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THE WORKS OF J. R. WATSON ON THYSANOPTERA

By

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There are very few specialists on Thysanoptera in the world and these individuals have, over a period of years, assembled their own collections and libraries. From the widely-scattered literature and their own studies, these workers have compiled indices and keys to this group of small insects which the majority of entomologists cannot identify. Such helpful data in the main has never been published. Professor Watson's "Synopsis and Catalog of the Thysanoptera of North America" published in 1923, was one of the few attempts in this direction. In 1929 when the writer took up the study of thrips he was confronted with this problem — the lack of published reviews and check lists. Therefore, as a memorial to Professor Watson's work and in the spirit in which he was ever helpful to beginning students of thrips, I am presenting a list of his writings on Thysanoptera. Also, I am listing the species of thrips he described with their synonymy as far as it is known to me.

The following seventy publications, chiefly on the taxonomy and biology of thrips, were published by Professor Watson over a period of thirty-three years.

- 1913. Apr.—New Thysanoptera from Florida. Ent. News 24(4) : 145-148, plate VI, figs. 1-7.
- 1913. Oct.—An unusual type of injury due to a thrips. Jour. Econ. Ent. 6(5) : 413-414, plate II.
- 1915. Feb.—New Thysanoptera from Florida. Ent. News 26(2) : 49-52, plate II, figs. 1-9.
- 1916. Mar.—New Thysanoptera from Florida. III. Ent. News 27: 126-133, plates V, VI.

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1918. Mar.-June.—Thysanoptera of Florida. Fla. Buggist I, 4, and II, 1 combined, pp. 53-55, 65-77. (Printed July 1918.)
1918. Dec.—New Thysanoptera from Florida. IV. Fla. Buggist, 2(3) : 97-102. (Printed Feb. 1919.)
1919. Mar.—Watson, J. R. and Evelyn Osborn. Additions to the Thysanoptera of Florida. V. Fla. Buggist 2(4) : 116-119, 120. (Printed Apr. 1919.)
1919. June.—Additions to the Thysanoptera of Florida. V. Fla. Buggist 3(1) : 2-7.
1919. Sept.—The native host-plant of the Camphor Thrips. Fla. Buggist, 3(2) : 25-27. (Printed in Nov., 1919.)
1919. Sept.—A new *Physothrips* from Oregon. Fla. Buggist, 3(2) : 32. (Printed Nov., 1919.)
1920. Mar.—Key to No. American species of Physothrips. Fla. Buggist 3(4) : 71. (Printed Apr., 1920.)
1920. July.—An apparently new *Haplothrips* from Cuba. Fla. Ent. 4(1) : 7, 12.
1920. July & Sept.—New Thysanoptera from Florida. VII. Florida Ent. 4 (1 & 2) : 13, 18-23, 27-30.
1920. Sept.—The toilet of thrips. Fla. Ent. 4(2) : 25.
1921. Jan.—New Thysanoptera from Florida. VIII. Fla. Ent. 4(3) : 35-39.
1921. June-Oct.—New Thysanoptera from New York. Bull. Brook. Ent. Soc. 16: 78-86.
1922. Apr.—New Thrips from Florida. IX. Fla. Ent. 5(4) : 65-66.
1922. Apr.—Another new thrips from cocoanuts from Cuba. Fla. Ent. 5(4) : 66-67.
1922. June.—The flower thrips. Univ. of Fla., Agric. Exp. Sta., Bul. 162, 1-51.
1922. June.—Another camphor thrips. Fla. Ent. 6(1) : 6-7.
1922. Sept.—Additions to the Thysanoptera of Florida. X. Fla. Ent. 6(2) : 21-23.
1922. Sept.—The greenhouse thrips out-of-doors in Northeastern Georgia. Fla. Ent. 6(2) : 23.
1922. Dec.—On a collection of Thysanoptera from Rabun County, Georgia. Fla. Ent. 6(3) : 34-39, 47-48.
1922. Dec.—A new thrips from citrus in Alabama. Fla. Ent. 6(3) : 45.
1922. —Recent experiments with thrips on citrus. Proc. Fla. State Hort. Soc. 35: 52-55.
1923. Apr.—An addition to the Thysanoptera of Florida. XI. Fla. Ent. 6(4) : 58.
1923. July.—The proper name and distribution of the Florida Flower thrips. Fla. Ent. 7(1) : 9-11.
1923. Dec.—Synopsis and Catalog of the Thysanoptera of North America. Univ. of Fla., Agric. Exp. Sta., Bul. 168, pp. 1-100.

