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Cooperative
**ECONOMIC INSECT
 REPORT**

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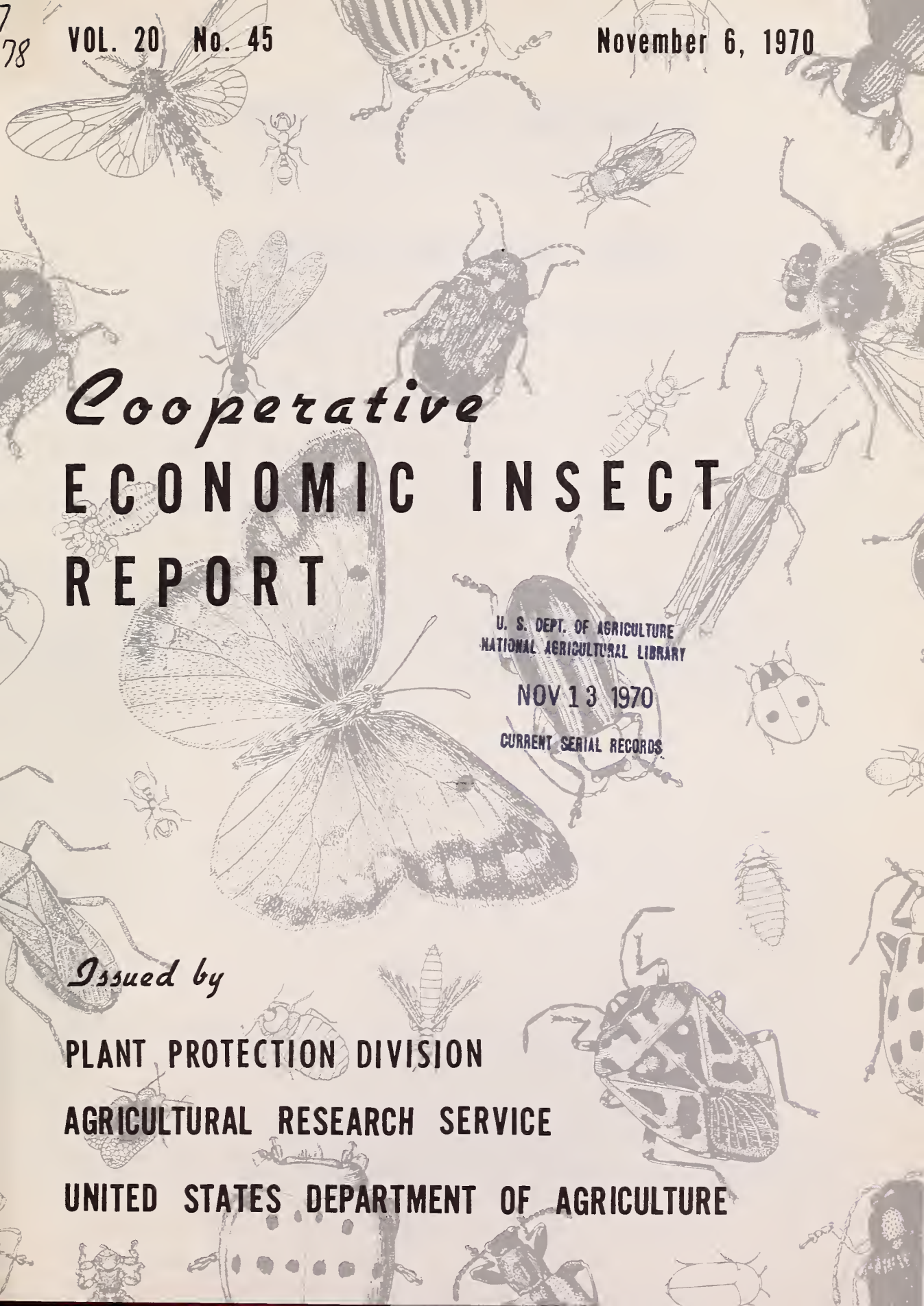
CURRENT SERIAL RECORDS

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PLANT PROTECTION DIVISION

AGRICULTURAL RESEARCH SERVICE

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

SPOTTED ALFALFA APHID building up on alfalfa in Arizona. (p. 757).

SORGHUM MIDGE damaged late-planted sorghum in west Tennessee. (p. 757).

BLACK-MARGINED APHID required controls in Arizona. (p. 759).

