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*Cooperative*  
**ECONOMIC INSECT  
REPORT**

*Issued by*

**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 clearinghouse and does not assume responsibility for accuracy of the material.

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Hyattsville, Maryland 20782

## COOPERATIVE ECONOMIC INSECT REPORT

### HIGHLIGHTS

#### Current Conditions

WINTER GRAIN MITE heavy on wheat in south-central Oklahoma. (p. 897).

#### Detection

New State records include a SPRINGTAIL from North Dakota, a TUBER FLEA BEETLE from California (p. 897), and a PYRALID MOTH from Indiana (p. 898).

For new county records see page 899.

#### Special Reports

Mexican Fruit Fly. Selected References 1966-1969. (p. 901).

Distribution of Southern Corn Rootworm. Map. (p. 902).

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Reports in this issue are for week ending December 12 unless otherwise indicated.

CONTENTS

Special Insects of Regional Significance.....897

Insects Affecting

Small Grains.....897	Citrus.....897
Turf, Pastures, Rangeland.....897	Ornamentals.....897
Forage Legumes.....897	Forest and Shade Trees.....898
Potatoes, Tomatoes, Peppers.....897	Man and Animals.....898

Beneficial Insects.....898

Federal and State Plant Protection Programs.....898

Hawaii Insect Report.....899

Detection.....899

Light Trap Collections.....900

Corrections.....900

Mexican Fruit Fly. Selected References 1966-1969.....901

Distribution of Southern Corn Rootworm. Map.....902

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WEATHER BUREAU'S 30-DAY OUTLOOK

MID-DECEMBER 1969 TO MID-JANUARY 1970

The Weather Bureau's 30-day outlook for mid-December to mid-January is for temperatures to average above seasonal normals over the western half of the Nation and below normal over the eastern half with greatest departures in Middle and South Atlantic States. Precipitation is expected to exceed normal in the Northeast as well as over the central and north Pacific coast. Subnormal amounts are indicated for the southern Plateau, and from the Rockies to the Appalachians except for near normal totals in the southern Plateau, the gulf coast, and Great Lakes regions. Elsewhere near normal precipitation is 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 the Superintendent of Documents, Washington, D.C. 20250. Price \$5.00 a year.

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WEATHER OF THE WEEK ENDING DECEMBER 15

HIGHLIGHTS: Winter storms brought rain accompanied by high winds to the Pacific coast with snow above about 5,000 feet and heavy snow to parts of the Great Lakes region and the Northeast.

PRECIPITATION: Several disturbances brought stormy weather to much of the Nation last week. Precipitation fell in 40 States Tuesday forenoon. Light rain fell along the Pacific coast, in the southern Great Plains, the lower Mississippi River Valley, along the Gulf of Mexico from Texas to Florida, and in the Atlantic Coast States. Snow fell from the interior sections of the Pacific States across the Rockies to the upper Great Lakes. A number of tornadoes occurred in the central Florida Peninsula on Wednesday forenoon. A storm off the Pacific coast intensified after midweek. Winds gusting to more than 100 m.p.h. battered coastal areas. Heavy rain fell along the coast and heavy snow fell in the mountains above 2,000 feet in portions of the Northwest and above 5,000 feet in California. Cape Blanco, where winds gusted to about 110 m.p.h., received over 5 inches of rain Thursday afternoon and evening. Another storm brought generous precipitation to the Northeast during most of the week with some heavy snow on the weekend. Weather of the week continued on page 900.

## SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

GREENBUG (Schizaphis graminum) - KANSAS - Average per linear foot of wheat by county on November 21 and 28 as follows: Montgomery 5, Cowley 15, Sedgwick 5, and negative in Elk, Chautauqua, Woodson, Greenwood, Harvey, and Sumner. (Redding). OKLAHOMA - Average per linear foot of wheat, 25 in Comanche County and 18 in Tillman County. Moderate in Cotton County. (Okla. Coop. Sur.). NEW MEXICO - This species and Rhopalosiphum maidis (corn leaf aphid) ranged up to 1 per linear foot in Roswell area, Chaves County. (Mathews).

