneconomic in all counties surveyed. Only 4 of 29 counties averaged over one per sweep; none averaged over 2. All districts averaged less than one per sweep. Heaviest populations found in northeast district with average of 8.7 per 10 sweeps. (Ill. Ins. Rpt.).

SOYBEANS

GREEN CLOVERWORM (*Plathypena scabra*) - OKLAHOMA - Moderate to heavy in soybeans in Garvin County; light to moderate in Wagoner, Muskogee, and McCurtain Counties. (Okla. Coop. Sur.). MISSISSIPPI - Larvae ranged 0.5-3 per row foot in soybeans in Clay, Monroe, and Chickasaw Counties. (Robinson). KENTUCKY - Larvae very light in western area. (Barnett, Raney).

VELVETBEAN CATERPILLAR (*Anticarsia gemmatalis*) - ALABAMA - Foliage feeding by increased larval populations occurred in southern area and northward to Montgomery County. Several thousand acres treated for this and other soybean pests. (Farquhar et al.).

BEAN LEAF BEETLE (*Cerotoma trifurcata*) - KENTUCKY - Averaged two per row foot in Caldwell and Graves Counties. (Barnett, Raney).

CORN ROOTWORMS (*Diabrotica* spp.) - SOUTH DAKOTA - Adults still active in eastern area. Frost reduced populations by only 20-25 percent. Beetles noted in weedy stubble fields and soybeans. Situation increases damage potential on first year corn in 1975. (Kantack).

THREECORNERED ALFALFA HOPPER (*Spissistilus festinus*) - OKLAHOMA - Moderate in soybeans in Wagoner County. (Okla. Coop. Sur.).

COTTON

BOLLWORMS (*Heliothis* spp.) - OKLAHOMA - In Jackson, Tillman, Greer, Harmon, and Kiowa Counties, *H. zea* (bollworm) eggs ranged 4-20 and larvae 4-12 per 100 terminals; damaged squares ranged 9-18 percent. In Washita and Caddo Counties, eggs averaged 55 and larvae 28 per 100 terminals. In Muskogee County, eggs ranged 0-20 and larvae 2-12 per 100 terminals. (Okla. Coop. Sur.). ARKANSAS - Much cotton past attractive stage for egg laying by *Heliothis* spp. moths. Eggs heavy on late cotton that is still attractive; larval counts increased on this type cotton, especially in more southern areas. Rainy weather prevented effective control application. *H. virescens* (tobacco budworm) continued to increase in relation to total *Heliothis* spp. population. This trend at this time of year noted for several years. Specimens collected from cotton September 10, 12, and 16 in Drew County determined as 4 *H. zea* and 73 *H. virescens*. (Boyer).

MISSISSIPPI - Light trap data indicate *Heliothis* spp. moth activity decreasing. Many fields mature enough that larvae no longer problem. (Robinson). ALABAMA - Heavy moth flights, oviposition, and larvae at 2-85 per 100 stalks continued in much of central and northern acreage. Treatments difficult and expensive. (Smith et al.). TENNESSEE - Larvae feeding on small bolls in central area. Feeding will not affect yield as bolls will not mature before frost. (Cagle).

CABBAGE LOOPER (*Trichoplusia ni*) - ALABAMA - Larvae partially defoliated several thousand acres of cotton in northern area. Feeding probably more valuable than damaging; allowed more sunlight to bottom bolls and reduced incidence of boll rot. (Jarrett et al.).

BOLL WEEVIL (*Anthonomus grandis*) - TENNESSEE - Heavy damage noted to few squares left on cotton at present. (Patrick). ALABAMA - Infestations, populations, and damage generally light for time of year, indicating good control efforts statewide. (Smith et al.). MISSISSIPPI - Cotton maturity slowed considerably due to recent cool, wet weather. Weevil feeding time on small bolls prolonged in top one-third of plants in hill counties where cotton still green. (Robinson). ARKANSAS - Treatments for control practically ceased for season. Many producers adding insecticide to defoliant for diapause weevil control. (Boyer). OKLAHOMA - Percent punctured square counts by county ranged up to 80 in Kiowa, up to 43 in Tillman, up to 29 in Greer, up to 26 in Jackson, up to 24 in Harmon, and 0-15 in Muskogee and Wagoner. Averaged 48 percent in Caddo and Washita Counties. Reported heavy in Garvin County. Total of 136 adults collected in 32 pheromone traps in Muskogee County. (Okla. Coop. Sur.).

