

THE INSECT RECORD FOR OKLAHOMA, 1938

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THE MORE IMPORTANT INSECT PESTS

Grasshoppers were the most serious insect pest. The following species were dominant in 1938: *Melanoplus packardii* Scudder, *M. bivittatus* (Say), *M. mexicanus* Sauss., *M. foedus* Scudder, *Aulocera elliotti* (Thomas), and *Acoloplus turnbulli bruneri* Caud. The first four were found generally over the entire State except the Panhandle counties. *Dissosteira longipennis* Thomas, migrated into the latter section late in the season. *M. mexicanus* was dominant in Kay and Grant counties. The infestation was very severe in Beckham, Washita, Harmon, Greer, Kiowa, Jackson, and Tillman counties. It was severe in all or parts of Cimarron, Texas, Beaver, Harper, Woods, Alfalfa, Grant, Kay, Ellis, Woodward, Roger Mills, Custer, Caddo, Grady, Comanche, Cotton and Jefferson counties. Much of the central and all of the eastern parts of the State were either free of serious infestation or had local damage.

The army worm, *Cirphis unipuncta* Haworth, occurred for the second year in succession over about the same territory infested in 1937 but in general was not so injurious except locally. When present in sufficient numbers, however, it caused more damage to wheat than normally because of a severe infection of orange leaf rust. This disease destroyed the leaves, thus forcing the worms to feed on the heads much earlier than would otherwise have been the case.

The wheat white grub, *Phyllophaga lanceolata* (Say), occurred in destructive numbers over much of the western part of the State and was particularly severe in Harper, Woods, Major, Blaine, Grant, Garfield, Kay, Noble, Kingfisher, Logan, Canadian, Oklahoma, Jackson, Tillman, Comanche and Cotton counties. Many thousands of acres were destroyed after several plantings.

The Boll Weevil, *Anthonomus grandis* Boh, began to injure squares in June in the southeastern part of the State. By late July the infestation in McCurtain county was still "spotted" but some fields had 50 to 60 per cent of the squares infested. C. F. Stiles reported in "The Insect Pest Survey" of September 1938, "Infestation has increased very rapidly throughout the southeastern quarter of the State, . . . Weevils more numerous this season in southeastern Oklahoma than since 1935, and perhaps worse than since 1933." In the same publication E. E. Ivy reported that between 70 and 80 per cent of the squares were infested in all fields examined. Forty per cent of the bolls had one or more eggs, larvae or pupae in them and between 10 and 15 per cent of the locks were destroyed. September 20 it was much more abundant in Payne county than since 1935.

The cotton leafworm, *Alabama argillacea* Hbn., first appeared July 16 in Garvin county. August 31 it was present generally in all the cotton producing areas of Oklahoma. It appeared in the Red River bottom areas July 24. By late September much of the cotton over the State was defoliated.

The cotton bollworm, *Heliothis obsoleta* Fabr., began to be noticed in McCurtain county late in July. August 21 it was very numerous with infestations ranging from 5 to 30 per cent in some fields.

The wheat mite, *Tetranychina tritici* Ewing, was again present in injurious numbers in some of the southwestern counties, where rainfall was below normal.

The chinch bug, *Blissus leucopterus* (Say) was more abundant than the previous year but was not in outbreak numbers except locally.

FRUIT AND NUT INSECTS

Acrobasis caryae Grote, pecan case bearer.

Okemah, June 23.

Ancylis, sp., strawberry leaf roller.

Sapulpa, May 7 (young berry).

Aspidiotus perniciosus Comstock, San Jose' scale.

Oklahoma City, Feb. 8 (peach); Tulsa, Nov. 3; Wister, June 24.

Catocala viduata Guen., alligator worm.

Common on pecans near Stillwater.

Chrysobothris femorata (Oliv.), flat-headed apple tree borer.

Antlers, Feb. 8 (pecans); Okmulgee, Mar. 24 (apple); Stuart, Apr. 11 (apple); Tulsa, Dec. 6, 1937 (apple and cherry).