## SMALL GRAINS

WINTER GRAIN MITE (Penthaleus major) - OKLAHOMA - Heavy on wheat in several south-central areas. First of season. (Okla. Coop. Sur.).

## TURF, PASTURES, RANGELAND

CHINCH BUG (Blissus leucopterus) - INDIANA - Noneconomic in 23 grass and soil samples in northwest, west-central, northeast, and east-central districts. Averaged 24 per square foot at one location east of Atkinson in Benton County, November 26 to December 2. (Meyer).

## FORAGE LEGUMES

THREE-CORNERED ALFALFA HOPPER (Spissistilus festinus) - MISSOURI - Declined. Averaged 2 per 100 sweeps of alfalfa, and girdled plants ranged 4-12 percent in New Madrid and Pemiscot Counties. (Munson).

PEA APHID (Acyrtosiphon pisum) - MISSOURI - Declined. Ranged 35-200 per 100 sweeps of alfalfa in southeastern area. (Munson).

A SPRINGTAIL (Sminthurus dorsalis) - NORTH DAKOTA - Ranged up to 250 per 100 sweeps on irrigated alfalfa in Oliver County; no damage evident. Collected May 22, 1969, by W.J. Brandvik. Determined by D.L. Wray. This is a new State record. (Brandvik).

## POTATOES, TOMATOES, PEPPERS

TUBER FLEA BEETLE (Epitrix tuberis) - CALIFORNIA - Suspected specimens collected on beans at Fort Jones, Siskiyou County, on June 6, 1968, by R.P. Allen and R. Richards. Additional collections in 1969 on tomato in same location. Determined this species by T.N. Seenó. Currently found on potatoes at Klamath River and Hornbrook in Siskiyou County and Crescent City, Fort Dick, and Smith River in Del Norte County. This is a new State record. (Cal. Coop. Rpt.). Also found in Colorado, Nebraska, Oregon, Washington, Wyoming, and British Columbia. (PPD).

## CITRUS

SIX-SPOTTED MITE (Eotetranychus sexmaculatus) - CALIFORNIA - Heavy on citrus at Oceanside, San Diego County. (Cal. Coop. Rpt.).

## ORNAMENTALS

ARMORED SCALES - FLORIDA - Nymphs and adults of Lepidosaphes maskelli on 90 percent of 939 Juniperus chinensis in nursery at Dover, Hillsborough County. (Vaughan). Control information requested. (Fla. Coop. Sur.). All instars of Pseudaonidia clavigera on 100 camellia plants in nursery at Englewood, Charlotte County. (Lamb).

BROWN SOFT SCALE (Coccus hesperidum) - CALIFORNIA - Heavy on strawberry trees, Arbutus unedo, at Taft, Kern County. (Cal. Coop. Rpt.).

PINE WEBWORM (Tetralopha robustella) - VIRGINIA - Damaged pines in residential area at Falls Church, Fairfax County. (Allen).

TEA SCALE (Fiorinia theae) - FLORIDA - All instars on 10 percent of 300 camellia plants in nursery at Orlando, Orange County (Van Pelt); and nursery at Gainesville, Alachua County. (Graham).

#### FOREST AND SHADE TREES

JEFFREY PINE BEETLE (Dendroctonus jeffreyi) - CALIFORNIA - Local infestations of about 75 trees in 2-acre area appearing in Sequoia National Forest. (Cal. Coop. Rpt.).

A PYRALID MOTH (Herculia intermedialis) - INDIANA - Larvae damaged spruce trees on lawn. Collected July 4, 1969, in West Lafayette, Tippecanoe County. Determined by D.C. Ferguson. This is a new State record. (Walker). Also found in Connecticut, Delaware, Illinois, Maryland, Massachusetts, New York, and Rhode Island. (PPD).

A RHOPALID BUG (Leptocoris rubrolineatus) - NEVADA - Collected from Acer negundo (boxelder) at Mina, Mineral County, October 20, 1969, by R.C. Bechtel. This is a new county record. (Bechtel).