TOBACCO

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - KENTUCKY - Adults averaged 1.9 per leaf at one location and 0.5 per leaf at second plot in Fayette County. (Barnett).

GRASSHOPPERS - KENTUCKY - Various species caused minor damage to tobacco in Bourbon and Morgan Counties. (Barnett).

POTATOES, TOMATOES, PEPPERS

EUROPEAN CORN BORER (Ostrinia nubilalis) - DELAWARE - Adults averaged about 10 per night in blacklight trap collections in western Sussex County. Infestations in untreated sweet peppers ranged 25-33 percent in this area. (Burbutis). KENTUCKY - Larvae infested about 15 percent of peppers in various plots totalling about 124 acres in Bourbon County. (Barnett).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - NEW HAMPSHIRE - Problem only in unsprayed potatoes and appeared lighter than usual. (Bowman).

BEANS AND PEAS

MEXICAN BEAN BEETLE (Epilachna varivestis) - NEW HAMPSHIRE - Continued small threat to bean crop but detected on late plantings. (Bowman).

A BLISTER BEETLE (Megetra cancellata) - NEW MEXICO - Damaged pinto beans near Deming, Luna County, where treatments applied. This beetle common on desert at this time but not usually damaging to crops. (N.M. Coop. Rpt.).

DECIDUOUS FRUITS AND NUTS

PEACHTREE BORER (Sanninoidea exitiosa) - OKLAHOMA - Heavy in peach and plum trees checked in Comanche County. (Okla. Coop. Sur.).

CODLING MOTH (Laspeyresia pomonella) - IDAHO - Pheromone trap catches at location in Moscow, Latah County: One moth September 13, one September 14, none September 15, one September 16, one September 17, two September 18, none September 19, none September 20. (Portman).

REDBANDED LEAFROLLER (Argyrotaenia velutinana) - NEW HAMPSHIRE - Combination of dry weather and well timed cover sprays resulted in good control of second brood on apples. (Bowman).

APPLE MAGGOT (Rhagoletis pomonella) - NEW HAMPSHIRE - Populations appear light in apples over State; few stings apparent in unsprayed fruit. Despite near-drought conditions, fruit size appears good. (Bowman).

PECAN WEEVIL (Curculio caryae) - MISSISSIPPI - Continued to infest pecans in Hinds County orchard, treatments began. (Neel). OKLAHOMA - Damage heavy to pecans in Payne County. Infestation moderate in Comanche County. (Okla. Coop. Sur.).

HICKORY SHUCKWORM (Laspeyresia caryana) - OKLAHOMA - Heavily damaged pecans in Payne County. (Okla. Coop. Sur.).

CITRUS

CALIFORNIA RED SCALE (Aonidiella aurantii) - CALIFORNIA - Heavy on citrus in Sacramento area of Sacramento County. Infestations all but eliminated by parasites and predators until 1973 and 1974 when upset of biological agents occurred. This upset probably traceable to severe freeze of 1972. (Cal. Coop. Rpt.).

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - Epidemic continues to expand with 81 of 100 counties infested during surveys in July 1974. Beetles infested 60 counties as of July 1973, and 71 counties as of January 1974. Infested area increased from 5 million acres in 1972 to 16 million acres during July 1974 on private and government owned land. Number of infested spots ranged up to 1,000 per county. (Hunt).

BLACK PINELEAF SCALE (Nuculaspis californica) - CALIFORNIA - Epidemic on pines in general area of Glenburn, Shasta County, and extends south to Butte County. Infestation has been active for about 5 years; pest usually disappears in about 2 years. Weakened pines currently being "attacked" by Dendroctonus brevicomis (western pine beetle). Scale counts averaged 3 per inch of branch in 1973, averaged 31 per inch in 1974. Parasitism of N. californica ranged 2-3 percent, predation 7-8 percent. D. brevicomis infested high percentage of pines on about 2,000 acres in Glenburn area. Most of infested area is private properties in 5, 10, and 20-acre parcels. Sanitation salvage underway. (Cal. Coop. Rpt.).

