

## NOTES ON THE AEOLOTHRIPIDAE (2)

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In a previous issue of our Proceedings (No. 12, February, 1918), I gave the Society certain suggestions on this group of Thysanoptera which were intended to assist beginners meeting with members of this group for the first time. In this present paper I wish to extend the information further by dwelling on certain life history and habit notes and by presenting a catalogue on certain of the genera and species.

It would appear that the life histories and habits of the several species of Aeolothripidae are not known with a great degree of exactitude. Adults are recorded to be "on the foliage of," "on" or "in the flowers of" certain plants, with little to indicate their feeding habits. C. B. Williams, in the Annals of Applied Biology 1:240:1915, reports **fasciatus** the type of the genus **Aeolothrips**, common in England on peas and beans, as "partly carnivorous but also feeds on pollen and plant juices." It is my belief that Thysanopterists regard the **Aeolothrips** as predacious in their primary functions, but concede that they are also phytophagus. J. R. Watson in Florida, referring to the "black and white" cereal thrips (**Aeolothrips bicolor**), states that this species is "often abundant on oats in spring and damages them materially." With my own species, **Ae. auricestus**, I have failed to determine its exact feeding habits but from its numbers in clumps of **Elymus condensatus** and from certain peculiar decolored areas in the leaves, I am inclined to think it is phytophagus.

The mouth parts of thrips have been discussed on many occasions by many writers, and several authors have used **Aeolothrips** upon which to base their discussions. Garman, Uzel and Comstock have contributed in this connection, and from what I can gather, while there has been a slight difference of opinions in the placing and naming of certain organs of the mouth, the view is generally held that "the mouth parts are chiefly used for sucking but intermediate in form between those of the sucking and those of the biting insects."

The predacious habits of several members of this family are undoubted, in view of more recent observations. In British Columbia **Ae. fasciatus** may be frequently found in association with swarms of **Frankliniella tritici** in the flower heads of plants; **Ae. annectans** has also occurred in sufficient numbers with **Thrips tabaci** on onion foliage to leave little doubt, although, unfortunately, it has not as yet been proven, that they are carnivorous. Watson, in Florida, has observed that **Ae. floridensis** is invariably found in association with other species, although he draws no conclusions from this occurrence. C. B. Williams, in "The Entomologist" 49:277:1916, has the following to say on the

situation relating to the association between the pea thrips and *Ae. fasciatus*:

"I was able to feed larvae of the predaceous thrips, *Ae. fasciatus*, on the larvae of the pea thrips in captivity. One larva of *Ae. fasciatus* sucked and killed three larvae of *K. pisivora* in about three hours." . . . . He "found adults (commonly) and larvae (occasionally) in pea flowers but has not actually seen them feeding on the pea thrips in the wild state. There is little doubt, however, that they do so, as the species is invariably predaceous and is indeed the chief enemy of *Limothrips cerealium*."

Kurdjumov in a Report from the Poltava Agricultural Experimental Station, Russia, 18:1913, records the fact that the larvae of *Ae. fasciatus* are enemies of *Haplothrips aculeatus* and *H. tritici*. According to the same authority,

"this predacious thrips, according to Uzel, winters in the larval and egg stage; both adults and larvae being found on various plants and the larvae have been found feeding on *Aphis crataegi* and *A. rumicis*" and on the eggs and larvae of several other insects.

With these few words I would leave with you a catalogue on this family as a supplementary index to my first paper in our Proceedings on this subject in 1918. I would draw your attention to the fact that a great deal is yet to be learnt on the habits and life histories of the members of this family, and would urge that an endeavour be made to make a closer study of this group. It would appear to me quite clearly from my brief acquaintance with this group of insects that nearly all the energy thus far expended, has been spent on devising new genera and establishing new species. I do not know how this applies to other groups of insects, but it is my belief that in many ways what is true in the Thysanoptera is also true in many other Orders. Not enough time has been spent on the bionomics of the species; species which are often easily determined and readily available for study. The dread of the junior entomologist may easily be removed if he realizes this situation within the science, which at once enables him to take almost any insect in hand and record by actual and accurate personal observation its habits and life history under strictly natural conditions. The charm of such a field of study should draw and attract a large number of students, and we as a Society should lend our influence towards developing the love for natural objects that usually abides in the mind of most boys and girls, by training their powers of observation.