Detection

New State records include an APHID from Utah, ASPARAGUS APHID from Virginia (p. 759), a SEED BEETLE from Utah (p. 760), a SPIDER MITE from Florida (p. 759), a WALSHIID MOTH from Missouri (p. 758), and NORTHERN CORN ROOTWORM from North Carolina (p. 757).

For new county records see page 761.

Special Reports

Survey Methods. Additional Selected References - 1968. Part XXXII. (pp. 763-767).

Distribution of Face Fly. Map. (p. 768).

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NATIONAL WEATHER SERVICE'S 30-DAY OUTLOOK

NOVEMBER 1970

The National Weather Service's 30-day outlook for November is for temperatures to average above seasonal normals in northern border States extending from the Rockies to the Appalachians and also in California and portions of the central and southern Plateau. Below normal averages are indicated for the South and the southern Plains. Elsewhere near normal temperatures are in prospect. Precipitation is expected to exceed normal along the central and north Pacific coast and from the Mississippi Valley to the east coast except for near to below normal in the Northeast. Subnormal precipitation is indicated for the Southwest. In unspecified areas near normal amounts are expected.

Weather forecast given here is based on the official 30-day "Resume and Outlook" published twice a month by the National Weather Service. You can subscribe through the Superintendent of Documents, Washington, D.C. 20250. Price \$5.00 a year.

WEATHER OF THE WEEK ENDING NOVEMBER 2

HIGHLIGHTS: Flood producing rains fell in southwest Texas and nearby parts of Louisiana. The West continued relatively cool, the East mild.

PRECIPITATION: A front stretched across the middle of the Nation from Wisconsin to Texas early in the week. A blocking high pressure area lay east of the front. By midweek, the southern end of the front had drifted only to Louisiana. A snow-storm moved out of the central Rocky Mountains to the central Great Plains. Several inches of snow fell Monday in parts of Nebraska and Kansas; 7 inches at Hays Center in the latter State. Severe thunderstorms, heavy showers, several funnel clouds, and a few tornadoes occurred in the warm moist air east of the front. Five to eight inches of rain fell in some localities in Arkansas on Tuesday forenoon, 8.20 inches at Jessierville, 6.12 inches at Little Fork. Deweyville, Texas, received 17.53 inches in the 24-hour period ending at 7:00 p.m. Central Standard Time and the rain was still falling at that time. Soaking rains occurred Tuesday night over a wide area from the Great Lakes to the Gulf of Mexico. As the far end approached, the southern part of the front swung east to Georgia. It brought rainy weather over a wide band from New York to Georgia. A low, centered over eastern South Dakota, produced snow flurries over the northern Great Plains and rain showers over the central Great Plains. A high in the Far West was accompanied by fair weather. Weather continued on page 762.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

ASTER LEAFHOPPER (Macrosteles fascifrons) - OKLAHOMA - Heavy on small grains in several counties in north-central, northwest, and south-central areas. (Okla. Coop. Sur.).

CORN EARWORM (Heliothis zea) - VIRGINIA - Averaged 15 per 100 sweeps of alfalfa in Page and Orange Counties. Negative in Frederick and Fauquier Counties. (Allen).

GREENBUG (Schizaphis graminum) - SOUTH DAKOTA - Trace, less than 1 infested plant in 200, in winter wheatfield south of Presho, Lyman County. (Jones). KANSAS - Light, 40 per square foot, in field of volunteer wheat. (Bell). OKLAHOMA - Light in rank early planted wheat in Noble County. (Okla. Coop. Sur.).

SPOTTED ALFALFA APHID (Therioaphis maculata) - ARIZONA - Building up in Yuma County. Counts per 100 sweeps of alfalfa ranged 6,000-7,000 in 3 Parker Valley fields October 22; 1,600-2,300 in 2 fields and 3,600 in 1 field in Yuma Valley October 26. (Ariz. Coop. Sur.). KANSAS - Counts per 10 sweeps of alfalfa: 12 in field of 8-inch alfalfa in Pottawatomie County (Bell); 8 in field in Sumner County; up to 5 in 2 fields in Sedgwick County; 18-27 in 2 fields in Harvey County; and none in one field in Cowley County. (Redding). FLORIDA - Nymphs and adults numerous in 100 sweeps of alfalfa at Gainesville, Alachua County. (Mead).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - NEBRASKA - In southeast district, plants averaged 93.0 percent infested, 52.4 percent of stalks broken, and 0.8 percent of ears fallen. In south, plants averaged 84.6 percent infested, 36.0 percent broken, and 1.6 percent of ears fallen. (Keith, Berogan, Oct. 23). KANSAS - Middle to last instars averaged 42 per 10 plants in field of very late-planted corn in Wabaunsee County. Earlier survey during first week in September revealed no signs of infestation by first or second-generation larvae, only eggs and young larvae of third generation. (Bell). Surveyed 3 fields in Sumner County and 8 percent of stalks lodged below ear. (Redding).

