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## October 23, 1970

U. S. EEPT. OF ATRIANTINE MATICANAL ACCIDENT'S LIZBIRY

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CURRENT SERIAL RECORDS

# Cooperative ECONOMIC INSECT REPORT

Issued by

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VOL. 20 No. 43

# PLANT PROTECTION DIVISION AGRICULTURAL RESEARCH SERVICE

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UNITED STATES DEPARTMENT OF AGRICULTURE

### AGRICULTURAL RESEARCH SERVICE

### PLANT PROTECTION DIVISION

ECONOMIC INSECT SURVEY AND DETECTION

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 clearing house and does not assume responsibility for accuracy of the material.

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#### COOPERATIVE ECONOMIC INSECT REPORT

#### HIGHLIGHTS

#### **Current Conditions**

FALL ARMYWORM destroyed several rye pastures in Alabama. (p. 735).

First ASPARAGUS APHID eggs found in New Jersey. (p. 737).

NOCTUID larvae required controls on lettuce in Arizona. (p. 737).

LODGEPOLE NEEDLE MINER killing lodgepole pine in Yosemite National Park. (p. 738).

DOUGLAS-FIR TUSSOCK MOTH epidemic in El Dorado National Forest, California. (p. 738).

#### Detection

New State records include SADDLEBACK CATERPILLAR in Michigan (p. 735), an APHID in Oklahoma (p. 736), and EUROPEAN PINE SHOOT MOTH in Nebraska (p. 738).

For new county and parish records see page 741.

Reports in this issue are for week ending October 16 unless otherwise indicated.

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#### NATIONAL WEATHER SERVICE'S 30-DAY OUTLOOK

#### MID-OCTOBER TO MID-NOVEMBER

The National Weather Service's 30-day outlook for mid-October to mid-November is for temperatures to average above seasonal normals over the Northeast, the Great Lakes, the western Great Basin, and California. Below normal temperatures are indicated for the southern Rockies, the central and southern Plains, and the gulf coast region. Elsewhere near normal temperatures are in prospect. Precipitation is expected to exceed normal over the Midwest and along the north Pacific coast. Subnormal totals are indicated for the Southwest and the northern Plains. In unspecified areas near normal precipitation is expected.

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 the Superintendent of Documents, Washington, D.C. 20250. Price \$5.00 a year.

Weather continued on page 741.

#### SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

GREENBUG (Schizaphis graminum) - NEW MEXICO - Generally light on wheat in Curry and Roosevelt Counties. Heavier, 37 per linear foot, in field near Clovis, Curry County. (Mathews).

SPOTTED ALFALFA APHID (Therioaphis maculata) - ARIZONA - Averages per 100 sweeps of alfalfa: 175 in Yuma Valley and 1,800 in Parker Valley, Yuma County; 2,000 at Ocotillo, Maricopa County. (Ariz. Coop. Sur.).

#### CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - ALABAMA - Larvae light on grain sorghum at Megargel, Monroe County. This is a new county record. Larvae light to medium on late corn but few on grain sorghum in Elmore County. (McQueen). VIRGINIA - Severe lodging of corn widespread in Warren County. (Allen, Conklin, Oct. 7). IOWA - Caused 8.6 bushels of dropped ears per acre by October 15 in Crawford County. Caused 3 percent dropped ears in Boone and Webster Counties. (Iowa Ins. Sur.).

SADDLEBACK CATERPILLAR (Sibine stimulea) - MICHIGAN - Larvae moderate in cornfield at Centreville, St. Joseph County. Collected by F. Henningsen August 26, 1970. This is a new State record. Collected at Traverse City, Grand Traverse County, by W.H. Wallner September 28 for a new county record. Determined by H. Newman. (Sauer).

WESTERN BEAN CUTWORM (Loxagrotis albicosta) - COLORADO - Larvae of this pest and Heliothis zea (corn earworm) ranged 0-20 per 100 row feet of corn throughout northeastern area. Heaviest in Kit Carson and Yuma Counties. Little economic loss. (Johnson).