#### MELANOTHRIPS Haliday

1836. Haliday. Entom. Mag. 450.

"Antennae distincte 9-articulatae: os breve: palporum maxillarum articuli subaequales: alae anticae costa pubescentes, nervis transversis tribus: tibiae anticae apicae productae: terebra a basi parum recurva."

1880. Taschenberg. Prak. Insek-Kunde. 4:212.

1895. Beach. Proc. Iowa. Acad. Sci. 3:215.

1907. Buffa. Processi verb. della Soc. Tosc. d. Sci. Nat. 4.

1907. Buffa. Atti d. Soc. Tosc. d. Sci. Nat. 23.

**extincta** Scudder

1875. *Melanothrips*. Scudder. Bull. Geol. Survey 2.

**ficallii** Buffa

1907. *Melanothrips*. Buffa. Atti. Soc. Tosc. Pro. verb. 16:58.  
 1907. *Melanothrips*. Buffa. Atti. d. Soc. Tosc. d. Sci. Nat. 23.  
 1913. *Melanothrips*. Bagnall. Ent. Mon. Mag. 24.  
 1913. *Melanothrips*. Bagnall. Jr. Econ. Biol. 8:231.  
 1913. *Melanothrips*. Bagnall. Jr. Econ. Biol. 8:155.

HABITAT—Italy; England.

**fuscus** Sulzer

1776. *Thrips fuscus*. Sulzer. Abg. Gesch. d. Ins. 112.  
 1788. *Thrips fusca*. Gmelin. C. Linne. Syst. Nat. 2223.  
 1836. *Melanothrips obesa*. Haliday. Ent. Mag. 450. TYPE.  
 1836. *Melanothrips obesa*. Burmeister. Hand. d. Ent. 2:417.  
 1843. *Melanothrips obesa*. Amyot et Serville. Ins. Hemip. 645.  
 1852. *Melanothrips obesa*. Haliday. Walk. Homop. Ins. Brit. Mus. 1116.  
 1852. *Melanothrips obesa*. Heeger Sitzb. Acad. Wiss. Wien. 8:133.  
 1895. *Melanothrips fusca*. Uzel. Mon. d. Ord. Thys.  
 1907. *Melanothrips fusca*. Buffa. Atti. d. Soc. Tosc. d. Sci. Nat. 23.  
 1907. *Melanothrips fusca*. Proces. verb. d. Soc. Tosc. d. Sci. Nat.  
 1911. *Melanothrips fuscus*. Bagnall. Jr. Econ. Biol. 6:10.  
 1912. *Melanothrips fuscus*. Bagnall. Jr. Econ. Biol. 7.  
 1913. *Melanothrips fuscus*. Bagnall. Ent. Mon. Mag. 24.  
 1913. *Melanothrips fuscus*. Bagnall. Jr. Econ. Biol. 8:155.  
 1913. *Melanothrips fuscus*. Williams. Jr. Econ. Biol. 8:218.  
 1915. *Melanothrips fuscus*. Williams. Ann. App. Biol. 1:240.  
 1915. *Melanothrips fuscus*. Bagnall. Ann. Mag. Nat. Hist. 15.

HABITAT—On *Sinapis arvensis* and in various flowers in England; Austria; Bohemia; on *Brassica rapae* in Italy; Tunis.

**nigricornis** Bagnall

1913. *Melanothrips*. Bagnall. Ent. Mon. Mag. 24.

HABITAT—In flowers of *Convolvulus*. Tunis.

**DESMOTHRIPS** Hood

1915. Hood. Proc. Biol. Soc. Wash. 28:57.

**australis** Bagnall

1914. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 13:287. TYPE.  
 1915. =*Desmothrips*. Hood. Proc. Biol. Soc. Wash. 28:57.  
 1916. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 17.  
 HABITAT—In flowers of *Xanthorrhoea australis* in Victoria, Australia.

**OROTHRIPS** Moulton

1907. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12:45.

**kelloggii** Moulton

1907. *Orothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12:46. TYPE.  
 1911. *Orothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 21:21.  
 1918. *Orothrips*. Treherne. Proc. B. C. Ent. Soc. 12:29.

