THE INSECT PEST RECORD FOR OKLAHOMA, 1942 AND 1943

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Grasshoppers, Melanoplus spp.

1942. The following is taken from the annual report (typewritten) of C. F. Stiles and J. M. Maxwell, state leaders in grasshopper control. The heaviest infestation occurred in Texas County where 90 tons of bait were used as compared to 66 tons in Tillman County and 279 tons for the entire state. The infestation was localized in the panhandle counties—Texas, Cimarron, and Beaver in the order listed—and in the southwestern counties—Kiowa, Tillman, Greer, Comanche, Beckham, and Harmon in the order listed. The above rating is based on the number of acres baited, not tons of bait used. The two most destructive species were Melanoplus mexicanus (Sauss.) and M. Divittatus (Say).

1943. "The state-wide grasshopper outbreak that started in 1935 seemed to have reached a peak in 1938 and has gradually declined since that date. In 1943 the damage was less than it has been in any year since 1934. Only small areas were baited in Grant, Alfalfa, Kiowa, and Tillman Counties."—C. F. Stiles. "About 2000 pounds of bait were spread, most of this being in Grant and Alfalfa Counties. . . About 50 farmers used bait on about 2000 acres."—Ephriam Hixson.

Chinch bugs, Blissus leucopterus (Say)

1942. No chinch bug survey was made. However, in Comanche County more intensive studies showed a comparatively low mortality in both bunch grass and sorghum stubble, 1.25 per cent and 5.94 per cent as compared to a maximum of 10.0 per cent in bunch grass in 1936-37 and 19.6 per cent in sorghum stubble in 1938-39. The average number alive in March per 0.2 sq. ft. was 102.3 in bunch grass, indicating a normally heavy infestation in Comanche County. The infestation over the state was average and the usual amount of damage to susceptible crops was done.

1945. "Chinch bug damage in 1943 was light."-C. F. Stiles.

¹ Most of the records are from identifications of material sent into the Experiment Station. Where starred, the record is from the files of C. F. Stiles and E. Hixson, of the Agricultural Extension Division.

The pecan nut case-bearer, Acrobasis carve Grote

1943. The infestation was the most severe in many years. Together with other insects and diseases it accounted for approximately 90 per cent of the crop. In 1942 it accounted for 5-10 per cent of the crop.

The green bug, Toxoptera graminum Rond.

- 1942. This species was reported in 56 counties. The heaviest damage to wheat (90-100 per cent loss) occurred in Jefferson, Love, Carter, Johnston, and Marshall Counties with as much loss reported in parts of Bryan, Murray, and Cotton Counties. The damage to wheat was progressively lighter as the distance from the Red River increased over most of the main wheat belt of the state with losses ranging up to 20 per cent. Severe damage to barley and oats was also reported, the percentage of loss being in rather definite zones as was the case with wheat.
- 1943. "The 1943 infestation began just about where that of 1942 left off and extended to the Kansas line. The heaviest infestation was in Blaine, Washita. Custer, and Major Counties."—C. F. Stiles.

Cotton leafworm. Alabama argillacea (Hbn.)

- 1942. This species was more abundant in Oklahoma than it had been for at least ten years. It was chiefly responsible for the greatest damage to cotton caused by insects since 1928. The caterpillars became so numerous that they destroyed all of the foliage in many fields and migrated in great numbers in search for food. Severe damage was caused, especially to late cotton.
- 1943. "The cotton leafworm appeared in Oklahoma much earlier than usual, first officially reported in Pittsburg and Stephens Counties on July 22; however, unofficial reports were received from Okmulgee and Pittsburg Counties a week earlier. . . From July 22-31 reports reached the office that leafworms were present over much of the state in small numbers. This pest was also kept in check by the hot dry weather and only small fields of late cotton were defoliated. Some of the heaviest damage occurred in Love, Garvin, McLain, and Caddo Counties."—C. F. Stiles. Boll weevil. Anthonomus grandis Boh.
- 1942. The boll weevil infestation was very heavy. Infestations were reported as far west as Lawton, in Comanche County.
 - 1943. The boll weevil was kept in check by hot dry weather.

The plum curculio, Conotrachelus nenuphar (Herbst)

This insect was unusually destructive in 1943. It was responsible to a very large extent for the small crop of wild plums in the state. Records of this species were obtained from Hobart and Weatherford, near to the supposed western limits of its range.

FRUIT AND NUT INSECTS

Acrobasis caryae Grote (pecan nut case-bearer).—1942: Prague, August 28.

Anarsia lineatella Zeller (peach twig borer).—1942: Durant, August 21; Vinita, September 10.

Alypia octomaculata F. (eight-spotted forester).—1942: Chickasha, on grapes, ... May 5.

Anthonomus scutellaris Lec. (plum gouger).—1942: Hennessey, July 31.

Aspidiotus perniciosus (Comstock) (San Jose scale).—1943: Dustin, on peaches, April 20; Tulsa, January 18.