SORGHUM MIDGE (Contarinia sorghicola) - OKLAHOMA - Adults up to 45 per head in occasional late sorghum head in Payne County field; most heads in field nearly mature and not susceptible. (Okla. Coop. Sur.).

#### SMALL GRAINS

FALL ARMYWORM (Spodoptera frugiperda) - TENNESSEE - Caused little or no damage to winter grains in central area; none expected. (Gordon). VIRGINIA - Severe; destroyed seedling rye field in Charles City County. (Davis, Allen, Oct. 1).

#### TURF, PASTURES, RANGELAND

FALL ARMYWORM (Spodoptera frugiperda) - ALABAMA - Heavy and widespread; small to medium-sized larvae destroyed several fields of Abruzzes rye planted for winter grazing in southern Mobile County. Spotted and scattered infestations still in grass crops in Jefferson County. (Robinson et al.).

LYGUS BUGS - UTAH - Averaged 5 per 10 sweeps on <u>Chrysothamnus</u> blossoms. Apparently moved to big sagebrush, ranged 8-23 per sweep (99 percent adults), in Blacksmith Fork Canyon, Cache County. (Knowlton).

A MARCH FLY (Dilophus orbatus) - CALIFORNIA - Increasing and extending its range. Large swarms on lawns or walls. Several hundred flies per square yard. Statewide complaints. (Cal. Coop. Rpt.).

BANKS GRASS MITE (Oligonychus pratensis) - NEVADA - Heavy in experimental plots of Kentucky bluegrass seed at Sparks, Washoe County. (Arnett).

#### FORAGE LEGUMES

BEET ARMYWORM (Spodoptera exigua) - ARIZONA - Average per 100 sweeps of alfalfa: 35 at Yuma Mesa and Yuma Valley, and 375 in Parker Valley, Yuma County; 20 in Salt River Valley, Maricopa County. (Ariz. Coop. Sur.).

ALFALFA CATERPILLAR (Colias eurytheme) - ARIZONA - Larvae averaged 70 per 100 sweeps of alfalfa on east side of Salt River Valley, Maricopa County. (Ariz. Coop. Sur.). NEW MEXICO - Light on alfalfa in Albuquerque area, Bernalillo County. (Heninger).

ALFALFA WEEVIL (Hypera postica) - IOWA - Adult collected in Boone County by Lentz October 13 for a new county record. Determined by B. Stoltzfus. (Iowa Ins. Sur.). UTAH - None found in Cache County alfalfa field. (Davis). Adults 1-2 per 0.5 pound of litter in Berlese funnels a mile or more from alfalfa fields. (Davis, Knowlton).

THREE-CORNERED ALFALFA HOPPER (Spissistilus festinus) - MISSOURI - Ranged 8-600 per 100 sweeps of alfalfa in Scott and Mississippi Counties. Girdled less than 1 percent of stems. (Munson).

LYGUS BUGS - UTAH - One per sweep, 95 percent adults, of alfalfa at North Logan and Hyde Park, Cache County. (Davis). ARIZONA - Lygus sp. per 100 sweeps of alfalfa averaged 90 at Yuma Mesa and Yuma Valley, Yuma County, and 200 nymphs in Salt River Valley, Maricopa County. (Ariz. Coop. Sur.).

PEA APHID (Acyrthosiphon pisum) - NEW MEXICO - Light on Bernalillo County alfalfa. (Heninger). UTAH - Counts of 20 per sweep at North Logan and Hyde Park, and 30 per sweep at Hyrum, Cache County. (Davis, Knowlton). WISCONSIN - Very light on alfalfa in Langlade, Marathon, Lincoln, and Taylor Counties, and most of Clark County. Began to increase in southern Clark County. Prevalent in Pepin, Dunn, Eau Claire, and Pierce Counties. (Wis. Ins. Sur.).

#### SOYBEANS

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - MISSISSIPPI - Larvae averaged less than 1 per 2 row feet in 6 Oktibbeha County fields. (Sartor).