HABITAT—In blossoms of *Manzanita manzanita* and *Arbutus menziesii* in California, U. S. A.

**kelloggii yosemitii** Moulton

1911. *Orothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 21:2.  
 1918. *Orothrips*. Treherne. Proc. B. C. Ent. Soc. 12:29.  
 1919. *Orothrips*. Treherne. Can. Ent. 51:181.  
 HABITAT—U. S. A.: in blossoms of **Ceanothus** in California;  
 Canada: off **Amelanchier** in British Columbia.

**propinquus** Bagnall

1916. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 17.  
 HABITAT—On sweet pea, Victoria, Australia.

**tenuicornis** Bagnall

1916. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 17.  
 HABITAT—From flowers of **Erythroea australis**, Australia.

**STOMATOTHRIPS** Hood

1912. Hood. Proc. Biol. Soc. Wash. 25:63.

**flavus** Hood

1912. *Stomatothrips*. Hood. Proc. Biol. Soc. Wash. 25:64. TYPE.  
 HABITAT—Mexico; Texas; Illinois, U. S. A.; on cotton, grasses and weeds.

**MITOTHRIPS** Trybom.

1912. Trybom. Ent. Tidskr. 33:146.  
 1913. Bagnall. Jr. Econ. Biol. 8:157.

**megalops** Trybom.

1912. *Mitothrips*. Trybom. Ent. Tidskr. 33:147. TYPE.  
 1912. =*Franklinothrips*. Bagnall. 2nd Ent. Congress. 397.  
 1915. =*Mitothrips*. Hood. Ent. News. 26:162.  
 1915. *Mitothrips*. Bagnall. Jr. Linn. Soc. Zool. 32:496.  
 HABITAT—British East Africa.

**petulans** Bagnall

1915. *Mitothrips*. Bagnall. Journ. Linn. Soc. Zool. 32:496.  
 HABITAT—On cacao leaves in Trinidad, B. W. I.

**ANKOTHRIPS** Crawford

1909. Crawford. Pom. Col. Jr. Ent. 1:109.  
 1915. Bagnall. Ann. Mag. Nat. Hist. 15.  
 1918. Treherne. Proc. B. C. Ent. Soc. 12:30.

**robustus** Crawford

1909. *Ankothrips*. Crawford. Pom. Col. Jr. Ent. 1:109. TYPE.  
 HABITAT—On **Umbellularia** and **Ceanothus** in California, U. S. A.

**ERYTHROTHRIPS** Moulton

1911. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 21:34.

**arizonæ** Moulton

1911. *Erythrothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 21:34. TYPE.  
 1918. *Erythrothrips*. Treherne. Proc. B. C. Ent. Soc. 12:29.  
 HABITAT—On Orange and Olive blossoms in Arizona; on **Rhamnus purshiana** in California, U. S. A.

**DESMOTHRIPS** Hood

1914. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 13:287.  
 1915. =*Desmothrips*. Hood. Proc. Biol. Soc. Wash. 28:57.

• **australis** Bagnall

1914. *Orothrips*. Bagnall. Ann. Mag. Nat. Hist. 13:287. TYPE.  
 HABITAT—In flowers of *Xanthorrhoea australis*, Victoria, Australia.

**RHIPIDOTHRIPS** Uzel

1895. Uzel. Mon. d. Ord. Thys. 67.

**brunneus** Williams

1913. *Rhipidothrips*. Williams. Jr. Econ. Biol. 8:216.  
 1916. *Rhipidothrips*. Williams. Entomologist. 49:221.  
 HABITAT—From grass, Sussex, England.

**gratiosus** Uzel

1895. *Rhipidothrips gratiosa*. Uzel. Mon. d. Ord. Thys. 66.  
 1912. *Rhipidothrips gratiosa*. Bagnall. Jr. Econ. Biol. 7:191.  
 1913. *Rhipidothrips gratiosa*. Williams. Jr. Econ. Biol. 8:217.  
 1913. *Rhipidothrips gratiosus*. Bagnall. Jr. Econ. Biol. 8:232.  
 HABITAT—Cereal fields in England; Bohemia.