SOUTHWESTERN CORN BORER (Diatraea grandiosella) - MISSOURI - Percent infested plants in 5 southwest counties ranged 3.0-7.6, and ranged 0.8-2.0 percent girdled. Total of 50 plants dissected in 5 fields per county. (Munson). ARKANSAS - Surveys showed average of 815 lodged corn plants per acre compared with 517 in 1969. Infestations heavier in early corn compared with late corn. (Boyer). ALABAMA - Reported for first time from Cherokee, Calhoun, and Cleburne Counties. (McQueen, Oct. 23). OKLAHOMA - Lodged 4-6 percent of stalks in several irrigated cornfields checked in Cimarron County. Larvae in overwintering stage. (Okla. Coop. Sur.).

NORTHERN CORN ROOTWORM (Diabrotica longicornis) - NORTH CAROLINA - Adults collected in Caldwell and Alleghany Counties on corn silks August 18 and 19, 1970, by J.R. Bradley. Determined by D.L. Stephan. This is a new State record. (Hunt).

WESTERN CORN ROOTWORM (Diabrotica virgifera) - UTAH - Adults collected from corn at Ogden, Weber County, by L. Rogers July 25. Determined by R.E. White. This is a new county record. (Knowlton).

SORGHUM MIDGE (Contarinia sorghicola) - TENNESSEE - Damaged grain sorghum planted after June 1 in many western areas. Extent of damage not known; however, yield reduction noted. (Johnson).

SMALL GRAINS

CHINCH BUG (Blissus leucopterus) - OKLAHOMA - Heavy numbers destroyed about 30 acres of 70-acre wheatfield at Snyder, Kiowa County. (Okla. Coop. Sur.).

FALL ARMYWORM (Spodoptera frugiperda) - ALABAMA - Larvae heavy; damaged 40-acre oatfield in Etowah County. Destroyed several fields of emerging small grain in Lawrence County. (Sanderson, McClendon, Oct. 23). Many larvae on ryegrass and other temporary grazing crops in Mobile County; treated. (Vickery, Oct. 23).

SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) - MISSISSIPPI - Adults 7.5 per 100 sweeps of Oktibbeha County oats. (Sartor).

APPLE GRAIN APHID (Rhopalosiphum fitchii) - WISCONSIN - Activity increased noticeably; numbers built up and oviposition well underway in Dane County. (Wis. Ins. Sur., Oct. 23). KANSAS - Averaged 20 per square foot in field of volunteer wheat in Pottawatomie County but none in 2 fields of sown wheat. (Bell).

TURF, PASTURES, RANGELAND

NORTHERN MASKED CHAFER (Cyclocephala borealis) - DELAWARE - Grubs very numerous in many areas; heavy injury in some lawns. (Bray).

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - WISCONSIN - Specimen submitted from field near Elderon, Marathon County, verified by R.E. Warner for a new county record. Heavy, 1 per foot, along beach at Whitefish Point and Cave Point, Door County. On October 29, 1 per linear yard at Whitefish Point and few at Cave Point, farther north. (Wis. Ins. Sur.).

CLOVER ROOT CURCULIO (Sitona hispidulus) - KANSAS - Adults per 10 sweeps averaged 17 in field of alfalfa in Pottawatomie County, 1 in field of red clover in Brown County. (Bell).

SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) - KANSAS - Adults per 10 sweeps averaged 4 in field of alfalfa in Pottawatomie County (Bell); 3 in field in Sumner County, up to 1 in 2 fields in Sedgwick County, and 2-3 in 2 fields in Harvey County (Redding).

A WEEVIL (Sciaphilus asperatus) - WISCONSIN - Common on alfalfa in Langlade County. Determined by R.E. Warner. This is a new county record. (Wis. Ins. Sur.).