INTRODUCED PINE SAWFLY (Diprion similis) - MINNESOTA - Heavy infestations reported on mature white pine in east-central area. Defoliation progressed to point landowners considering controls. Some pupation occurred but percentage unknown. (Hoger).

MAN AND ANIMALS

SCREWORM (Cochliomyia hominivorax) - Total of 152 cases reported from continental U.S. during period September 1-7 as follows: Texas 137, New Mexico 9, Arizona 5, California 1. Total of 364 cases confirmed from Mexico. Number of sterile flies released in U.S. this period totaled 184,012,800 as follows: Texas 166,223,400; New Mexico 5,810,400; Arizona 11,871,000; Oklahoma 108,000. Total of 25,986,600 sterile flies released in Mexico. (Anim. Health).

HORN FLY (Haematobia irritans) - MISSISSIPPI - Adults increased on cattle in Oktibbeha, Clay, and Monroe Counties. Infestations up to 500 per head on some cattle. (Robinson). TENNESSEE - Ranged 5-25 per head on cattle in Hamblen County. (Walker). OKLAHOMA - Counts per head on cattle ranged 50-100 in Wagoner County and 200-300 in Muskogee County. (Okla. Coop. Sur.). KANSAS - Very heavy on some range cattle in Wabaunsee County. Counts of 800-1,000 per head common. (Bell). WISCONSIN - Populations and annoyance to cattle decreased greatly past 14 days due to much cooler weather. (Wis. Ins. Sur.).

FACE FLY (Musca autumnalis) - MISSISSIPPI - Adults continued to oviposit on manure in Monroe County. Some population reduction noted on some farms but still heavy on one Chickasaw County farm where infestations ranged 15-60 per head of beef cattle. (Robinson). TENNESSEE - Ranged 0-5 per head in Hamblen County. (Walker). KENTUCKY - Averaged 15 per animal during midday in Clark County. (Barnett). OHIO - Populations continued to decline as fall weather approaches. Average per face by county as follows: Wayne 2.4, Holmes 8, Ashland 4.9. Adults will begin to enter sheltered areas to overwinter. (Heller; Rheinheimer). WISCONSIN - Due to much cooler weather past 14 days, populations and annoyance to cattle greatly reduced. (Wis. Ins. Sur.).

STABLE FLY (Stomoxys calcitrans) - WISCONSIN - Populations and annoyance to cattle declined greatly due to much cooler weather past 14 days. (Wis. Ins. Sur.).

MOSQUITOES - NEW HAMPSHIRE - Light over most of State due to dry summer. However, Aedes sollicitans greatly annoyed seacoast residents past 14 days. (Bowman). OKLAHOMA - Psorophora spp. adults still common in Payne County area; larvae ranged up to 72 per dip. (Okla. Coop. Sur.).

A BIBIONID FLY (Plecia nearctica) - FLORIDA - Fall generation peaked and now tapering off. First adult noted at Gainesville, Alachua County, August 8; adults common by August 10. This was 7-10 days earlier than expected. Heaviest concentrations noted from Ft. Pierce, St. Lucie County, to Jupiter, West Palm Beach County. No significant populations noted south of Ft. Lauderdale, Broward County. Peak populations occurred in Alachua County September 9-14. (Fla. Coop. Sur.).

WESTERN BLACK WIDOW SPIDER (Latrodectus hesperus) - NEVADA - Began to move into homes and other structures in Las Vegas area, Clark County. (Zoller).

MISCELLANEOUS WILD PLANTS

NORTHERN CORN ROOTWORM (Diabrotica longicornis) - OHIO - Heavy adult populations noted in weeded areas near cornfields in Ashland County. This type infestation usually noted during fall months in weedy areas or flower gardens near cornfields. (Heller, Szatmari-Goodman).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

CEREAL LEAF BEETLE (Oulema melanopus) - OHIO - Adults recovered from corn plants in Ashland County. Adults overwinter beneath corn remnants or in wooded areas near fields of cereal crops and grasses. (Heller).