Canker worm.

Bixby, Apr. 29 (apple).

Conopia exitiosa Say, peach tree borer.

Cleveland, Oct. 12; Chelsea, Dec. 9, 1937; Crowell, Feb. 25; Owasso, Aug. 26; Ponca City, Oct. 12; Vian, Aug. 9; Welch, Jan. 13.

Conotrachelus nenuphar Hbst., plum curculio.

Tulsa, Oct. 10 (peach).

Datana integerrima G. & R., walnut datana.

Bartlesville, Apr. 29; Fittstown, Aug. 5; Harrah, Feb. 1; Muskogee, Dec. 17, 1937; Okemah, Apr. 25; Tonkawa, Mar. 8; Tulsa, July 5; Wynnewood, May 26. Not severe, stripping rare. Largely controlled by egg parasites of which *Trichogramma pretiosum* Riley was the most important.

Diastrophus nebulosus O. S., gall.

McAlester, Oct. 15 (youngberry).

Mealy bug.

Bixby, Jan. 6 (pecans).

Saperda candida Fab., round-headed apple tree borer.

Red oak, May 12.

Scolytus rugulosus Ratz., shot hole borer.

Frederick, Mar. 14 (pecan).

Termites.

Carnegie, Apr. 22 (peach); Ringling, Dec. 21, 1937 (fruit trees).

HOUSEHOLD INSECTS

Anthrenus scrophulariae (L.), carpet beetle.

Eldorado, Feb. 2; Elk City, Jan. 3; El Reno, Nov. 26.

Ants.

Carnegie, June 29; Enid, Jan. 7, 12; Geary, Aug. 30; Muskogee, May 20.

Blatella germanica (Linne), German cockroach.

Hydro, Dec. 10, 1937; Seminole, Feb. 23.

Cimex lectularius Linn., bed bug.

Oklahoma City, May 28.

Cockroaches.

Clayton, Nov. 23; Ketchum, Sept. 16; Lexington, June 27; Oklahoma City, Sept. 8; Tulsa, July 20; Vinita, May 4.

Lepisma saccharina Linn., silver fish.

Davis, June 10; Okeene, July 28; Perry, May 28; Wagoner, Oct. 5.

Pogonomyrmex barbatus var. *molefaciens* Emery, red harvester ant.

Canton, May 31; Clinton, July 20; Comanche, April 28; Geary, June 29; McAlester, Sept. 27; Oklahoma City, Sept. 19; Ralston, June 3; Terrel, Feb. 21; Tonkawa, Mar. 10.

Polistes canadensis var. *annularis* L., paper wasps.

This and allied species were unusually abundant in Oklahoma in the late summer and early fall of 1938. Large numbers of individuals seeking shelter for hibernation caused considerable concern in buildings over the State. The nests are more numerous than they have been in many years.

Pseudococcus longispinus (Targ.), mealy bug.

Longdale, May 24; Lookeba, Apr. 8; (on house plants).

Tenebriodes mauritanicus (L.), cadelle.

Cloud Chief, Mar. 26 (porch).

Termites.

Ada, Jan. 27; Altus, Nov. 28; Amorita, Aug. 26; Arnett, June 13; Broken Arrow, June 20; Checotah, June, 20; Claremore, Apr. 25; Clinton, Aug. 20, Nov. 4; Edmond, Feb. 16; Elk City, July 1; Enid, May 20, Dec. 17, 1937; Guymon, Jan. 12; Ketchum, Aug. 20; Konawa, July 19; Lindsay, Dec. 21; Manitou, Apr. 25; Medford, Oct. 17, Nov. 14; Nicoma Park, Mar. 22, Apr. 23; Norman, July 6; Nowata, Apr. 14, May 20; Oklahoma City, Dec. 23, 1937, Mar. 16, Mar. 29, May 24, 31, Dec. 9; Okmulgee, Apr. 14; Pauls Valley, May 23; Rocky, Mar. 24; Sand Springs, Jan. 3; Sharon, Feb. 18; Shawnee, Apr. 14; Sentinel, Dec. 16; Snyder, May 4; Sperry, Apr. 28; Tulsa, Mar. 23, Apr. 22, June 15, Aug. 17; Waynoka, Dec. 1, 1937; Weleetka, May 31.