#### PEANUTS

RED-NECKED PEANUTWORM (Stegasta bosqueella) - NEW MEXICO - Infestation averaged as high as 25-30 percent of terminals in some fields around Portales, Roosevelt County. (Mathews). OKLAHOMA - Averaged about 40 larvae per 100 terminals at Perkins, Payne County. Damaged nearly all terminals. (Okla. Coop. Sur.).

#### COTTON

BOLL WEEVIL (Anthonomus grandis) - ALABAMA - Adults 1-5 per 10 row feet in all fields examined in Mobile, Baldwin, Monroe, Butler, Crenshaw, Macon, and Elmore Counties. Many will enter successful hibernation if first killing frost occurs no earlier than usual. (McQueen).

#### MISCELLANEOUS FIELD CROPS

AN APHID (Aphis helianthi) - OKLAHOMA - Collected on wild sunflower at Ingalls, Payne County, by C.E. Rogers, July 17, 1970. Determined by L.M. Russell. This is a new State record. (Okla. Coop. Sur.).

#### COLE CROPS

CABBAGE LOOPER (Trichoplusia ni) - MICHIGAN - Adults, 2-3 per night, at all blacklight stations. (Sauer, Oct. 19).

#### GENERAL VEGETABLES

ASPARAGUS APHID (Brachycolus asparagi) - NEW JERSEY - Eggs on leaves of asparagus plants at Somerset, Somerset County. Found by J.P. Reed October 1, 1970. First report of eggs laid by this aphid in North America. Eggs small and shiny black. (Race).

NOCTUID MOTHS - ARIZONA - <u>Spodoptera</u> exigua (beet armyworm) and <u>Trichoplusia</u> ni (cabbage looper) still active in lettuce statewide. Most growers on regular spray program. Treatments in lettuce for <u>Estigmene</u> acrea (salt-marsh caterpillar) required as migration started at Yuma, Yuma County. (Ariz. Coop. Sur.).

A SAP BEETLE (Conotelus mexicanus) - NEW MEXICO - Migrated since frost from cotton into lettuce in Dona Ana County. (N.M. Coop. Rpt.).

#### DECIDUOUS FRUITS AND NUTS

APPLE MAGGOT (Rhagoletis pomonella) - MICHIGAN - Small numbers of adults still active in southwestern area orchards. (Sauer, Oct. 12).

PEAR-SLUG (Caliroa cerasi) - UTAH - Last larvae gone from cherry, pear, and cotoneaster foliage in Cache County. (Davis).

PECAN WEEVIL (<u>Curculio caryae</u>) - ALABAMA - Larvae 1-2 per pecan nut in small home orchard in Elmore County; 25 percent of crop fallen. Larvae have entered soil to pupate. Larval damage in some orchards in Covington County. (Bayles et al.). NEW MEXICO - All surveys negative at Tularosa, Otero County. No infestation outside infested area. (Riddle, Campbell).

WALNUT HUSK FLY (Rhagoletis completa) - CALIFORNIA - Infested black walnuts at Chico, Butte County. Over 200 larvae emerging per sack of walnuts. Adults still trapped at Richmond, Contra Costa County. (Cal. Coop. Rpt.).

HICKORY SHUCKWORM (Laspeyresia caryana) - OKLAHOMA - Moderate in Marshall County pecans. Light in Payne County. (Okla. Coop. Sur.).

#### CITRUS

AN ARMORED SCALE (Unaspis citri) - FLORIDA - Moderate in 3 nurseries in Lake County: Adults on 5 percent of 1,400 grapefruit plants at Astatula, October 9; adults on 10 percent of 10,820 orange plants at Montverde; and adults and larvae on 5 percent of 15,000 orange plants at Ferndale. (DeWolf). All stages moderate on kumquat stems in Lake Monroe, Seminole County (VanPelt).

CHAFF SCALE (Parlatoria pergandii) - FLORIDA - Adults moderate on 10 percent of 10,820 orange plants in nursery at Montverde, Lake County. (DeWolf).

