

HEMIPTERA UNRECORDED FROM INDIANA

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Blatchley (1926 in his manual "Heteroptera of Eastern North America" records 414 species and 21 varieties of Hemiptera that occur in Indiana. Since then 26 species and five varieties have been added to the state list by the following authors: Blatchley (1928), two species of Miridae; Drake and Harris (1934), two species of Gerridae; Esaki (1926), one species of Gerridae; Evans (1931), one species and one variety of Phymatidae; Gould (1933), one species of Veliidae; Knight (1926, 1927), one species and one variety of Miridae; Musgrave (1934), 18 species and three varieties of Miridae. In addition, there are two species reported from the state which Blatchley (1926, 1928) overlooked. These are the common box-elder bug, *Leptocoris trivittatus* (Say), reported by Baldwin as destructively abundant in 1914 and the egg-plant lace bug, *Gargaphia solani* Heidemann, reported by Davis (1926). In connection with this last species it is of interest to note that although Heidemann did not describe this species until 1914, there are specimens of it in the Purdue Entomological Collection which were taken in Posey County in 1903.

The writers in the present paper wish to add 46 species and three varieties to the list, making 488 species and 29 varieties of Hemiptera which are known to occur in the state.

The numbers in parentheses following the serial number are those of Van Duzee's "Catalogue of Hemiptera North of Mexico". The initials P. S. C. used in "collection records" indicate specimens in the Purdue Entomological Collection which do not bear a collector's label. Specimens of all the species recorded here are deposited in the Purdue Entomological Collection.

Family SCUTELLERIDAE

- 1 (16). *Homaemus parvulus* (Germar, 1839).

Collection records: Clark Co., June 11-13, B. E. Montgomery, P. S. C.; Harrison Co., June 27, on willow, D. W. LaHue; Jefferson Co., June 5, D. W. Brinson.

Family CYDNIDAE

- 2 (44). *Cyrtomenus mirabilis* (Perty, 1834).

Collection records: Lawrence Co., July 10, August 6, 13, at light, J. M. Amos; Orange Co., July 12, at light, J. M. Amos.

Family PENTATOMIDAE

- 3 (99). *Trichopepla atricornis* Stal, 1872.

Collection records: Wayne Co., October 13, H. Shoemaker.

- 4 (125b). *Euschistus tristigmus luridus* Dallas, 1851.

Collection records: Tippecanoe Co., September 7, P. S. C.

- 5 (...). *Thyanta accerra* McAtee, 1919.

Collection records: Tippecanoe Co., Sept. 7, October 2, 10, G. E. Gould, P. S. C.

¹Contribution of the Department of Entomology.

Notes: Dr. H. M. Harris, who determined this species, states that the specimens may be a variety of *T. calceata* (Say).

Family COREIDAE

6 (357). *Jadera haematoloma* (Herr.-Schaeffer, 1848).

Collection records: Lawrence Co., July 11, at light J. M. Amos.

Family ARADIDAE

7 (378). *Aradus inornatus* Uhler, 1876.

Collection records: Tippecanoe Co., May 12, P. S. C.

8 (389). *Aradus falleni* Stal, 1860.

Collection records: Lawrence Co., June 21, at light, L. I. Musgrave.

Family LYGAEIDAE

9 (468). *Nysius thymi* (Wolff, 1804).

Collection records: Kosciusko Co., May 24, June 24, G. E. Gould; Tippecanoe Co., October 8, L. I. Musgrave.

10 (483). *Cymus luridus* Stal, 1874.

Collection records: Porter Co., Sept. 2, B. E. Montgomery.

Family TINGIDIDAE

11 (. . . .). *Hesperotingis illinoiensis* Drake, 1918.

Collection records: Clark Co., July 30, P. S. C.

Family PLOIARIDAE

12 (. . . .). *Empicoris winnemana* M. & M., 1925.

Collection records: Tippecanoe Co., Nov. 28, R. A. Regains.

13 (715). *Metapterus fraterna* (Say, 1832).

Collection records: Clark Co., July 16, P. S. C.; Lawrence Co., Sept. 14, at light, J. M. Amos; Tippecanoe Co., Sept. 19, on soybeans, G. E. Gould.

Family REDUVIIDAE

14 (720). *Pnirontis informa* Stal, 1859.

Collection records: Lawrence Co., July 6, L. F. Steiner; Tippecanoe Co., June 22, at light.

15 (727). *Stenopoda cinerea* Laporte, 1832.

Collection records: Clark Co., June 5, 25, P. S. C.

16 (736). *Triatoma heidemanni* Neiva, 1911.

Collection records: Orange Co., June 12, at light, J. M. Amos.

17 (. . . .). *Zelus angustatus* Hussey, 1925.

Collection records: Morgan Co., June 28, L. I. Musgrave.

Family ANTHOCORIDAE

18 (840). *Lyctocoris campestris* (Fabricius, 1794).

Collection records: Harrison Co., Nov. 21, D. W. LaHue; Noble Co., August 14, G. E. Gould; Tippecanoe Co., May 6, 11, P. S. C.