TWIG GIRDLER (Oncideres cingulata) - ARKANSAS - Heavier than normal in northwest area; mainly on hickory and ash. (Boyer).

CALIFORNIA OAKWORM (Phryganidia californica) - CALIFORNIA - Larvae, pupae, and adults heavy on cork oak trees at Chula Vista, San Diego County. (Cal. Coop. Rpt.).

#### MAN AND ANIMALS

SCREW-WORM (Cochliomyia hominivorax) - No cases reported in U.S. December 7-13. Total of 56 laboratory-confirmed cases reported in portion of Barrier Zone in Republic of Mexico November 30 to December 6 as follows: Sonora 47, Chihuahua 5, Tamaulipas 4. Total of 3 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 1,218,000; Mexico 103,170,000. (Anim. Health Div.).

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Reported heavy on cattle in Cotton County. (Okla. Coop. Sur.).

BROWN RECLUSE SPIDER (Loxosceles reclusa) - ARKANSAS - Single specimen submitted from Conway County. (Barnes). This is a new county record. (PPD).

#### BENEFICIAL INSECTS

AN ICHNEUMON WASP (Bathyplectes anura) - INDIANA - A parasite of Hypera postica (alfalfa weevil) recovered May 7 for first time since release in 1965 in Harrison County. Determined by M.C. Wilson and confirmed by R.J. Dysart. (Wilson).

#### FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - TENNESSEE - Surveys in 8 south-central counties negative. (PPD).

KHAPRA BEETLE (Trogoderma granarium) - TENNESSEE - Negative in boxcars on clean-up track in Davidson County. (PPD).

MEXICAN FRUIT FLY (Anastrepha ludens) - ARIZONA - Trappings completed end of October in Pima and Santa Cruz Counties. Surveys negative. (PPD).



MEDITERRANEAN FRUIT FLY (Ceratitis capitata) - ARIZONA - Trappings completed end of October in Pima and Santa Cruz Counties. Surveys negative. (PPD).

PINK BOLLWORM (Pectinophora gossypiella) - NEW MEXICO - One moth collected in hexalure trap; 2 Eddy County cottonfields had 100 percent of bolls infested. (Mathews).

PISTACHIO SEED CHALCID (Megastigmus pistaciae) - CALIFORNIA - Surveys now show ornamental pistachio seed in other areas infested with a chalcid tentatively identified as same species found only at Chico, Butte County. Seed collected from Pistacia chinensis in Santa Ysabel and Oak Grove show 40-60 percent infestation, also heavy in Irvine area, Orange County. Ornamental pistachio widely used statewide. (Cal. Coop. Rpt.).

RANGE CATERPILLAR (Hemileuca oliviae) - NEW MEXICO - Egg clusters found throughout most of rangeland areas between Raton and Farley in Colfax County. Small numbers of both male and female moths flying. (Mathews, Nielsen).

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#### HAWAII INSECT REPORT

General Vegetables - LEEK MOTH (Acrolepia assectella) larvae heavy, up to 5 per leaf, in small backyard planting of green onions at Hilo, Hawaii. Damaged 75 percent of leaves. (Matayoshi). Larvae and adults of DIAMONDBACK MOTH (Plutella xylostella) medium in 0.25 acre of young and mature head cabbage at Anahola, Kauai. (Ikehara). All instars of GREEN PEACH APHID (Myzus persicae) light, 3-10 per leaf in one acre of bell pepper at Omapio, Maui. About 10 percent of adults parasitized by a wasp. (Miyahira). All instars of TARO LEAFHOPPER (Tarophagus proserpina) light, ranged 1-3 per leaf whorl; and WATERLILY APHID (Rhopalosiphum nymphaeae) generally moderate, heavy in spots, up to 100 per leaf, in 1 acre of taro at Waihee, Maui. Adults of a PREDACIOUS CAPSID BUG (Cyrtorhinus fulvus) light amid leafhoppers. (Ah Sam, Miyahira). All instars of GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) heavy on seedling eggplants, moderate in old field of eggplants, at Waianae, Oahu; light in snap beans in same area. Negligible on both crops at Waimanalo. Larvae of BEET ARMYWORM (Spodoptera exigua) light to moderate, infested 1-4 leaves of green onions at Waianae. Adults of LEAF MINER FLIES (Liriomyza spp.) heavy in 2 acres of cantaloup, 5-30 per leaf, at Waianae. Larvae heavy on okra and pumpkin; light on daikon, mustard cabbage, and white-stem cabbage in same area. All instars light at Waimanalo. (Funasaki).