#### ORNAMENTALS

APHIDS - OKLAHOMA - Aphis hederae (ivy aphid) ranged 50-400 per terminal of English ivy checked at Stillwater, Payne County Parasitism light. (Okla. Coop. Sur.). CALIFORNIA - Macrosiphoniella sanborni (chrysanthemum aphid) and Paraphytoptus chrysanthemi (an eriophyid mite) up to 500 per leaf on chrysanthemum plants at La Mesa, San Diego County. (Cal. Coop. Rpt.). WASHINGTON - A. fabae (bean aphid) heavy on nasturtiums with apterous and alate viviparae at Federal Way, King County, October 6. (Barstow).

ARMORED SCALES - FLORIDA - Phenacaspis cockerelli adults infested Carolina jessamine (Gelsemium sempervirens) leaves in nursery at Gainesville, Alachua County. (Graham, Mar. 4). This is a new county and host record. (Fla. Coop. Sur.) All stages severe on 40 percent of 100 magnolia plants in nursery at Orlando, Orange County. All stages of this and <u>Fiorinia theae</u> (tea scale) severe on 35 percent of 200 camellia plants in nursery at Orlando. (Graddy, Oct. 9).

#### FOREST AND SHADE TREES

SUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana) - NEBRASKA - Adult reared from Austrian pine at Lincoln, Lancaster County. Larva collected by J.J. Deuser, June 1970. Determined by G. Munson. This is a new State record. (Roselle).

LODGEPOLE NEEDLE MINER (Coleotechnites milleri) - CALIFORNIA - Severe needle killing in upper areas of Yosemite National Park. High usage areas show damage. Over 50,000 acres of native lodgepole pine reddening in semiwilderness areas of park; high percentage dead. (Cal. Coop. Rpt.).

DOUGLAS-FIR TUSSOCK MOTH (Hemerocampa pseudotsugata) - CALIFORNIA - Epidemic numbers in El Dorado National Forest. Infested 2 areas of about 30,000 acres. (Cal. Coop. Rpt.).

BAGWORM (Thyridopteryx ephemeraeformis) - VIRGINIA - Defoliation widely evident on eastern redcedars and other tree species, notably in Richmond County. Defoliation moderate to cedar and spruce in scattered locations in Prince William, Orange, Campbell, and Prince Edward Counties. (For. Pest Sur. Rpt., Sept.).

PINE WEBWORM (Tetralopha robustella) - NEW HAMPSHIRE - Destroyed 50 percent of 2-year-old Scotch pine in Strafford County plantation by October 5. (Mason, Conklin).

ROUNDHEADED PINE BEETLE (Dendroctonus adjunctus) - NEVADA - Fall flights continuing in Spring Mountains, Clark County. Adults numerous. Weather more favorable than in 1969 when adverse conditions abruptly shortened flight period. (Long et al.).

A MARGARODID SCALE (Matsucoccus sp.) - OREGON - Moderate on about 30 percent of 5,000 seedling Scotch pines shipped to nursery at Silverton, Marion County. All plants treated. (Wheeler, Long).

FALL WEBWORM (Hyphantria cunea) - VIRGINIA - Widespread; defoliation light in various hardwoods in Richmond, Essex, Brunswick, Surry, and Sussex Counties. Active in occasional locations in Nelson County. Present throughout Loudoun County; defoliation light. Occasionally in Lunenburg County. (For. Pest Sur. Rpt., Sept.).

FALL CANKERWORM (Alsophila pometaria) - NORTH DAKOTA - Adults emerged at Fargo, Cass County. Appear to be up from 1969 with 105 females on 5 tanglefoot-banded trees. (Anderson).

OAK SKELETONIZER (Bucculatrix ainsliella) - CONNECTICUT - Heavy throughout Bristol, Litchfield County. (Gray). MASSACHUSETTS - Larvae and pupae statewide. (Jensen). NEW HAMPSHIRE - Larvae pupating. Very numerous over all of southern area October 1-9. (Conklin).

ELM LEAF BEETLE (Pyrrhalta luteola) - NEW MEXICO - Heavy on elms at Truth or Consequences, Sierra County. (Hare).

A BARK BEETLE (Xylosandrus compactus) - FLORIDA - Adults moderate on all sweetgum plants in nursery at Sarasota, Sarasota County. (McFarlin, Bickner, Oct. 7).