Family MIRIDAE

- 19 (893). *Trigonotylus tarsalis* (Reuter, 1876).
Collection records: Kosciusko Co., August 10, G. E. Gould; Lake Co., June 4, G. E. Gould.
- 20 (899a). *Platytylhellus insitivus angusticollis* Knight, 1923.
Collection records: Morgan Co., June 8, L. I. Musgrave.
- 21 (. . . .). *Paracalocoris salicis* Knight, 1926.
Collection records: Tippecanoe Co., June 6, Musgrave & Deay.
- 22 (. . . .). *Paracalocoris gleditsiae* Knight, 1926.
Collection records: Tippecanoe Co., June 6, Musgrave & Deay.
- 23 (. . . .). *Paracalocoris multisignatus* Reuter, 1909.
Collection records: Tippecanoe Co., June 14, L. I. Musgrave.
- 24 (1010b). *Lygidae rosacea* Reuter, 1909.
Collection records: Lawrence Co., June 14, at light, L. I. Musgrave.
- 25 (. . . .). *Lygus vanduzeei* Knight, 1917.
Collection records: Wayne Co., October 9, H. Shoemaker.
- 26 (1024). *Lygus apicalis* Fieber, 1861.
Collection records: Morgan Co., Oct. 17, L. I. Musgrave; Tippecanoe Co., Apr. 10 to Oct. 22, L. I. Musgrave, H. G. Butler, P. S. C.
- 27 (. . . .). *Lygus caryae subfuscus* Knight, 1917.
Collection records: Kosciusko Co., May 30, G. E. Gould.
- 28 (. . . .). *Lygus geneseensis* Knight, 1917.
Collection records: Morgan Co., June 18, on oak, L. I. Musgrave; Tippecanoe Co., June 2, on oak, L. I. Musgrave.
- 29 (1044). *Xenoborus pettiti* (Reuter, 1909).
Collection records: Clark Co., July 14, on willow, P. S. C.
- 30 (. . . .). *Dicyphus gracilentis* Parshley, 1923.
Collection records: Kosciusko Co., Aug. 8, G. E. Gould; Wayne Co., Oct. 8, H. Shoemaker.
- 31 (1175 $\frac{1}{8}$). *Orthotylus viridis* Van Duzee, 1916.
Collection records: Morgan Co., June 10, on willow, L. I. Musgrave; Tippecanoe Co., June 12, on willow, Deay & Musgrave.
- 32 (1178 $\frac{3}{4}$). *Noctuocoris fumidus* Van Duzee, 1916.
Collection records: Lawrence Co., July 30, at light, L. I. Musgrave.
- 33 (1179 $\frac{5}{8}$). *Orthotylus knighti* Van Duzee, 1916.
Collection records: Kosciusko Co., June 7, G. E. Gould.
- 34 (. . . .). *Reuteroscopus sulphureus* Reuter, 1907.
Collection records: Jefferson Co., July 28, on *Solanum nigrum*, D. W. Brinson.
- 35 (. . . .). *Plagiognathus punctatipes* Knight, 1923.
Collection records: Morgan Co., June 10, on boxelder, L. I. Musgrave.
- 36 (. . . .). *Plagiognathus dispar* Knight, 1923.
Collection records: Kosciusko Co., June 8, G. E. Gould.

- 37 (....). *Plagiognathus tiliac* Knight, 1923.
Collection records: Tippecanoe Co., June 12, on boxelder, L. I. Musgrave.
- 38 (....). *Plagiognathus negundinis* Knight, 1923.
Collection records: Morgan Co., July 10, on willow, L. I. Musgrave.
- 39 (....). *Plagiognathus repletus* Knight, 1923.
Collection records: Tippecanoe Co., June 26, G. E. Gould.
- 40 (1249). *Leucopocila albofasciata* Reuter, 1907.
Collection records: Jefferson Co., July 5, on *Solanum nigrum*, D. W. Brinson.
- 41 (....). *Microsynamma bohemani* (Fallen, 1829).
Collection records: Morgan Co., June 10, on willow, L. I. Musgrave.
- 42 (996). *Dichrooscytus suspectus* Reuter, 1909.
Collection records: Indiana (specimen retained by Knight).

Family GERRIDAE

- 43 (1289). *Gerris buenoi* Kirkaldy, 1911.
Collection records: Benton Co., G. E. Gould; Clay Co., G. E. Gould; Kosciusko Co., H. O. Deay, G. E. Gould; Warren Co., G. E. Gould. Collection dates: April 15 to October 17.
- 44 (1290). *Gerris canaliculatus* Say, 1832.
Collection records: Carroll Co., July 15, G. E. Gould; Tippecanoe Co., April 22, G. E. Gould.
- 45 (....). *Gerris comatus* Drake & Hottes, 1925.
Collection records: Elkhart, Kosciusko, Noble, Pulaski, Tippecanoe, and Warren counties. Collector: G. E. Gould. Dates: April 8 to August 11.
- 46 (....). *Gerris nebularis* Drake & Hottes, 1925.
Collection records: Kosciusko Co., August 8, G. E. Gould.
- 47 (....). *Trepobates inermis* Esaki, 1928.
Collection records: Allen, Bartholomew, Carroll, Clay, Decatur, Dubois, Huntington, Jennings, Johnson, Lawrence, Marion, Monroe, Owen, Parke, Putnam, Ripley, Tippecanoe, Wabash, and Whitley counties; all collected by G. E. Gould; Harrison Co., D. W. LaHue. Collection dates: July 4 to October 15.
Notes: Blatchley (1926) no doubt records specimens of this species under *T. pictus* (H.-S., 1848), since the two were confused until Esaki's work in 1926.
- 48 (1297). *Rheumatobates rileyi* Bergroth, 1892.
Collection records: Decatur and Ripley counties, Oct. 15, G. E. Gould.

Family VELIIDAE

- 49 (....). *Microvelia austrina* Bueno, 1924.
Collection records: Tippecanoe Co., G. E. Gould.

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