Fruits and Nuts - FLORIDA RED SCALE (Chrysomphalus aonidum) moderate, up to 20 per square inch, on 40 coconut trees at Kihei and Kahului, Maui. (Miyahira).

Miscellaneous Insects - CLUSTER FLY (Pollenia rudis) up to 50 per square foot on walls of homes; annoying at Volcano, Waimea, Kona, and Kohala, Hawaii. (Kobayashi).

#### DETECTION

New State Records - A PYRALID MOTH (Herculia intermedialis) - INDIANA - Tippecanoe County (p. 898). A SPRINGTAIL (Sminthurus dorsalis) NORTH DAKOTA - Oliver County (p. 897). TUBER FLEA BEETLE (Epitrix tuberis) CALIFORNIA - Siskiyou County (p. 897).

New County Records - A BILLBUG (Sphenophorus aequalis ochreus) - NEVADA - Collected at Soldier Meadows, Humboldt County, at 4,400 feet elevation July 9, 1969, by R.C. Bechtel. (Bechtel). BROWN RECLUSE SPIDER (Loxosceles reclusa) ARKANSAS - Conway (p. 898). A RHOPALID BUG (Leptocoris rubrolineatus) NEVADA - Mineral (p. 898).

#### LIGHT TRAP COLLECTIONS

FLORIDA - Gainesville, BL, 12/5-11 - Armyworm (Pseudaletia unipuncta) 5, black cutworm (Agrotis ipsilon) 3, granulate cutworm (Feltia subterranea) 9.

#### CORRECTIONS

CEIR 19(5):59 - Euplectrus plathypenae (a braconid) should be Euplectrus plathypenae (a eulophid wasp).

CEIR 19(23):400 - A CARPOSINID MOTH (Bondia commonana) ... should read A CARPOSINID MOTH (Bondia comonana).

CEIR 19(47):843, 846, 847 - A LABIDURID EARWIG (Euborellia cincticollis) should be A CARCINOPHORID EARWIG (Euborellia cincticollis).

CEIR 19(49):859, 862, 863 - A BIRD BUG (Haematosiphon inodorus) should be POULTRY BUG (Haematosiphon inodorus).

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Weather of the week continued from page 896.

TEMPERATURE: Temperatures averaged above normal over most of the Nation. Most of New England averaged 10 to 18° warmer than normal. The lower Missouri River Valley and most of the Deep South averaged cooler than normal. In Montana, this was the 6th consecutive week with above normal average temperatures. In Pennsylvania, it was the first week with above-normal temperature averages after 8 consecutive cool weeks. Most of the West and the Northeast averaged much warmer than the previous week. Omaha, Nebraska, averaged 10° cooler than a week ago. Subfreezing temperatures occurred as far south as central Texas and the Florida Panhandle. Tallahassee registered 29° on Saturday morning. Temperatures dropped to below zero on most mornings in the central Rocky Mountains, on several mornings in the northern Rockies, and in the extreme northern Great Plains in one or more mornings late in the week. Afternoon temperatures ranged from the 20's along the northern border to the 60's in the South except in southern Texas where they reached the low 70's on a few days in the latter part of the week and in southern Florida where afternoon temperatures climbed to the 70's on most afternoons. Fort Myers registered 81° on Tuesday afternoon. (Summary supplied by Environmental Data Service, ESSA.)