BOXELDER BUG (Leptocoris trivittatus) - UTAH - Extremely numerous on and around boxelder trees and entering homes at Bothwell, Box Elder County. Control sprays partly effective. (Knowlton). Much annoyance to Cache County residents. (Davis).

#### MAN AND ANIMALS

SCREW-WORM (Cochliomyia hominivorax) - One case reported in U.S. October 11-17 in San Diego County, California. Total of 185 laboratory-confirmed cases reported in portion of Barrier Zone in Republic of Mexico as follows: Sonora 126, Chihuahua 56, Coahuila 1, Nuevo Leon 1, Tamaulipas 1. Total of 37 cases reported in Mexico south of Barrier Zone. Barrier Zone is area where eradication operation underway to prevent establishment of self-sustaining population in U.S. Sterile screw-worm flies released: Texas 33,278,000; New Mexico 4,860,000; Arizona 6,222,000; Mexico 94,920,000. (Anim. Health Div.).

HORN FLY (Haematobia irritans) - OKLAHOMA - Averaged 500 per head of cattle checked in Payne County. Heavy in Mayes County. Moderate in Marshall County. (Okla. Coop. Sur.).

HORSE BOT FLY (<u>Gasterophilus intestinalis</u>) - MISSISSIPPI - Ovipositing adults averaged less than 1 per head on 7 horses in Oktibbeha County. (Sartor). MARYLAND - Egg laying heavy at isolated farms in Frederick, Baltimore, and Wicomico Counties. (U. Md., Ent. Dept.).

HOG LOUSE (Haematopinus suis) - OKLAHOMA - Moderate to very heavy on hogs checked in Payne County. (Okla. Coop. Sur.).

BLOODSUCKING CONENOSE (Triatoma sanguisuga) - OKLAHOMA - Bit people in 2 homes at Stillwater, Payne County. (Okla. Coop. Sur.).

BLACK WIDOW SPIDER (Latrodectus mactans) - UTAH - Unusually numerous under rocks in mouths of Providence and Green Canyons, Cache County. (Davis). Several in and around homes in Cache and Weber Counties. Two reports of persons bitten. (Knowlton). NEVADA - Large numbers still entering homes and garages in southern Washoe County. (Nev. Coop. Rpt.).

#### HOUSEHOLDS AND STRUCTURES

SUBTERRANEAN TERMITES (<u>Reticulitermes spp.</u>) - CALIFORNIA - <u>R</u>. hesperus (western subterranean termite) heavy in residence at San Francisco, San Francisco County. Many calls received at Sacramento, Sacramento County. (Cal. Coop. Rpt.). MARYLAND - Season's first swarm of <u>R</u>. virginicus at Rockville, Montgomery County. (U. Md., Ent. Dept.).

#### **BENEFICIAL INSECTS**

A FLOWER BUG (Orius tristicolor) - UTAH - Ranged 1-4 per sweep on thrips-infested Chrysothamnus, and 1 per sweep on big sagebrush in Millville and Blacksmith Fork Canyon area of Cache County. (Knowlton).

DAMSEL BUGS - UTAH - Often 1 per sweep in pea aphid-infested alfalfa fields in Cache County. (Davis). WISCONSIN - <u>Nabis ferus</u> still prevalent in most alfalfa fields. (Wis. Ins. Sur.).

#### FEDERAL AND STATE PLANT PROTECTION PROGRAMS

BOLL WEEVIL (Anthonomus grandis) - TEXAS - Adults light on cotton on farm at Seminole, Gaines County, for a new county record. Collected by J.D. Meekma October 9. Determined by R.E. Warner. (PPD).

JAPANESE BEETLE (Popillia japonica) - VIRGINIA - Grubs severely damaged some Page County lawns. (Saunders, Allen).