Carpocapsa pomonella (L.) (codling moth).—1942: Durant, on pears, August 21.—1943: Francis, February 25; Porter, January 12

- Chrysobothris femorata (Oliv.) (flatheaded apple borer).—1943: Calumet, December 20.
- Conopia exitiosa (Say) (peach borer).—1942: Chelsea, March 24; Counch Hill, March 31; Elk City, January 22; Hominy, March 6; Muskogee, February 28; Ringold, April 25; Seminole, December 15; Tulsa, January 22 and November 21.—1943: Apache, September 30; Mounds, April 20; Muskogee, January 3.
- Conotrachelus nenuphar (Herbst) (plum curculio).—1943: Hobart, on plums, September 7; Weatherford, on peaches, June 1.
- Datana integerrima G. and R. (walnut datana).—1942: Sperry, October 26.
 —1943: Seen in all the southern and southeastern counties.
- Diastrophus nebulosus O. S. (blackberry knot gall).—1943: Chelsea, July 12.
- Eriophyes caryae Keif. (pecan leaf-curl mite).—1943: Stillwater, July 8.
- Lecanium corni Bouché (European fruit lecanium).—1942: Tecumseh, on pecans, April 23.
- Lygus pratensis (L.) (tarnished plant bug).—1942: Tulsa, on peaches, May 8.—1943: Stillwater, on apples, April 22; Wagoner, on peaches, June 21.
- Mineola indiginella Zeller (apple leaf crumpler).—1942: Oklahoma City, May 26.
- Scolytus rugulosus Ratz. (shot-hole borer).—1942: Miami, July 6.—1943: Coweta, July 28.
- Paleacrita vernata (Peck) (spring cankerworm).—1942: Chickasha, on plums, April 26.

HOUSEHOLD INSECTS

- Blattella germanica (L.) German cockroach.—1943: Ringwood, August 3.
- Cimex lectularius L. (bedbug).—1942: Beggs, July 27; Dewar, June 5; Oklahoma City, October 23; Wetumka, July 1.—1943: Blanchard, April 1; Geary, April 8; Grandfield, April 11.
- Lepisma saccharina L. (silver fish).-1942: Guthrie, May 21.
- Lyctus planicollis Lec. (powder-post beetle).—1942: Ada, February 4; Duncan, February 26.—1943: Oilton, April 1.
- Piophila casei L. (cheese skipper).—1942: Talihina, on ham, May 21.
- Supella supellectilium (Serv.) (banded cockroach).—1942: Davenport, December 16; Tulsa, July 6.—1943: Tulsa, August 7 and October 19.
- Termites.—1942: Bristow, October 22*; Carmen, May 20; Commerce, May 1; Cromwell, February 9; Delhi, August 28; Enid, October 9; Guthrie, September 8; Holdenville, November 9*; Idabel, January 23; Kingfisher, May 1 and June 9; Leedey, November 7*; Oklahoma City, April 18; Ponca City, August 20; Pryor, September 1; Ryan, February 9; Seminole, February 7; Shawnee, May 4; Tulsa, April 24, September 17, and October 24.—1943: Bartlesville, April 13; Boise City, August 7*; Chattanooga, January 18; Coweta, December 16*; Fairfax, April 13; Holdenville, May 10; Hominy, May 11; Jet, October 22; Nowata, August 14*; Oklahoma City, August 7* and October 7; Perry, September 7*; Sallisaw, June 6; Sand Springs, July 30; Sapulpa, March 19; Tulsa, April 27.
- Jadera haematoloma (H. S.) (chinaberry bug).—1943: Tulsa, in a house, September 21.

- Tinea pellionella L. (case-bearing clothes moth).—1943: Duncan, November 3; Shawnee, May 6; Woodward, January 13.
- Tineola biselliella Hum. (webbing clothes moth).—1942; Shawnee, January 14.—1943: Woodward, February 7.

VEGETABLE INSECTS

- Aphis gossypii Glov. (melon aphid).—1943: Covington, on cucumbers, July 28.
- Anasa tristis (DeGeer) (squash bug).—1942: Cushing, on pumpkins, August 3.—1943: Medford, September 2; Tulsa, August 7.
- Ceratoma trifurcata Forst. (bean leaf beetle).—1943: Henryetta, July 3; Shawnee, May 1.
- Daihinia breviceps (Hald.) (sand cricket).—1943: Lindsay, April 13.
- Diabrotica vittata (F.) (striped cucumber beetle).—1943: Bristow, May 22;
 Oklahoma City, May 18.
- Leptinotarsa decemlineata (Say) (Colorado potato beetle).—1942: Tryon, May 13.
- Macrosiphum pisi Kltb. (pea aphid).—1943: Waukomis, on garden peas, May 1.
- Protoparce quinquemaculata (Haw.) (tobacco worm) and P. sexta (Johan.) (tomato hornworm).—1942: Marlow, August 27.
- Tetranychus telarius (L.) (red spider).—1943: Idabel, on beans, June 24.