MEXICAN FRUIT FLY  
Anastrepha ludens (Loew)

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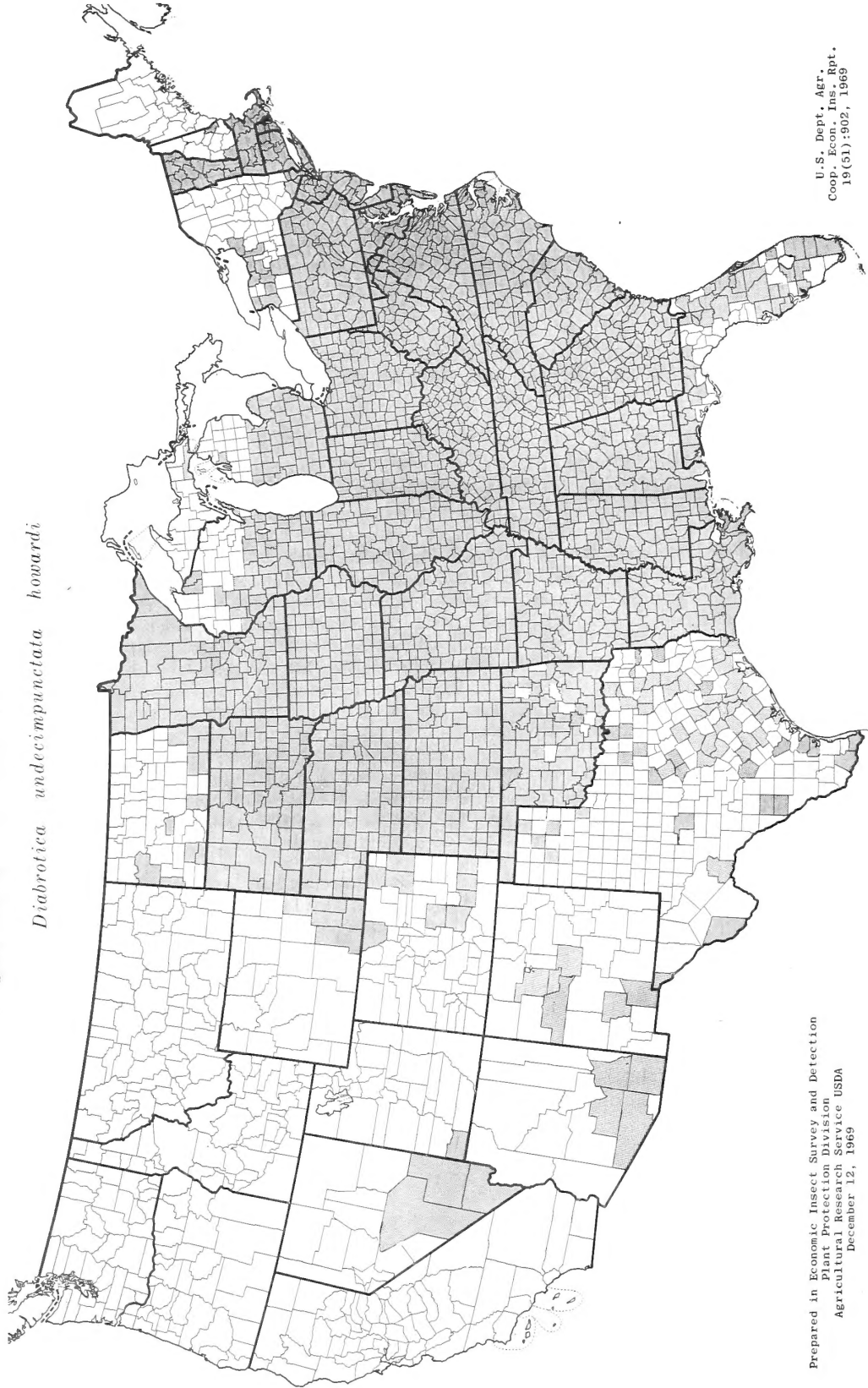
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Prepared in Plant  
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# Distribution of Southern Corn Rootworm

*Diabrotica undecimpunctata howardi*



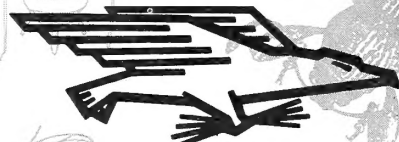
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