PINK BOLLWORM (Pectinophora gossypiella) - CALIFORNIA - Release of 5,247,975 sterile moths October 9-15; 70,137,160 to date at Bakersfield, Kern County. Two native moths trapped October 8. One, 1 mile north of intensive drop zone; other at Comanche Point in same field where moth collected in 1967. With total find of 7 moths and 2 larvae this season, general feeling now, infestation very light in Kern County. ARIZONA - Sterile release of 67,500 at Redington, Pima County; 1,552,300 to date. Two native moths caught for season total of 45. Infested 86 bolls, a 17.2-percent boll infestation. (PPD). Larval counts in top crop by area. Yuma County: 1-4 per boll in Parker Valley; 1-6 per boll at Cibola; 2.5 per 5 bolls at Bouse; larvae few, harvest beginning, major part of crop still green at Salome and Wenden. Mohave County: 1 per 20 bolls at Bullhead City, harvest underway. (Ariz. Coop. Sur.). NEW MEXICO - Infested 0-12 percent of bolls around Artesia, Eddy County. (Mathews).

SOYBEAN CYST NEMATODE (Heterodera glycines) - NORTH CAROLINA - Cysts light on farm at Beaulaville, Duplin County, for a new county record. Collected by W.E. Mobley October 8. Determined by V.H. Owens; confirmed by A.M. Golden. (PPD).

A WHITE-FRINGED BEETLE (Graphognathus peregrinus) - LOUISIANA - Adults light on camphor weed in vacant commercial lot at Shreveport, Caddo Parish. Collected by F.L. Hughes September 29. Determined by V.H. Owens; confirmed by R.E. Warner. (PPD).

#### HAWAII INSECT REPORT

Sugarcane - SUGARCANE APHID (Longiunguis sacchari) nymphs and adults generally light in about 10 acres of 4 to 6-month-old sugarcane at Kekaha, Kauai; moderate to heavy in spots. Predators nil. (Sugawa).

Turf - Several adults of a SKIPPER (<u>Hylephila phylaeus</u>) in grassy areas at naval housing area, Oahu. Adults first collected on Bermuda grass at Salt Lake, Oahu, September 8; subsequently taken at Moanalua, Aiea Heights, and Honolulu International Airport. (Takabayashi).

<u>General Vegetables</u> - BEET ARMYWORM (Spodoptera exigua) damage light in 0.25 acre of green onions at Waimanalo, Oahu; affected about 5 percent of leaves on each plant. Egg masses on 1 per 4 plants. (Kawamura). BEAN FLY (Melanagromyza phaseoli) light in small planting of yardlongbeans in community garden at Puunene, Maui; infested 15 percent of petioles. (Ah Sam). Larval mines of LEAF MINER FLIES (Liriomyza spp.) light to moderate in 5,000 square feet of green onions at Koko Head, Oahu; affected about J5 percent of leaves. Larval mines trace in 0.25 acre of Chinese waxgourd (Benincasa hispida). All stages of GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) moderate in same planting and adjacent row of tomatoes. (Kawamura).

Fruits and Nuts - BARNACLE SCALE (<u>Ceroplastes cirripediformis</u>) moderate to heavy in 20 of 135 acres of passionfruit at Kahului, <u>Maui</u>; some dead or dying vines in heavily infested acres. Heavy on 10 fiddlewood trees (<u>Citharexylum spinosum</u>) at Hawaii Kai, Oahu; 100+ scales per 2 inches on some pencil-sized branches. Severely affected or killed 15 percent of branches. (Miyahira, Kawamura).

<u>Ornamentals</u> - COWPEA APHID (<u>Aphis craccivora</u>) nymphs and adults light to moderate on 40 percent of buds and flowers on 0.25 acre of tuberoses. (Kawamura). Colonies of an ARMORED SCALE (<u>Pinnaspis strachani</u>) light to moderate on hibiscus hedge at Wailuku but heavy at Lahaina, <u>Maui</u>. Light on hibiscus bush at Honolulu, Oahu. (Miyahira, Kawamura).

Forest and Shade Trees - LONG-TAILED MEALYBUG (Pseudococcus longispinus) light on 80 percent of leaves on 20+ kamani trees (<u>Calophyllum inophyllum</u>) at Hawaii Kai. Adults of a LADY BEETLE (Scymnus bipunctatus) light. (Kawamura). New State Records - An APHID (Aphis helianthi) OKLAHOMA - Payne County (p. 736). EUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana) NEBRASKA - Lancaster County (p. 738). SADDLEBACK CATERPILLAR (Sibine stimulea) MICHIGAN - St. Joseph County (p. 735).