GRASSHOPPERS - NEW MEXICO - Moderate populations of Schistocerca shoshone defoliated trees and shrubs in Albuquerque area, Bernalillo County. (N.M. Coop. Rpt.). CALIFORNIA - Adult survey during August revealed populations of Oedaleonotus enigma, Melanoplus devastator, and Camnula pellucida averaged 50+ per square yard on rangelands in Amador, Calaveras, El Dorado, Sacramento, San Joaquin, Solano, Tuolumne, and Stanislaus Counties. Late season rainfall contributed to dense growth of rangeland vegetation which supported economic population without noticeable damage. (Cal. Coop. Rpt.). UTAH - Grasshoppers generally lighter statewide than at this time in 1973. Migrating from range and vacant lots into many home gardens throughout State. (Stephens, Knowlton).

ORIENTAL FRUIT FLY (Dacus dorsalis) - CALIFORNIA - Saturation trapping revealed additional flies in known infested area in San Diego County. As of September 16, total of 76 flies trapped and 50-100 larvae found. Larvae collected from fruit of Prunus caroliniana and lemon. Additional 83 flies trapped as of September 18. Core area of infestation about 12 square miles. Traps inspected daily. Eradication treatment underway. Single male taken in Steiner trap at Panorama City, Los Angeles County, (see CEIR 24 (38):761) not considered to be connected with infestation in San Diego County. (Cal. Coop. Rpt.). In line 6 of note on this pest in CEIR 24(38):761, D. orientalis should read D. dorsalis. (PPQ).

PINK BOLLWORM (Pectinophora gossypiella) - NEW MEXICO - Damaged bolls ranged 1-8 per 100 cotton bolls checked. First damage of season at Radium Springs, northern Dona Ana County, noted. Populations near Carlsbad, Eddy County, ranged from 5 fields with no damage to 2 fields with 4 damaged bolls per 100 checked; 8, 12, and 32 damaged bolls per 100 bolls found in 3 additional fields. (N.M. Coop. Rpt.).

HAWAII INSECT REPORT

Fruits and Ornamentals - Total of 652 map-grid points checked during survey for ORANGE SPINY WHITEFLY (Aleurocanthus spiniferus) on Oahu; pest found only at 18 sites. Infested sites generally within previously known infestation area. Plants inspected included rose, citrus, pear, grape, orchid, palm, guava, peach, cherry, plum, and apple. Pest found on only rose and citrus during survey. Although none found on grape and pear, these plants confirmed as hosts prior to survey. (Shiroma). BROAD MITE (Polyphagotarsonemus latus) caused moderate to heavy damage in 200+ acres of passion fruit at Kahului, Maui; estimated 75 percent of young terminal leaves showed injury. Counts ranged 1-3 mites per leaf even after recent sulfur applications. GREENHOUSE THRIPS (Heliothrips haemorrhoidalis) light in planting; about 25 percent of leaves with 3-6 nymphs and adults. (Miyahira).

Turf and Pasture - GRASS WEBWORM (Herpetogramma licarsisalis) larvae and adults light in 200 acres of Kikuyu grass pasture at Hana, Maui. Light damage observed at various sites (total less than one percent of pasture area). Larvae averaged 4 per square foot at infested sites. No damage observed in Pangola grass pastures. All of 50 eggs collected at Kipahulu, Maui, parasitized by Trichogramma sp. (a minute egg parasite). (Miyahira).

Beneficial Insects - Releases of 400 and 1,000 adults of a PLATYGASTERID WASP (Amitis hesperidum) made at Kapahulu, Oahu, August 23 and September 14, 1974, respectively. Releases made as part of cooperative project for control of Aleurocanthus spiniferus (orange spiny whitefly). Oviposition by parasite can occur in all 3 larval stages of A. spiniferus; however, first stage preferred. Adult longevity averages 4-5 days for males, 6 days for females. (Mau).