**niveipennis** Reuter

1901. *Rhipidothrips*. Reuter. Acta. Soc. Faun. Fenn. 17:30.  
 1909. *Rhipidothrips*. Bagnall. Jr. Econ. Biol. 4.  
 1912. *Rhipidothrips*. Bagnall. Jr. Econ. Biol. 7:190.  
 1913. *Rhipidothrips*. Williams. Jr. Econ. Biol. 8:218.  
 1916. *Rhipidothrips*. Williams. Entomologist. 49:221.  
 HABITAT—On *Abies* and *Convallaria* in Finland.

**juniperina** Linnaeus

1761. *Thrips*. Linnaeus. Fauna Svecica. 265.  
 1901. =*Rhipidothrips niveipennis*? Reuter. Acta. Soc. pro. Faun. Flora Fenn. 17.

**FRANKLINOTHRIPS** Back

1912. Back. Ent. News. 23:75.  
 1912. Bagnall. Trans. 2nd Ent. Congress. 397.  
 1913. Bagnall. Jr. Econ. Biol. 8:157.

**insularis**

(In the Review of Applied Entomology, London, Vol. 3, page 468, 1915, reference is made to *Franklinothrips insularis*. It is possible that this refers to *Frankliniella insularis*. Franklin.)

**tenuicornis** Hood

1915. *Franklinothrips*. Hood. Can. Ent. 26:164.  
 1918. *Franklinothrips*. Williams. Trin. & Tob. Bull. 17:144.  
 1918. *Franklinothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—On leaves on *Inga*, cacao, *Hibiscus rosa sinensis*, *Ipomoea* in Trinidad; Panama.

**vespiformis** Crawford

1909. *Aeolothrips*. Crawford. Pom. Col. Jr. Ent. 1:109. TYPE.  
 1911. *Aeolothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 21:21.  
 1912. =*Franklinothrips (Aeolothrips)*. Back. Ent. News. 23:74, 75.  
 1912. *Franklinothrips (Aeolothrips)*. Hood. Proc. Biol. Soc. Wash. 25:62.

1913. *Franklinothrips*. Hood. Psyche. 20:119.  
 1915. *Franklinothrips*. Bagnall. Linn. Soc. Jr. Zool. 32:498.  
 1915. *Franklinothrips*. Hood. Ent. News. 26:163.  
 1917. *Franklinothrips*. Bagnall. Jr. Zool. Res. 2:21.  
 1918. *Franklinothrips*. Watson. Florida Buggist. 2:66.  
 1918. *Franklinothrips*. Williams. Trin. & Tob. Bull. 17:143.  
 1918. *Franklinothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—U. S. A.: Florida on **Citrus** foliage; Nicaragua; Texas, Panama Canal; West Indies: Trinidad; St. Vincent; Central America.

**AEOLOTHRIPS** Haliday**albicinctus** Haliday

1836. *Ae. albicincta*. Haliday. Ent. Mag. 3:451.  
 "Atra, abdominis apice ferrugineo; antennis basi et abdominis antici annulo albis."  
 1838. *Ae. albicincta*. Burmeister. Handb. d. Ent. Bd. 2:418.  
 1843. *Ae. albocincta*. Amyot et Serville. Ins. Hemip. 646.  
 1852. *Ae. albicincta*. Haliday, Walker. Homop. Ins. Brit. Museum. 1118.  
 1879. *Ae. albicincta*. Reuter. Diagn. ofv. nya. Thys. f. Finland. 7.  
 1895. *Ae. albocincta*. Uzel. Mon. Ord. Thys. 75.  
 1899. *Ae. albicincta*. Reuter. Acta. Soc. Fauna. Flora. Fennica. 17:33.  
 1907. *Ae. albocincta*. Buffa. Atti. Soc. Tosc. Sci. Nat. Mem. 23:57.  
 1907. *Ae. albocincta*. Buffa. Processi verbali d. Soc. Tosc. Sci. Nat.  
 1908. *Ae. albocinctus*. Buffa. Redia. 5:134.  
 1911. *Ae. albocinctus*. Bagnall. Jr. Econ. Biol. 6:10.  
 1912. *Ae. albocinctus*. Bagnall. Trans. 2nd Ent. Congress. 397.  
 1913. *Ae. albicinctus*. Karny. Verh. k. k. zool-bot. Gesellsch. Wien. 64:51.  
 1915. *Ae. albicinctus*. Hood. Ent. News. 26:165.  
 HABITAT—England; Finland; Sweden; Austria; on **Aster sinensis** in Italy; Portugal; Sardinia; on corn leaves and on onion in New York State, U. S. A.