New County and Parish Records - ALFALFA WEEVIL (Hypera postica) IOWA - Boone (p. 736). An ARMORED SCALE (Phenacaspis cockerelli) FLORIDA - Alachua (p. 737). BOLL WEEVIL (Anthonomus grandis) TEXAS - Gaines (p. 739). EUROPEAN CORN BORER (Ostrinia nubilalis) ALABAMA - Monroe (p. 735). SADDLEBACK CATERPILLAR (Sibine stimulea) MICHIGAN - Grand Traverse (p. 735). SOYBEAN CYST NEMATODE (Heterodera glycines) NORTH CAROLINA - Duplin (p. 740). A WHITE-FRINGED BEETLE (Graphognathus peregrinus) LOUISIANA - Caddo (p. 740).

Weather continued from page 734.

#### WEATHER OF THE WEEK ENDING OCTOBER 19

HIGHLIGHTS: Most of the Nation enjoyed sunny, cool autumn weather. Snow fell in the central Rockies, in the Syracuse, New York, vicinity, and in northern Maine. Heavy thundershowers and a few tornadoes occurred in Mississippi.

**PRECIPITATION:** Early in the week, precipitation continued along a front that stretched from the lower Great Lakes to southwestern Louisiana. Numerous locations in Louisiana and Mississippi received more than 1.0 inch in the 6-hour period ending at 8 a.m., Monday, October 5. Lake Charles, Louisiana, received 4.8 inches in the 24-hour period ending at that time. A few tornadoes occurred Tuesday morning in Louisiana and Mississippi, and many more in the forenoon in Mississippi. Damages were mostly light. A wide band of rainy weather spotted by thunderstorms preceded the front as it moved eastward toward the Atlantic Ocean. Snow flurries fell in southern Wyoming, northern Colorado, and western Nebraska, and a mixture of rain and snow fell from the northern and central Great Plains to the Ohio River Valley and the lower Great Lakes Wednesday. In the afternoon and evening, snow continued in southeastern Colorado and spread to northern New Mexico. Albuquerque, New Mexico, measured 5 inches late Thursday. Showers continued ahead of the cold front from New England to the southern Atlantic States on Thursday. Light rain was still falling along the coast on Friday. Oklahoma and northern Texas received light, scattered weekend showers. The weekend also brought 5-10 inches of wet snow to some communities in the Syracuse, New York, area; 5 inches at Pompey and 10 inches at Marcellus, early Saturday morning. Several inches of snow fell in northern Maine Sunday forenoon. Elsewhere the weekend was mostly sunny due to the large high-pressure area that extended from the Great Basin to the Atlantic Ocean and from Canada to Mexico.

TEMPERATURE: Sunny, mild weather prevailed over most of the Nation early in the week. Afternoon temperatures were mostly in the 40's and 50's in the North and the 70's and 80's in the South. The main exception to the fine weather was a cloudy, rainy area from Arkansas to the Great Lakes along and ahead of a front that separated two high-pressure areas. By Wednesday much cooler weather was spilling across the Nation's midsection. The front moved eastward and by Thursday high pressure dominated the weather from the Rocky Mountains to the Appalachians. This was accompanied by sunny, cool, dry weather over most of the Nation. North Platte, Nebraska, registered 19° Thursday morning. In contrast, Macon, Georgia, still in the warm air ahead of the front, registered 91°. By Saturday the cold front had moved off the coast, and Sunday morning subfreezing temperatures were common in the central Appalachians and Piedmont. Columbia, South Carolina, registered 31° Sunday morning. The Atlantic Coast States averaged near or slightly warmer than normal in spite of the cool weekend. Elsewhere over the Nation, weekly mean temperatures were mostly below normal. A large area from the central Rocky Mountains to the middle Mississippi River Valley and southward to New Mexico and Texas averaged 6-14° cooler than normal. (Summary supplied by Environmental Data Service, ESSA.)

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