

NOTES ON SOME OHIO APHIDS¹

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While collecting aphids and parasites in Ohio during the years 1936-1939 the writer has found two species of apparently undescribed aphids. He has also collected several species which have hitherto been unrecorded for Ohio. It is deemed advisable to publish the records and the descriptions of the new species in order to have names to use in recording the parasites, and to add to the list of Ohio Aphidae.

The following list was prepared as a supplement to the lists published by Guyton (Ohio Jour. Sci. 24: 1-30, 1924) and Cutright (Ohio Jour. Sci. 25: 313-314, 1925). Unless stated otherwise the following material was collected in Ohio by the writer.

Essigella pini Wilson. Hocking County, June 26, 1938, on *Pinus virginiana*.

Cinara tujafiliana (Del Guercio), Columbus, August 14, 1937, on Arborvitae (N. F. Howard; R. H. Davidson).

Unilachnus parvus (Wilson). Monroe County, July 23, 1938, on *Pinus* sp. and Hocking County, June 26, 1938, on *Pinus* sp.

Saltusaphis scirpus Theobald. Logan County, June 23, 1938, on *Scirpus* sp.

Plocamaphis flocculosa (Weed). Columbus, June 19, 1938, on *Salix* sp.

Aphis acritus n. sp.²

Alate vivipara.—Color dark greyish-black, only slightly pulverulent; antennae, metathoracic legs, cornicles and cauda dark, pro- and mesothoracic legs paler; (cleared specimens) head and thorax dark, abdomen with dusky areas about the base of the cornicles, between the cornicles and cauda, along the sides of the body and with a few smaller dark areas down the middle of the back. Body 1.77³ (1.57-1.96); hairs on

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³All measurements are given in millimeters, measurements in parenthesis indicate paratype variations. Variations in measurements of structures figured are given on the figures and not repeated in the text.

vertex, abdomen and tibiae .02; antennae 1.57 (1.44-1.6); antennal III, .40 and bearing 40 sensoria; IV, .26 and bearing 11 sensoria; V, .22 and bearing 1 secondary sensorium; VI, .14 plus .36; rostrum attaining first abdominal segment; rostral IV plus V, .12; hind tibiae .94 (.93-.96); hind tarsi .15; cornicles .17; cauda .09 for the hard portion and .15 total length.

Collections.—Holotype and 3 paratypes (alate vivipara) collected at Columbus, Ohio, June 17, 1938, on *Sedum* sp. Collections of alate vivipara were also made on the same plant June 10, 1938, (2 specimens) and October 7, 1938 (1 specimen).

Apterous vivipara.—Color greyish pulverulent, nymphs yellowish; legs and antennae slightly lighter than in the alate vivipara; cornicles and cauda dark; (cleared specimens) head slightly dusky; thorax pale; abdomen with a large dark patch between the cornicles and cauda and a few very small patches on the dorsum and sides. Body 1.72-1.85; hairs on vertex .034; antennae 1.41-1.64; rostrum attaining first abdominal segment; rostral IV plus V, .12-.13; hind tibiae .86-.94; hind tarsi .15; cauda .11-.12 for hard portion, .17-.18 total length.

Described from 6 paratypes collected with the holotype, and 5 paratypes in the June 10 collection.

Apterous ovipara.—Color as in apterous vivipara. Antennae 1.27-1.30; antennal III, .28; IV, .22; V, .2-.23; VI, .12-.13 plus .31-.33; rostrum attaining first abdominal segment; rostral IV plus V, .11; hind tibiae .73-.80; hind tarsi .14; cornicles .17-.19; cauda .11 for the hard portion, .14-.16 total length.

Collection.—On *Sedum* sp. at Columbus, Ohio, Oct. 7, 1938 (21 specimens). This collection was made on the same plant the holotype was collected from.

Alate or Apterous males.—Color very similar to alate vivipara. Body 1.09-1.58; antennae .97-1.58; rostral IV plus V, .08-.10; hind tibiae .56-.86; hind tarsi .09-.12.

Collection.—6 alate and 1 apterous specimens collected with the apterous ovipara.

Taxonomy.—*Aphis acritus* differs from *A. rumicis* in having more sensoria on the antennae of the alate vivipara. The alate vivipara of *A. rumicis* may have a relatively large number of sensoria (20-23) in the fall forms, however, the writer knows of no case where the spring forms have this many. In *A. acritus* the number of sensoria seem to be fairly constant in the spring and fall forms of the alate vivipara. *A. acritus* also differs in the sensoria being more tuberculate in alate vivipara; in bearing fewer hairs on the cauda; and in the shape of the hind tibiae of the apterous ovipara and the number and arrangement of the sensoria.