A WALSHIID MOTH (Walshia miscecolorella) - MISSOURI - Adult collected at lights in Boone County by W.S. Craig. Determined by R.W. Hodges. This is a new State record. (Munson).

BEEET ARMYWORM (Spodoptera exigua) - ARIZONA - Average per 100 sweeps of alfalfa in Yuma County: 45 in Yuma and Gila Valleys, and 400 in Parker Valley. (Ariz. Coop. Sur.).

LYGUS BUGS (Lygus spp.) - ARIZONA - Ranged 60-260 per 100 sweeps of alfalfa in Gila and Yuma Valleys, Yuma County. (Ariz. Coop. Sur.).

A PLANT BUG (Taylorilygus pallidulus) - FLORIDA - Adults 32 in 100 sweeps of alfalfa at Gainesville, Alachua County. (Mead).

PEA APHID (Acyrtosiphon pisum) - VIRGINIA - Increasing, ranged 200-400 per 100 sweeps of alfalfa, in Frederick and Fauquier Counties. (Allen).

SUGAR BEETS

SUGAR-BEET ROOT MAGGOT (Tetanops myopaeformis) - NORTH DAKOTA - Maggots up to 30 (averaged 5) per root in infested fields surveyed in Walsh and Pembina Counties. In 1969, counts in same areas ranged up to 100 (averaged 20) per root. Sugar beet harvesting completed; yields somewhat less than in 1969. (Kaatz).

COLE CROPS

IMPORTED CABBAGEWORM (Pieris rapae) - ALABAMA - Larvae of P. rapae, Trichoplusia ni (cabbage looper), Plutella xylostella (diamondback moth), and Evergestis rimosalis (cross-striped cabbageworm) increasing on cabbage and collards throughout State in commercial and home plantings. Damaging in Jefferson, Elmore, Coosa, and Lee Counties; controls applied. (Johns et al.).

TURNIP APHID (Hyadaphis pseudobrassicae) - ALABAMA - Increased on young turnip greens statewide in commercial plantings and gardens. Medium throughout entire commercial planting in Tuscaloosa County. (Pitts et al., Oct. 23).

GENERAL VEGETABLES

ASPARAGUS APHID (Brachycolus asparagi) - VIRGINIA - Single specimen collected from asparagus at Blacksburg, Montgomery County, October 8, 1970, by W.A. Allen. Determined by L.M. Russell. This is a new State record. (Allen).

DECIDUOUS FRUITS AND NUTS

WALNUT HUSK FLY (Rhagoletis completa) - UTAH - Infested English and black walnuts at Farmington and Sunset, Davis County, and at Salt Lake City, Salt Lake County. Infested 4 English walnuts at Providence, Cache County. This is a new county record. (Knowlton). OREGON - Two infestations in walnut crop in Washington County. Few husks found infested in commercial orchard on Grabhorn Road near Hazeldale. Nuts were extra large variety grafted to Franquette tree. About one gallon of infested walnuts found on ungrafted limb in a Franquette tree in Sherwood area. Infested nuts destroyed by burning. (Baron).

LESSER MEALWORM (Alphitobius diaperinus) - CALIFORNIA - Adults 3-4 per limb on almond trees in one-half acre planting at Encinitas, San Diego County. (Okla. Coop. Rpt.).

NAVEL ORANGEWORM (Paramyelois transitella) - CALIFORNIA - Averaged one larva per nut in 2-acre almond orchard at Bonsall, San Diego County. (Cal. Coop. Rpt.).

BEEF ARMYWORM (Spodoptera exigua) - CALIFORNIA - Larvae 5 per stem of almond nursery stock at Modesto, Stanislaus County. (Cal. Coop. Rpt.).

TWIG GIRDLER (Oncideres cingulata) - MISSISSIPPI - Damage light to Hinds County pecans. (Sartor). ALABAMA - Limbs in Tuscaloosa County girdled and falling from pecan and hickory trees on lawns. Ten to 20 limbs falling from all hickory trees on drives in Little River Mouth Canyon Park in Cherokee County. Lighter on pecan and hickory in Montgomery, Macon, Lee, Crenshaw, and other central counties. (Pitts et al.).

BLACK-MARGINED APHID (Monellia costalis) - ARIZONA - Treatments required on pecan trees at Yuma, Yuma County. (Ariz. Coop. Sur.).