VEGETABLE INSECTS

Anasa tristis De Geer, Squash bug.

Claremore, July 11; Perry, Aug. 20; Pryor, July 12; Tulsa, Mar. 8; Vinita, July 12.

Blister beetles, (sp. unknown).

Hammon, June 10; Perry, May 28; Stigler, July 28; Wynnewood, June 17.

***Epicauta vittata* Fab., striped blister beetle.**

Earlsboro, June 23.

***Leptinotarsa decimlineata* Say., potato beetle.**

In southwestern part of State, September 20 on egg plant. According to C. F. Stiles occurred in unusually large numbers throughout eastern part of State on potato in May.

***Ligyrus gibbosus* De G., carrot beetle.**

Abundant in Woods and Kay counties. Some injury to gardens.

***Macrobostis torosa* (Lec.)**

Tulsa, May 4.

***Murgantia histrionica* (Hahn), harlequin bug.**

Reported by Stiles to be common in the southeastern part of the State Mar. 25; Cloud Chief, June 29.

***Paratrioza cockerelli* (Sulc.), tomato psyllid.**

Stillwater, Apr. 15 (greenhouse tomatoes).

***Tetranychus telarius* (Linn.), red spider.**

Britton, July 28, (Beans).

Bagworms.

El Reno, July 22.

***Blepharida rhots* (Forst.), sumac flea beetle.**

Oklahoma City, April 7; Sand Springs, Apr. 18.

***Caryomyia caryaecola* O. S., leaf gall on hickory.**

Coalgate, Oct. 10.

***Chrysobothris femorata* (Oliv.), flat-headed apple tree borer.**

El Reno, Jan. 21; Hydro, Jan. 3; Oilton, May 24; Stuart, April 11, (apple).

***Kermes* spp.**

Henryetta, Okmulgee, May 12 (oak).

***Dilachnus thujafilinus* (Del. G.), arbor vitae aphid.**

Edmond and Stillwater, May 20. Reported by Dahms to be present in southwestern Oklahoma, Mar. 26.

***Monochamus notatus* (Drury), Southern pine sawyer.**

Okmulgee, Dec. 6, 1937, Dec. 9, 1937.

***Plectrodera scalator* Fab., cottonwood borer.**

N. D. Wygant reports in the Insect Pest Survey for September, 1938, "Extensive damage being done to cottonwood . . . in western Oklahoma."

***Scolytus rugulosus* Ratz., Fruit tree bark beetle.**

Ponca City, Nov. 28; Lindsay, Dec. 31.

Termites.

Cleo Springs, Mar. 24, (elm); Shawnee, Aug. 12.

Tuberculatus ulmifolii (Monell.), elm leaf aphid.

Wewoka, May 2.

Tetranychus telarius (Linn.), red spider.

Stillwater, Oct. 7 (evergreen).

FIELD CROP INSECTS

Aphis maidis Fitch, corn leaf aphid.

Abundant September 20 in southwestern part of State on grain sorghums.
In Payne County scarce.

Blissus leucopterus (Say), chinch bug.

Bristow, May 4; Britton, April 28; Choctaw, Aug. 24; Durant, Aug. 5;
Ringling, Oct. 21; Roff, June 8; Stroud, April 30.

Chaetocnema pulicaria Melsh., corn flea beetle.

Vinita, June 20 according to E. V. Walter in the July issue of the Insect
Pest Survey for 1938.

Chorizagrotis auxiliaris Grote, army cutworm.

Kiowa and Tillman counties, Mar. 28.

Diatraea grandiosella Dyar, southwestern corn borer (on grain sorghum)

Altus, Nov. 29, 1937; Blair, Dec. 8, 1937; Hydro, Aug. 31; Sayre, Nov.
29, 1937.