DETECTION

New County Records - WESTERN CORN ROOTWORM (Diabrotica virgifera) INDIANA - Adams, Montgomery, Parke, Boone, Jay (p. 768).

CORRECTIONS

CEIR 24(36):725, 726 - HORN FLY (Haematobia irritans) - ARKANSAS should read TENNESSEE. FACE FLY (Musca autumnalis) - ARKANSAS should read TENNESSEE.

CEIR 24(38):761 - ORIENTAL FRUIT FLY (Dacus dorsalis) - Line 6: D. orientalis should read D. dorsalis. (PPQ).

[illegible]

Additional Aphids Collected in the Los Angeles
State and County Arboretum (Homoptera: Aphididae)

Mortimer D. Leonard 1/ and Harry G. Walker 2/

ABSTRACT - In Proc. Ent. Soc. Wash. 75(2):209-212, 1973, Leonard and Walker published a list of 111 species of aphids collected in the Los Angeles State and County Arboretum from March 1966 through October 1971. The present paper lists 18 additional species.

There now have been about 135 aphids recorded as occurring in the Arboretum. In 1968, Leonard estimated that about 300 species of aphids had been recorded from California (Cornell Memoir 407, p. 4, 1968). Therefore, about 45 percent of all the aphids known to occur in California have been recorded as occurring in the Arboretum.

Aphids in the following list were collected by H.G. Walker. Determinations were made by V.F. Eastop (VFE), A.K. Ghosh (AKG), and C.S. Wood-Baker (W-B).

Aphis ilicis Kaltenbach. November 24, 1971, abundant on Ilex cassinae Linn. (W-B det).

Aphis frangulae Kaltenbach. March 10, 1970, abundant on Rhamnus californica Eschsch. (W-B det); June 21, 1969, moderate on Sarcococca saligna Muell. (W-B det); June 21, 1969, scarce on Sida rhombifolia Linn. (W-B det); July 12, 1969, moderate on Tabebuia donell-smithii F.N. Rose (W-B det).

Aphis medicaginis Koch. July 16, 1970, abundant on Robinia ambigua "decaisneana" (W-B det).

Aphis sambuci Linn. October 24, 1969, abundant on Sambucus kantschatica E. Wolg (W-B det).

Aphis sedi Kaltenbach. February 4, 1969, abundant on Sedum spectabilis Bor. (W-B det).

Cinara arizonica Wilson. July 24, 1969, abundant on Pinus coulteri D. Don (VFE det).

Cinara fresai Blanchard. June 5, 1971, scarce on Cupressus sempervirens var. stricta Ait. (VFE det); May 4, 1971, scarce on Juniperus chinensis "columnaris-glauca" (VFE det); May 1, 1970, abundant on J. c. "Hetzi glauca" (VFE det) and May 20, 1971, abundant (VFE det); March 13, 1970, moderate on J. occidentalis "Silver Star" and April 10, 1971, abundant (VFE det); May 2, 1970, abundant and May 21, 1971, moderate on Juniperus scopulorum "Gray Gleam" (VFE det); March 12, 1970, abundant on J. s. "Staver" (VFE det); March 14, 1970, abundant and April 10, 1971, moderate on J. virginiana "Silver Spreader" (VFE det).