ORNAMENTALS

A SPIDER MITE (Tetranychus canadensis) - FLORIDA - Adults moderate to severe on redbud, Cercis canadensis, at Oakland, Orange County, September 23, 1970. Collected by F.L. Ware. Determined by H.A. Denmark. This is a new State record. (Fla. Coop. Sur.).

FOREST AND SHADE TREES

AN APHID (Pemphigus monophagus) - UTAH - Galls heavy on Populus angustifolia at Garden City, Rich County, August 20 and 22, 1969. Collected by G.F. Knowlton. Determined by H.L.G. Stroyan. This is a new State record. (Knowlton).

MAN AND ANIMALS

SCREW-WORM (Cochliomyia hominivorax) - Three cases reported in U.S. October 25-31, as follows: TEXAS: Maverick 1, Dimmit 1, Lavaca 1. Total of 148 laboratory-confirmed cases reported in portion of Barrier Zone in Republic of Mexico as follows: Sonora 89, Chihuahua 33, Coahuila 9, Nuevo Leon 3, Tamaulipas 14. Total of 24 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 22,918,000; New Mexico 1,150,000; Arizona 2,910,000; California 400,000; Mexico 81,520,000. (Anim. Health Div.).

HORN FLY (Haematobia irritans) - OKLAHOMA - Averaged 100 per head on cattle checked in Payne County. (Okla. Coop. Sur.). MISSISSIPPI - Adults averaged 150 per head on Oktibbeha County cattle. (Sartor).

FACE FLY (Musca autumnalis) - CALIFORNIA - Adults collected from cattle at Sierraville, Sierra County, October 6, 1970, by E.C. Loomis. This is a new county record. (Cal. Coop. Rpt.).

HORSE BOT FLIES (Gasterophilus spp.) - OKLAHOMA - Many eggs on horses checked in Kay County; some adults still alive. (Okla. Coop. Sur.).

BROWN DOG TICK (Rhipicephalus sanguineus) - NEVADA - Heavy in homes, more common than usual, in Boulder City and Las Vegas, Clark County. (Zoller et al.).

BLACK WIDOW SPIDER (Latrodectus mactans) - COLORADO - Populations heavier than previous 3 to 4 years, many entering homes in Fort Collins area of Larimer County. (Harmston).

STORED PRODUCTS

LESSER MEALWORM (Alphitobius diaperinus) - WISCONSIN - Specimens found in hatchery at Verona, Dane County, for a new county record. Determined by L. Bayer. (Wis. Ins. Sur., Oct. 23).

BENEFICIAL INSECTS

A SEED BEETLE (Acanthoscelides aureolus) - UTAH - Adults emerged from seeds of patterson loco (Astragalus pattersoni) collected at Black Rock, Millard County, by H.C. Williams, July 13, 1970. Determined by J.M. Kingsolver. This is a new State record. (Knowlton).

A LADY BEETLE (Coleomegilla maculata) - MISSISSIPPI - Adults aggregating in Oktibbeha and Noxubee Counties. (Sartor).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

EUROPEAN CRANE FLY (Tipula paludosa) - WASHINGTON - Collected 4 males September 22 from Strawberry Point on Lake Whatcom, Bellingham, Whatcom County. (Holmes).

PINK BOLLWORM (Pectinophora gossypiella) - CALIFORNIA - Sterile moth releases of 6,348,733 (83,119,882 to date) October 23-29 at Bakersfield, Kern County. Third larva for season found in gin trash October 21. ARIZONA - Sterile moth releases of 67,500 (1,687,300 to date) at Redington, Pima County; 6 native moths trapped for season total of 55. Boll infestations increased to 20.8 percent. (PPD). Larvae (all stages) up to 4 per boll in top-crop cotton at Wellton, Yuma County. Moderate in okra planting in South Phoenix area, Maricopa County. (Ariz. Coop. Sur.). FLORIDA - Native male moth collected in trap at Key Largo, Monroe County, October 13 by H.S. Creamer. Determined by V.H. Owens. (Fla. Coop. Sur.).

A WHITE-FRINGED BEETLE (Graphognathus leucoloma fecundus) - VIRGINIA - Adult collected on aster at Woodbridge, Prince William County, October 21 by N. Trammell and R. Norris. Determined by R.E. Warner. This is a new county record. (PPD).