**annectans** Hood

1916. *Aeolothrips*. Hood. Proc. Biol. Soc. Wash. 29:109.  
 1917. *Aeolothrips*. Hood. Ins. Ins. Men. 5:55.  
 1919. *Aeolothrips*. Treherne. Can. Ent. 51:182.  
 HABITAT—On foliage of **Robinia pseudo-acacia**, pear, in flower of **Erigeron annuus** in Maryland; Virginia; New York State, U. S. A.: on foliage of a variety of plants at Victoria, B. C., and in the Okanagan Valley in British Columbia (Canada).

**auricestus** Treherne

1919. *Aeolothrips*. Treherne. Can. Ent. 51:184.  
 HABITAT—On foliage of **Elymus condensatus** in the Okanagan Valley, British Columbia (Canada).

**bicolor** Hinds

1902. *Aeolothrips*. Hinds. Proc. U. S. Nat. Mus. 26:130.  
 1907. *Aeolothrips*. Hooker. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 65:13.  
 1911. *Aeolothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 23:21.  
 1912. *Aeolothrips*. Jones. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 23:1.  
 1912. *Aeolothrips*. Bagnall. Trans. 2nd Ent. Congress. 397.  
 1912. *Aeolothrips*. Back. Ent. News. 23:74.  
 1913. *Aeolothrips*. Morgan. U. S. Nat. Mus. 46:42.  
 1915. *Aeolothrips*. Ent. Rept. Univ. Florida. 64.

1916. *Aeolothrips*. Watson. Ent. News. 27:127.  
 1917. *Aeolothrips*. Hood. Ins. Ins. Men. 5:55.  
 1918. *Aeolothrips*. Watson. Florida Buggist. 2:65.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.

HABITAT—On oats and wheat in Southern United States; on various plants and grasses at Amherst, Massachusetts; on *Plantago virginica*, citrus, corn, strawberry, grain, onion, oats, rutabaga in Florida; in sod in Tennessee; in Indiana; Virginia; Maryland; Illinois; Minnesota; Kansas; Texas (U. S. A.).

#### *brevicornis* Bagnall

1915. *Aeolothrips*. Bagnall. Ann. Mag. Nat. Hist. 15.  
 HABITAT—In flowers, Cape Town, South Africa.

#### *crassus* Hood

1912. *Aeolothrips*. Hood. Proc. Ent. Soc. Wash. 14:130.  
 HABITAT—In flower of *Hydrophyllum virginicum* and on wild grape in Maryland, U. S. A.

#### *fasciatus* Linnaeus

1758. *Thrips fasciata*. Linnaeus. Syst. Naturae. 10:457. TYPE.  
 1761. *Thrips fasciata*. Linnaeus. Fauna Svecica. 266.

"*Thrips elytris albis nigrisque fasciatus, corpore atro. Habitat in floribus, uti praecedentes, sed rarior aliis. Desc: Omnia, ut in praecedenti, (T. juniperina) sed fasciae transversae albae et nigrae alas distinguunt; animal totum atrum, praesedenti majus, elytra nigra fasciae tres niveae secant, quarum una in apicae, altera in medio, tertia versus basi elytrorum.*"