- 1923-24. —Adiciones a los Thysanoptera de Cuba. Mem. Soc. Cubana Hist. Nat. "Felipe Poey". 6(1-2) : 46-47.
1924. Apr.—Watson, J. R. and T. H. Hubbell. On a collection of Thysanoptera from Honduras. Fla. Ent. 7(4) : 60-62.
1924. Sept.—Thysanoptera of North America. Additions and a correction. Fla. Ent. 8(2) : 29-30.
1924. Nov.—A new *Bregmatothrips* (Thysanoptera) from England and Holland. Ent. Mo. Mag., 60: 253-254.
1924. Dec.—Additions to Thysanoptera of Florida. XII. Fla. Ent. 8(3-4) : 50-52.
1925. Aug. & Oct.—A new species of *Sympyothrips* (Thysanoptera) from Argentina. Fla. Ent. 9(2&3) : 29-30, 45.
1925. Oct.—The camphor thrips in Formosa. Fla. Ent. 9(3) : 39.
1926. Feb.—Two new Thysanoptera from Cuba. Fla. Ent. 9(4) : 53-55.
1926. Feb.—New Thysanoptera from Florida. XIII. Fla. Ent. 9(4) : 58-60.
1926. Apr.—New Thysanoptera from Florida. XIII, cont'd. Fla. Ent. 10(1) : 9-12.
1926. June.—Citrus insects and their control. Florida Flower thrips. Univ. of Fla., Agric. Exp. Sta., Bul. 183: 382-387.
1926. July.—Ecological and geographical distribution of Thysanoptera in Florida. Fla. Ent. 10(2) : 21-24, 27.
1926. July.—A new *Haplothrips* from Abyssinia. Fla. Ent. Vol. 10(2) : 28-29.
1927. Jan.—A new *Liothrips* from Santo Domingo. Fla. Ent. 10(4) : 59-60.
1927. Jan.—New Thysanoptera from Florida. XIV. Fla. Ent. 10(4) : 60-62.
1927. July.—New Thysanoptera from Florida, cont'd. Fla. Ent. 11(2) : 26.
1927. July.—The Thysanopteron fauna of the Indian pipe. Fla. Ent. 11(2) : 27-30.
1927. Nov.—The English orchid thrips native to Florida. Additions to the Thysanoptera of Florida. XVI. Fla. Ent. 11(3) : 41-42.
1927. Nov.—The Thysanoptera fauna of the Indian pipe, cont'd. Fla. Ent. 11(3) : 42-44.
1931. Apr.—A new *Haplothrips* from Panama. Fla. Ent. 15(1) : 11-12.
1931. Nov.—Two new Thysanoptera from Colorado. Fla. Ent. 15(3) : 51-54.
1931. Dec.—A collection of Thysanoptera from western Oklahoma. Pub. Univ. Okla. Vol. 3, no. 4, Biol. Survey, pages 339-345, 7 figs.
1933. Jan.—Some Thysanoptera of the Great Smoky Mountains. Fla. Ent. 16(4) : 61-62.
1933. Mar. & Aug.—Two new species of *Plectrothrips*. Fla. Ent. 17(1&2) : 16-18, 33-34, figs. 1-4.
1933. Oct. & Dec.—Two new species of *Oedaleothrips* with notes on other species. Fla. Ent. 17(3&4) : 48-50, and 63-64.
1934. Nov.—Thysanoptera of the Geenton. Fla. Ent. 18(3) : 44-46.
1935. Mar.—Thysanoptera of the Geenton, cont'd. Fla. Ent. 18(4) : 55-62.

1937. July.—A sericothrips with an unusual habitat. Fla. Ent. 20(1) : 3-4.
1937. July.—A new Trichothrips (Haplothrips) from Alabama. Fla. Ent. 20(1) : 8-9.
1937. July.—Thysanoptera of the Geenton, cont'd. Fla. Ent. 20(1) : 12-15, fig. 3.
1937. Oct.—Thysanoptera of the Geenton, cont'd. Fla. Ent. 20(2) : 17-21, fig. 1.
1938. Mar.—A new *Liothrips* from Spanish moss. Fla. Ent. 21(1) : 14-15.
1938. July.—Watson, J. R. and J. R. Preer. A new *Frankliniella* (Thysanoptera) from Florida. Fla. Ent. 21(2) : 17-19, 2 figs.
1939. Feb.—Watson, J. R. and J. R. Preer. Two new Thysanoptera from Florida. Fla. Ent. 22(1) : 1-5, 2 figs.
1939. Apr.—Wilson, J. W. and J. R. Watson. Two new Thysanoptera from Mexico. Fla. Ent. 22(2) : 17-20, 3 figs.
1941. May.—Notes on Other Thrips found on Gladiolus. Univ. Fla., Agric. Exp. Sta. Bul. 357: 22-23.
1942. Jan.—A new Stephanothrips from Texas. Fla. Ent. 24(4) : 65-66.
1942. May.—Watson, J. R. and A. N. Tissot. Insects and other pests of Florida vegetables. Univ. Fla., Agric. Exp. Sta. Bul. 370: 78-80, 94-95, 105-106. (This bulletin is a revision of bulletins 134, 151, and 232 successively, each with same title and written by J. R. Watson.)
1942. June.—A new *Frankliniella* from Florida (Thysanoptera). Fla. Ent. 25(2) : 17-18, 2 figs.
1942. Oct.—Two new *Frankliniellas* from Mexico (Thysanoptera). Fla. Ent. 25(3) : 43-46.
1945. Nov.—The ecological and geographical distribution of the Thysanoptera of the Geenton. Fla. Ent. 28(2) : 33-36.
1946. Feb.—Distributional notes on two species of Thysanoptera. Fla. Ent. 28(3) : 53.