HAWAII INSECT REPORT

Turf, Pasture - Larvae of a GRASS WEBWORM (Herpetogramma licarsisalis) light, averaged 3 per square foot, on Bermuda (Cynodon sp.) and Hilo (Paspalum conjugatum) grasses at Hilo, Hawaii. Adults 2-6 per sweep in border mixed stand of grass at golf course and memorial park on windward Oahu; larvae trace in both areas, less than 1 per square yard. (Yoshioka, Kawamura).

General Vegetables - TOMATO PINWORM (Keiferia lycopersicella) larvae severe in 5,000 square feet of old tomato planting at Halawa, Oahu; one or more larvae on every leaf. Damage moderate to older leaves and fruits 3 months ago at this farm. (Kawamura). Larval mines of LEAF MINER FLIES (Liriomyza spp.) heavy in acre of green onion at Waianae, Oahu; adults light. Mines and adults heavy in 5,000 square feet of pumpkin and 0.25 acre of zucchini at Kahului, Maui; 15-25 adults per young leaf. (Miyahira, Kawamura). CORN EARWORM (Heliothis zea) one or more on about 5 percent of mature fruits in 0.25 acre of bell peppers at Halawa. (Kawamura).

Nuts - COCONUT SCALE (Aspidiotus destructor) moderate to heavy on many coconut trees (less than 30 feet tall) at Kaneohe; moderate colonies on 30 percent of fronds on 40 coconut trees at memorial park in same area and on 50 percent of fronds on 25 coconut trees at Hawaii Kai; generally light on same host throughout Waianae. Nymphs and adults of LADY BEETLES (Telsimia nitida and Lindorus lophanthae) light to moderate in these areas of Oahu. (Funasaki, Kawamura).

Forest and Shade Trees - Larvae of a NOCTUID MOTH (Melipotis indomita) heavy on roadside kiawe trees at Puunene and Keawakapu, Maui; heavy under loose bark and in debris at base of monkey-pod trees throughout Kau, Hawaii. Random survey of monkey-pod trees along boulevard stretch at Honolulu revealed 40 percent of larvae were this species and 60 percent were MONKEYPOD MOTH (Polydesma umbricola). Similar survey in mid-August revealed larval percentages of 60 and 40, respectively. (Miyahira et al.).

Beneficial Insects - A DUNG BEETLE (Copris incertus prociduus) moderate at light at Makawao, Maui. Introduced in 1923 to control Haematobia irritans (horn fly). (Miyahira). Larvae of another NOCTUID MOTH (Catabena esula) heavy in 1,000 acres of lantana at South Point, Kau, Hawaii; defoliation severe. Introduced to control lantana. (Yoshioka).

Miscellaneous Insects - Nymphs and adults of a LEAFHOPPER (Protalebrella brasiliensis) heavy in landscape planting of wedelia at Moanalua, Oahu; averaged 2 nymphs and/or adults per leaf. (Kashiwai).

DETECTION

New State Records - AN APHID (Pemphigus monophagus) UTAH - Rich County (p. 759). ASPARAGUS APHID (Brachycolus asparagi) VIRGINIA - Montgomery County (p. 759). NORTHERN CORN ROOTWORM (Diabrotica longicornis) NORTH CAROLINA - Caldwell County (p. 757). A SEED BEETLE (Acanthoscelides aureolus) UTAH - Millard County (p. 760). A SPIDER MITE (Tetranychus canadensis) FLORIDA - Orange County (p. 759). A WALSHIID MOTH (Walshia miscecolorella) MISSOURI - Boone County (p. 758).

New County Records - ALFALFA WEEVIL (Hypera postica) WISCONSIN - Marathon (p. 758). FACE FLY (Musca autumnalis) CALIFORNIA - Sierra (p. 760). LESSER MEALWORM (Alphitobius diaperinus) WISCONSIN - Dane (p. 760). NORTHERN CORN ROOTWORM (D. longicornis) NORTH CAROLINA - Alleghany (p. 757). SOUTHWESTERN CORN BORER (Diatraea grandiosella) ALABAMA - Calhoun, Cherokee, and Cleburne (p. 757). WALNUT HUSK FLY (Rhagoletis completa) UTAH - Cache (p. 759). A WEEVIL (Sciaphilus asperatus) WISCONSIN - Langlade (p. 758). WESTERN CORN ROOTWORM (Diabrotica virgifera) UTAH - Weber (p. 757). A WHITE-FRINGED BEETLE (Graphognathus leucoloma fecundus) VIRGINIA - Prince William (p. 760).