1767. *Thrips fasciata*. Linnaeus. Syst. Naturae. 12 & 13:743.  
 1775. *Thrips fasciata*. Fabricius. Systema Ent. 745.  
 1781. *Thrips fasciata*. Schrank. Enum. Insect. Aust. 297.  
 1781. *Thrips fasciata*. Fabricius. Species Insectorum. 2:397.  
 1781. *Thrips fasciata*. Fabricius. Mantissa Insectorum. 2:320.  
 1788. *Thrips fasciata*. Gmelin. Linn. Syst. Nat. 13:2223.  
 1789. *Thrips fasciata*. Berkenhout. Syn. Nat. Hist. Gt. Br. & Ire. 123.  
 1802. *Thrips fasciata*. Stew. Elem. of Nat. Hist. 2:114.  
 1803. *Thrips fasciata*. Fabricius. Systema Rhyngotorum. 314.  
 1806. *Thrips fasciata*. Turton. Gen. Syst. of Nat. 2:717.  
 1836. *Aeolothrips (Coleothrips) fasciata*. Haliday. Ent. Mag. 3:451.  
 1838. *Aeolothrips fasciata*. Burmeister. Hundb. d. Entom. 2:417.  
 1843. *Aeolothrips fasciata*. Amyot et Serville. Hist. nat. d. Ins. Hemip. 646.  
 1852. *Aeolothrips (Coleothrips) fasciata*. Haliday, Walk. Homop. Br. Mus. 4:1117.  
 1852. *Aeolothrips fasciata*. Heeger. Sitz. d. Acad. d. Wiss. Wien. 8:135.  
 1855. *Coleothrips trifasciata*. Fitch. Count. Gent. 6:385.  
 1857. *Coleothrips trifasciata*. Fitch. 2nd Rept. Nox. Ins. N. Y. 308.  
 1871. *Thrips fasciata*. de Man. Tijdschr. v. Entom. 147.  
 1879. *Aeolothrips (Coleothrips) fasciata*. Reuter. Ofv. Fin. Soc. 21:214.  
 1882. *Coleothrips fasciata*. Pergande. Entomologist. 95.  
 1886. *Coleothrips trifasciata*. Webster. Rept. Dept. Agr. 577.  
 1889. *Coleothrips trifasciata*. Thaxter. Rept. Conn. Agr. Exp. Sta. 180.  
 1891. *Coleothrips 3-fasciata*. Riley-Howard. Ins. Life. 3:301.  
 1892. *Coleothrips trifasciata*. Townsend. Can. Ent. 24:197.  
 1893. *Coleothrips trifasciata*. Gillette. Bull. 24. Col. Agr. Exp. Sta. 15.  
 1893. *Coleothrips trifasciata*. Davis. Mich. Agr. Exp. Sta. 102:39.

1895. *Coleothrips trifasciatus*. Cockerell. N. Mex. Agr. Exp. Sta. 15:71.  
 1895. *Aeolothrips fasciata*. Uzel. Mon. d. Ord. Thys. 72.  
 1896. *Coleothrips trifasciata*. Davis. Spec. Mich. Agr. Exp. Sta. 2:13.  
 1901. *Aeolothrips fasciata*. Tumpel. Die Geradflugler Mitteleuropas. 286.  
 1902. *Aeolothrips fasciatus*. Hinds. U. S. Nat. Mus. 26:127.  
 1907. *Aeolothrips fasciata*. Buffa. Atti. d. Soc. Tosc. d. Sci. Nat. 23:57.  
 1911. *Aeolothrips fasciatus*. Moulton. U. S. Dept. Agr. Tech. Ser. 21:23.  
 1913. *Aeolothrips fasciatus*. Stcherbakov. Rev. Russe d. Ent. 13:461.  
 1913. *Aeolothrips fasciatus*. Kurdjumov. Trans. Poltava Agr. Exp. Sta. 18:19.  
 1913. *Aeolothrips fasciatus*. Bagnall. Jr. Econ. Biol. 8:156.  
 1915. *Aeolothrips fasciatus*. Williams. Ann. App. Biol. 1:240.  
 1915. *Aeolothrips fasciatus*. Bagnall. Ann. Mag. Nat. Hist. 15.  
 1916. *Aeolothrips fasciatus*. Williams. Entomologist. 49:277.  
 1916. *Aeolothrips fasciatus*. Watson. Ent. News. 27:127.  
 1916. *Aeolothrips fasciatus*. Ross. Ent. Soc. Ont. 47:27.  
 1918. *Aeolothrips fasciatus*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 1919. *Aeolothrips fasciatus*. Treherne. Can. Ent. 51:181.

HABITAT—On various grains, grasses, flowers and weeds; England; Russia; Austria; Finland; Germany; Africa: Tunis; Canary Islands; United States: Connecticut, Indiana, Iowa, Michigan, Massachusetts, New Mexico, New York, Ohio, Arizona, Oregon, California; Canada: British Columbia, Ontario, Manitoba.