Euscelis exitosus (Uhler), a leafhopper.

Geary, Jan. 3 (wheat).

Euxoa tessellata (Harris), striped cutworm.

Frederick, Feb. 28.

False wireworms.

A severe outbreak in the vicinity of Woodward, and in Harper county,
where much wheat was damaged.

Heliothis obsoleta Fab., corn earworm.

Not so abundant as in 1937. Blackwell, Aug. 5.

Illinoia pisi Kalt., pea aphid.

Common on alfalfa in southwestern Oklahoma, Mar. 26.

Meromyza americana Fitch, wheat stem maggot.

Claremore, May 16.

Phyllophaga lanceolata (Say), wheat white grub.

Blackwell, June 17; Chattanooga, Feb. 4; Cherokee, Mar. 5; Edmond,
June 30; Kingfisher, Apr. 6; Loyal, April 6; Newkirk, May 28.

Phytophaga destructor Say, Hessian fly.

According to E. T. Jones in the Insect Pest Survey for August 1938 it
was general, but the infestation was very light. Survey made in north-
ern Oklahoma.

Pogonomyrmex barbatus var. *molefactens* Emery, red harvester ant.

Guthrie, Oct. 14; Ralston, Mar. 24 (alfalfa).

Psyllus seriatus Reut., cotton flea hopper. Not particularly injurious in 1938.

Tetranychina tritici Ewing, wheat mite.

Lawton, June 6. Common in wheat in southwestern part of State during last week in April and first 10 days of May.

Toxoptera graminum Rondani., green bug.

Colony, Apr. 15; Coyle, May 20 (oats); Perkins, May 16; Willow, Apr. 28. Also reported from Harmon and Greer counties Apr. 30.

Wireworms.

Eufaula, Mar. 16 (corn); Newkirk, June 10 (wheat).

FLOWERS

Anthrenus verbasci (L.), carpet beetle.

Oklahoma City, May 17.

Diabrotica duodecimpunctata (Fab.), twelve-spotted cucumber beetle.

This species was unusually abundant in the fall of 1938 and caused considerable injury to flowers, especially chrysanthemums.

Termites.

Ardmore, Feb. 1 (Chrysanthemums).

Tetranychus telarius (Linn.), red spider.

Drumright, July 7 (snapdragons); Oklahoma City, July 26 (dahlias and roses).

ANIMAL PARASITES

Argas persicus Oken, blue bug.

Calvin, Oct. 31; Cordell, Sept. 21; Reydon, June 22; Weatherford, Aug. 25.

Cochliomyia americana C. and P., screw worm.

Bartlesville, Aug. 20.

Echidnophaga gallinaceae (West) sticktight flea.

Snow, Aug. 25.

Haematopinus suis Linn., hog louse.

Minco, Nov. 19.

Melophagus ovinus Linn., sheep tick.

Dustin, Apr. 22.

Rhipicephalus sanguineus Latr. brown dog tick.

Okmulgee, Feb. 5.

MISCELLANEOUS

Acanthacephala femorata Fabr., a coreid bug.

Perry, Aug. 11.

Anas junius Drury, dragon fly.

Ripley, May.

Ohaoborus spp., phantom midges.

Tulsa, Oct. 11 (water system). These larvae were reported to be very numerous in the settling tanks in municipal water systems throughout the State.

Eraz aestuans Linne', robber fly.

Perry, Aug. 11.

Galleria mellonella Linn., wax moth.

Chelsea, Dec. 28, 1937; Hennessey, Sept. 6.

Papilio cresphontes Cramer, giant swallowtail.

Ponca City, June 14.

Pseudomops septentrionalis Heb., cockroach.

Oklahoma City, Apr. 18, (intercepted on vegetable shipment).

Hermetia illucens Linne', soldier fly.

Westville, Aug. 6.

Samia cecropia (L.) giant silkworm moth.

Oklahoma City, July 5.