In addition to the above publications on thrips, as the head of the department of entomology, he reported on crop pests in the annual reports of the University of Florida, Agricultural Experiment Station. The following annual reports contained notes on injurious thrips:

1913, pp. LXI-LXIII.	1926, pp. 44R-45R.
1914, pp. LXV, LXVII- LXIX, 4 figs.	1927, p. 46R.
1916, pp. LXIV-LXXII.	1928, p. 48R.
1917, p. 64R.	1929, pp. 53-54.
1919, pp. 54R-55R.	1930, p. 67.
1920, p. 20R.	1931, p. 70.
1921, pp. 31R-32R.	1932, p. 69.
1923, pp. 103R-105R.	1933, p. 75.
1924, pp. 76R-77R.	1934, pp. 51-55.
	1935, pp. 64, 67-68.

1936, pp. 64, 67-68.	1941, pp. 71-73.
1937, pp. 70, 73.	1942, pp. 74-75.
1938, pp. 83, 85.	1943, p. 64.
1939, pp. 93-94, 96.	1944, p. 59.
1940, pp. 72-74.	1945, p. 65.

SPECIES OF THIRIPS DESCRIBED

By

J. R. WATSON

- Aeolothrips floridensis* Wats., 1916
Allothrips nubillicauda Wats., 1935
Anaphothrips (Proscirtothrips) monotropae Wats., 1927
Anthothrips dozieri Wats., 1918 = *Haplothrips gowdeyi* (Franklin), 1908
Anthothrips floridensis Wats., 1916 = *Haplothrips graminis* Hood, 1912
Arpediothrips mexicanus Wats., 1939
Bregmatothrips iridis Wats., 1924
Cephalothrips elongata Wats., 1919 = *Watsoniella*
Cephalothrips merrilli Wats., 1926
Chirothrioides minutus Wats., 1927 = *Preeriella*
Chirothrips floridensis Wats., 1920 = *C. mexicanus* D. L. Cwfd., 1909
Chirothrips floridensis var. *catchingsi* Wats., 1923 = *C. mexicanus* D. L. Cwfd., 1909
Chirothrips obesus var. *hubbelli* Wats., 1926 = *C. crassus* Hinds, 1903
Cryptothrips adirondacks Wats., 1921 = *Leptothrips mali* (Fitch), 1856
Cryptothrips citri Wats., 1918 = *Haplothrips*
Cryptothrips floridensis Wats., 1913 = *Liothrips*
Cryptothrips pini Wats., 1915 = *Leptothrips mali* (Fitch), 1856
Dictyothrips floridensis Wats., 1919 = *Echinothrips americanus* Morgan, 1913
Dolichothrips Wats., 1920 (genotype: *Cephalothrips elongata* Wats., 1919)
Erythrothrips durango Wats., 1923
Eurythrips longilabris Wats., 1920
Eurythrips robustisetis Wats., and Preer, 1939
Euthrips grandioculus Wats., 1920 = *Anaphothrips*
Euthrips tritici var. *projectus* Wats., 1915 = *Frankliniella cephalica* (D. L. Cwfd.), 1910
Frankliniella bratleyi Wats., 1942
Frankliniella cephalica var. *brunneri* Wats., 1926
Frankliniella cephalica var. *masoni* Wats., 1919
Frankliniella deserti-leonidum Wats., 1942
Frankliniella floridana Wats., 1918 = *Mycterothrips*
Frankliniella pontederiae Wats., and Preer, 1938
Frankliniella tolucensis Wats., 1942
Gastrothrips (?) *pallidus* Wats., 1935
Glyptothrips barythripoides Wats., 1935
Glyptothrips batesi Wats., 1935 = *Eurythrips*
Glyptothrips eddeyi Wats., 1935