#### *floridensis* Watson

1916. *Aeolothrips*. Watson. Ent. News. 27:126.  
 1918. *Aeolothrips*. Watson. Florida Buggist. 2:65.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—On oats and corn in Florida, U. S. A.

#### *gloriosus* Bagnall

1914. *Aeolothrips*. Bagnall. Ann. Mag. Nat. Hist. 14.  
 HABITAT—Sardinia.

#### *kuwanaii* Moulton

1907. *Aeolothrips*. Moulton. U. S. Dept. Agr. Bur. Ent. 12:47.  
 1907. *Aeolothrips* (variety *robustus*). Moulton. U. S. Dept. Agr. Bur. Ent. 12:48.  
 1912. *Aeolothrips*. Hood. Proc. Ent. Soc. Wash. 14:130.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—On *Ceanothus thyrsiflorus* in California, U. S. A., and *robustus* on apricot tree in California, U. S. A.

#### *longiceps* Crawford

1909. *Aeolothrips*. Crawford. Pom. Col. Jr. Ent. 1:101.  
 1912. =*Franklinothrips*. Bagnall. Trans. 2nd Nat. Congress. 397.  
 1913. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 8:157.  
 1915. =*Aeolothrips kuwanaii*. Hood. Ent. News. 26:162.  
 1916. *Aeolothrips*. Watson. Ent. News. 27:127.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—On *Umbellularia* and *Ceanothus* in California, U. S. A.

#### *Melaleuca* Haliday

1836. *Aeolothrips*. Haliday. Entom. Mag. 3.  
 1911. *Ae. melaleucus*. Bagnall. Jr. Econ. Biol. 6:10.  
 1916. *Ae. melaleuca*. Hood. Proc. Biol. Soc. Wash. 29:110.  
 "Apparently very close" to *Ae. annectans* Hood, but type "cannot now be secured for comparison."  
 HABITAT—British Isles.



**nasturtii** Jones

1912. *Aeolothrips*. Jones. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 23:2.  
 1912. =*Franklinothrips*. Bagnall. Trans. 2nd Ent. Congress. 397.  
 1913. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 8:157.  
 1915. =*Aeolothrips*. Hood. Ent. News. 26:162.  
 1916. *Aeolothrips*. Watson. Ent. News. 27:127.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—On flowers of *Nasturtium officinale* in California, U. S. A.

**vittatus** Haliday

1836. *Aeolothrips*. Haliday. Ent. Mag. 3.  
 1911. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 6:10.  
 1912. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 7:189.  
 HABITAT—England; Finland; Sweden; Austria-Hungary.

**vittipennis** Hood

1912. *Aeolothrips*. Hood. Proc. Ent. Soc. Wash. 14:129.  
 1917. *Aeolothrips*. Hood. Ins. Ins. Men. 5:64.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—U. S. A.: on leaf of hickory in Maryland; on honey locust (*Gleditsia triacanthos* L), Illinois; and yellow locust (*Robinia pseudacacia*), in Washington D. C.

**tibialis** Reuter

1901. *Aeolothrips*. Reuter. Acta. Soc. Faun. Fenn. Finland. 17:33.  
 1913. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 8:157.  
 1918. *Aeolothrips*. Treherne. Proc. B. C. Ent. Soc. 12:30.  
 HABITAT—Finland.

**tiliae** Bagnall

1913. *Aeolothrips*. Bagnall. Jr. Econ. Biol. 8:156.  
 HABITAT—On *Tilia* in Norway.

**versicolor** Uzel

1895. *Aeolothrips*. Uzel. Mon. d. Ord. Thys. 69.  
 HABITAT—Austria.

## ERRATA

In the Proceedings of the Entomological Society, February, 1918, Number 12, Systematic Series, on pages 27-33, in my article on "Notes on the Aeolothripidae," the following errors have appeared in the text:

On page 27—Line 15, **Physoda** should read **Physopoda**.

Line 22, **Aeolothripidea** should read **Aeolothripoidea**.

On page 28—The word **Melanothrips** requires the author's name after it, thus reading "**Melanothrips** Haliday."

**Mitrothrips** should read **Mitothrips**.

On page 29—**Rhipidothrips** requires the author's name after it, thus reading "**Rhipidothrips** Uzel."

**E. arizona** should read **E. arizonae**.