INSECTS INFESTING SHADE TREES AND ORNAMENTALS

- Calligrapha scalaris Lec. (linden leaf beetle).-1942: Enid, July 17.
- Cerococcus koebelei (Ckll.) (a scale insect).—1942: Oklahoma City, on Bumelia lanuginosa Pers. March 2.
- Cinara strobi Fitch (an aphid).—1942: Tulsa, on white pine, October 28.
- Eriosoma americanum (Riley) (leaf-curl aphid).—1942: Hennessey, July 20.
- Eriosoma rileyi Thos. (woolly elm-bark aphid).—1943: Thomas, June 21.
- Leptocoris trivittatus (Say) (box-elder bug).—1943: Tulsa, January 28.
- Plectrodera scalator (F.) (cottonwood borer).—1942: Oklahoma City, July 11.—1943: Watonga, September 14.
- Pulvinaria amygdali Ckll. (cottony maple-leaf scale).—1942: Oklahoma City, June 13.
- Rhyacionia frustrana (Comst.) (Nantucket tip moth).—1943: Owasso, July 13: Shawnee. June 1.
- Termites.—1942: Canute, on flowers, August 11.
- Tetranychus bimaculatus Harvey.—1942: Mulhall, on cedar, August 11.
- Tetranychus telarius (L.) (red spider).—1942: Guymon, on flowers, August 15.—1943: Tulsa, August 23.
- Thyridopteryx ephemeraeformis Haw. (bagworm).—1942: Cushing, July 11; Custer City, April 16; Fox, July 11; Hydro, July 22; Oklahoma City, January 19.—1943: Custer City, May 4; Oklahoma City, November 13; Seiling, February 17.

FIELD-CROP INSECTS

- Alabama argillacea (Hbn.) (cotton leafworm).—1942: Bartlesville, September 17; Chickasha, September 14; Clinton, September 17; Enid, September 16; Gotebo, August 17; Mountain View, September 1; Prue, August 17; Waukomis, July 17.—1943*: Choctaw Co., July 24; Garvin Co., July 26; McClain Co., July 26; Pittsburg Co., July 22; Stephens Co., July 22.
- Anthonomus grandis Boh. (boll weevil).—1942: Bowring, July 10; Purcell, August 26.
- Blissus leucopterus (Say) (chinch bug).—1942: Ringold, September 11; Webb City, July 10.
- Celama sorghiella (Riley) (sorghum webworm).—1942: Oklahoma City, September 4; Paoli, September 14.
- Contarinia tritici (Kby.) (wheat midge).—1943: Bartlesville, on wheat, July 20.
- Diabrotica duodecimpunctata (F.) (spotted cucumber beetle).—1942: Cheyenne, on cotton, September 22.
- Diatraea grandiosella Dyar (southwestern corn borer).—1942: Calumet, October 12; Ft. Cobb, March 24; Weatherford, April 8.
- Heliothis armigera (Hbn.) (corn earworm).—1943: Elmore City, June 3; Oklahoma City, April 27; Woodward, August 11.
- Psallus seriatus (Reut.) (cotton fleahopper).—1942: Gotebo, August 11.—
 1943: Lookeba, August 1; Ada, Coalgate, and Tishomingo in July.*
- Toxoptera graminum Rond. (green bug).—1942: Ardmore, December 11; Helena, April 9; Lawton, April 18; Stigler, September 10; Temple, March 24; Wynnewood, March 24.—1943*: Arapaho, April 11; Bethany, April 10; Cordell, April 10; El Reno, April 10; Enid, April 10; Fairview, April 12; Kingfisher, April 10; Snyder, January 29; Watonga, April 10; Yukon, April 10.

STORED-PRODUCTS INSECTS

- Plodia interpunctella (Hbn.) (Indian-meal moth).—1943: Stillwater, on feed, January 7.
- Tenebroides mauritanicus (L.) (cadelle).—1943: Waukomis, October 27.
- Tribolium confusum (Duv.) (confused flour beetle).—1943: Seminole, January 19; Bethany, November 13.

ANIMAL PARASITES

- Argas miniatus Koch (fowl tick).—1942: Mountain View, September 23. Calendra callosa (Oliv.) (curlew bug).—1943: Bristow, on chickens, July 26. Culicoides guttipennis Coq. (punkie).—1942: Fallis, on chickens, August 17.
- Dermanyssus gallinae (Deg.) (poultry red mite).—1943: Ardmore, November 3.
- Echidnophaga gallinacea (Westw.) (sticktight flea).—1943: Tonkawa, on poultry, September 10.
- Itaematopinus eurysternus Nits. (short-nosed cattle louse).—1943. Wagoner, April 1.
- Haemophysalis leporis-palustris (Pack.) (rabbit tick).—1942: June 15, host in this instance was a boy.

Hypoderma lineatum (DeVilliers) (ox warble).—1942: Davis, January 12.
—1943*: Ada, November 10; Alva, November 4; Antlers, December 6; Ardmore, December 1; Atoka, December 8; Coalgate, December 9; Durant, December 8; Guthrie, November 26; Hugo, December 7; Idabel, December 3; Lookout, November 5; Madill, November 9 and December 2; Norman, November 29; Pauls Valley, November 8; Poteau, November 18; Purcell, November 30; Talihina, November 19; Westville, November 22; Wilburton, November 17.

MISCELLANEOUS

Campsus auricephalus Say.-1942: Idabel, on cotton, July 13.

Chrysochus auratus (Say).—1942: Arapaho, June 22.