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Part XXXII

Additional copies of Parts I through XXXII of this bibliography are available from Economic Insect Survey and Detection.

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Especially H. dissidens (Tucker), in tests in Georgia

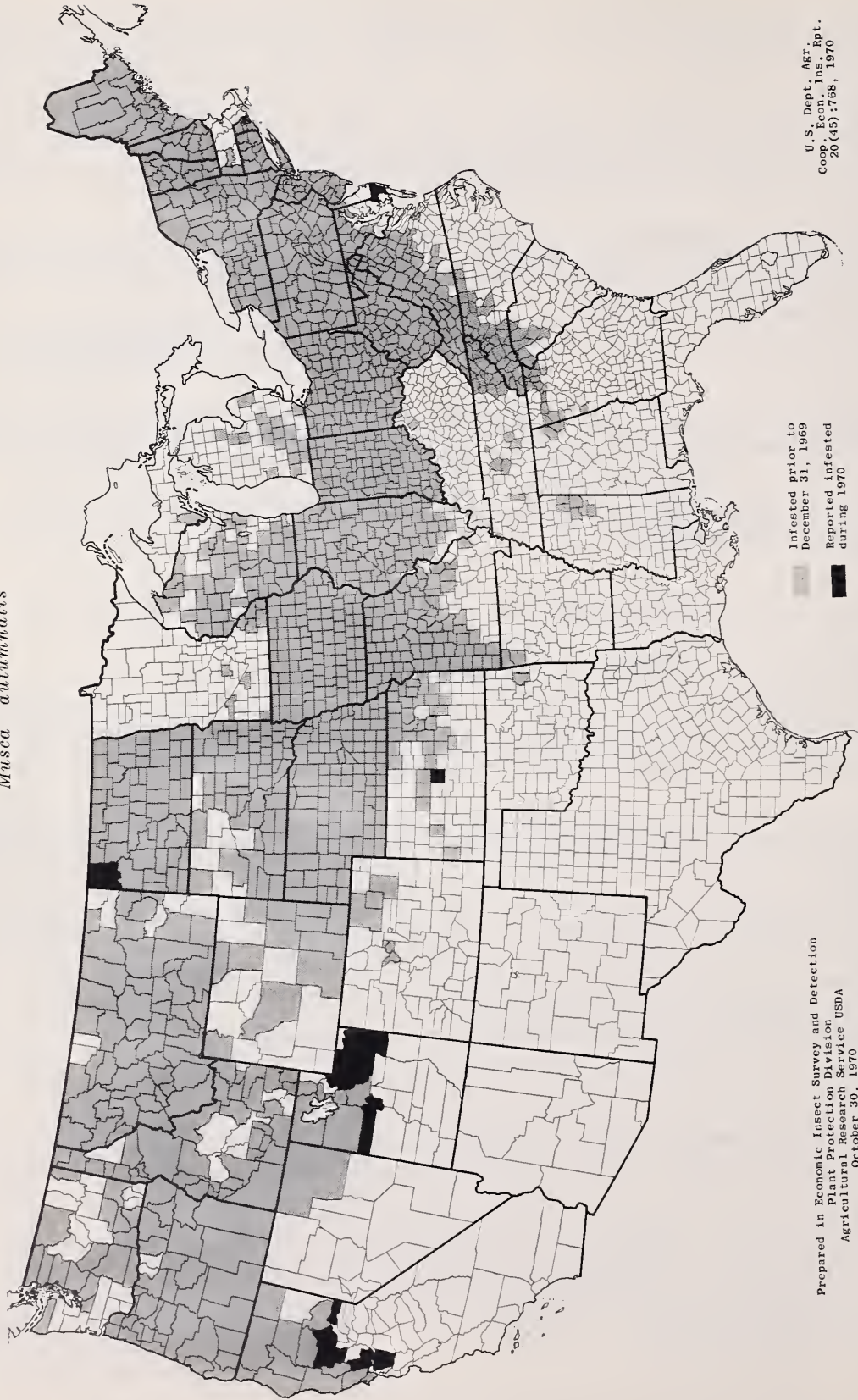
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Distribution of Face Fly

Musca autumnalis



Infested prior to
December 31, 1969
Reported infested
during 1970


Prepared in Economic Insect Survey and Detection
Plant Protection Division
Agricultural Research Service USDA
October 30, 1970

U.S. Dept. Agr.
Coop. Econ. Ins. Rpt.
20 (45):768, 1970



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