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- Cinara ponderosa (Williams). October 30, 1969, abundant and March 27, 1971, moderate on Pinus canariensis C.S.M. (VFE det).
- Essigella essigi Hottes. September 3, 1969, moderate on Pinus sp. (VFE det); March 24, 1968, abundant, March 27, 1970, moderate, and September 9, 1970, moderate on Pinus canariensis (VFE det).
- Essigella fusca Gillette & Palmer. May 14, 1968, moderate on Pinus attenuata (VFE det); July 24, 1969, and April 26, 1971, abundant on Pinus coulteri (VFE det).
- Hyadaphis (Lipaphis) erysimi Kaltenbach. February 17, 1970, abundant on Capsella bursa-pastoris Medic (AKG det).
- Hysteroneura setariae Thomas. October 28, 1970, abundant on Bougainvillea spectabilis Willd. (VFE det).
- Masonaphis morrisoni (Swain) or M. pseudomorrisoni MacGillivray. March 13, 1969, scarce, July 24, 1969, moderate, and April 2, 1970, moderate on Cupressus lusitanica Mill. (VFE det); December 23, 1968, March 3, 1969, and June 5, 1971, scarce on Cupressus sempervirens (VFE det); May 21, 1969, abundant and May 4, 1970, scarce on Juniperus chinensis "columnaris glauca" (VFE det); May 19, 1969, scarce and May 26, 1971, abundant on J. chinensis "Hetzi glauca" (VFE det); April 10, 1971, abundant on J. occidentalis "Sierra Silver" (VFE det); May 31, 1971, moderate on J. scopulorum "Gray Gleam" (VFE det).
- Masonaphis pseudomorrisoni MacGillivray. April 10, 1971, moderate on Juniperus virginiana "Silver Spreader" (VFE det).
- Myzocallis coryli (Goeze). June 30, 1970, abundant on Corylus avellana fuscorubra (AKG det).
- Neomyzus circumflexus (Kaltenbach). February 25, 1970, moderate on Artemisia dracunculus Linn. (AKG det).
- Neotoxoptera violae (Pergande). June 24, 1970, abundant on Allium schoenoprasum Linn. and February 25, 1970, abundant on Allium tuberosum Rottl. (AKG det).
- Rhopalosiphum fitchii (Sanborn). February 5, 1970, moderate on Bromus carinatus Hook & Arn. (AKG det).

U.S. Dept. Agr.
Coop. Econ. Ins. Rpt.
24(39):778-779, 1974

Showers and drizzle moved northeastward out of west Texas and Oklahoma Thursday morning. Abilene and San Angelo, Texas, reported flooding of Elm Creek and the Colorado River. In western Texas, McCamey got 10 inches of rain and Rankin got 9 inches. Friday, rain and thundershowers were widespread near a cold front stretching from Texas to Maine. Showers also occurred in the upper and middle Mississippi Valley, the Great Lakes region, Florida, New Mexico, and Arizona. Early morning showers and thundershowers associated with a cold front continued from southern New England through the Ohio Valley and Arkansas into southeast New Mexico on Saturday. In western and south-central Texas, additional rain on already saturated soil triggered more flash flooding. Sunday, showers and thundershowers were scattered from southern Arizona into western and south-central Texas and along the Atlantic coast and the Northeast.

TEMPERATURES: Below normal temperatures blanketed most of the Nation last week. Only sections of the Far West, Atlantic and Gulf coasts reported average temperatures near normal or above. Cool air flowed from Canada across the North Central States. Frost was general across the northern Corn Belt over the weekend. Monday, early morning temperatures in the northern half of the Nation were generally in the 40's and 50's while the Gulf and lower Atlantic Coast States experienced the 60's and 70's. Temperatures remained on the reasonable side with no records broken and very little frost on Tuesday. Wednesday, morning temperatures ranged from the upper 30's in Michigan to the 40's in Maine, 40's and low 50's in the Pacific Northwest, and near the 80's in southern Florida, southern Texas, and the Southwest. Most of the Nation reported early morning temperatures in the 50's and 60's on Thursday. The Northeast experienced cooler readings in the low to mid-40's. Friday, early morning temperatures in the northern Plains and southern Plateau were in the 30's while the 70's were reported along much of the gulf and south Atlantic coasts. Cool weather continued over the Plains and much of the Mississippi Valley Saturday afternoon. In the morning, North Platte, Nebraska, dropped to 29 degrees tying their record low for this date. A low of 28 degrees in Huron, South Dakota, was the coldest ever recorded there so early in the fall. Sunday, cold Canadian air settled across much of the Nation's midsection dropping early morning temperatures into the 30's from the northern Plains to the upper Great Lakes. New daily record lows were set in an area bounded by Sault Ste. Marie, Michigan, St. Louis and Springfield, Missouri, to North Platte, Nebraska, and Duluth, Minnesota.

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