Aphis dibilicornis (Gillette and Palmer). Columbus, September 22, 1937, on *Helianthus tuberosus*.

Aphis frangulae Kaltenbach. Columbus, October 8, 1936, *Nepeta cataria*.

Aphis medicaginis Koch. Columbus, June 19, 1938, on sweet clover.

Aphis neogillettei Palmer. Columbus, May 1, 1938, on *Cornus* sp.

Aphis nyctalis Hottes and Frison. Hocking County, May 1, 1937, on *Senecio* sp.

Aphis oestlundii Gillette. Columbus, May and June, 1938, and Monroe County, July 23, 1938, on *Oenothera*.

Aphis saliceti Kaltentbach. Columbus, June and July, 1938, on *Salix* sp. Also in Pickaway County, July 7, 1938 (J. S. Caldwell).

Amphorophora ribiella (Davis) Columbus, June 18, 1938, on *Ribes* sp.

Capitophorus braggi (Gillette). Delaware County, October 9, 1938, and Columbus, October 2 and 14, 1938, on thistle.

Capitophorus gillettei Theobald. Columbus, October 14, 1938, on *Polygonum* sp.

Capitophorus ohioensis n. sp.⁴

Apterous vivipara.—Color greenish appearing overcast with greyish-white because of numerous fan-shaped or capitate hairs, antennal I, II and basal $\frac{2}{3}$ of III concolorous with head, remainder of antennae dark brown to black; legs pale, shading to brownish on the tibiae and tarsi; cornicles light brownish; cauda pale. Length of body 2.19 (2.11–2.35); hairs on vertex (.02–.04); hairs on antennal III, 0.1; antennae 2.86 (2.67–3.14); antennal III, .61 and bearing 2 or 3 sensoria; IV, .50; V, 43; VI, .15 plus 1.02; rostrum attaining second pair of coxae; rostral IV plus V, .11 (.10–.12); hind tibiae 1.30 (1.30–1.38); hind tarsi .15; cornicles .42 (.42–.51); cauda .23 (.23–.28) for the hard portion and .31 (.28–.34) for the entire length.

Described from the holotype and 3 paratypes taken on the underside of leaves of *Helianthus* sp. at Columbus, Ohio, October 15, 1938.

Apterous ovipara.—Color same as apterous vivipara described above; body (2.04–2.50); hairs on vertex (.03–.04); hairs on antennal III, .01; antennae (2.37–2.74); rostral IV plus V, (.11–.12); hind tibiae bearing 65 to 75 sensoria; hind tarsi .15; cauda (.17–.22) for the hard portion and (.23–.26) total length.

Described from 37 paratypes taken with the holotype.

Alate male.—Appendages somewhat darker than the apterous vivipara; body 1.41 (1.41–1.57); hairs on vertex .03; antennae 2.50; antennal III, .51 (.51–.53) and bearing 35–41 (27–43) sensoria; IV, .50 (.50–.52) and bearing 28–30 (22–30) sensoria; V, .39 (.39–.43) and bearing 18–21 sensoria; VI, .12 (.12–.14) plus .81 (.78–.81); rostral IV plus V, .09 (.09–.11); hind tibiae 1.19 (1.18–1.22); hind tarsi .15; cornicles .15; cauda (.07–.12) for the hard portion and (.12–.18) total length.

Described from allotype and 2 paratypes taken with the holotype.

Holotype, allotype and a few paratypes to be deposited in the U. S. National Museum, paratypes in the collection of the writer.

Taxonomy.—*C. ohioensis* resembles *C. wasatchii* Knowlton from which it differs in cornicles being longer than antennal V in the apterous vivipara and in the body hairs being longer and having a more distinct shaft. The body hairs on *C. wasatchii* are much denser and more conspicuous than in *C. ohioensis*.

⁴The writer wishes to express his appreciation to Dr. G. F. Knowlton for his opinions concerning this species.

Macrosiphum ambrosiae (Thomas). This species is common throughout the state and was collected on *Helianthus* sp., *Solidago* sp. and *Sonchus* sp.

Macrosiphum coryli Davis, Hocking County, June 26, 1938, on *Corylus* sp.

Macrosiphum illini Hottes and Frison. Columbus, August, September and October, 1938, on *Helianthus* sp.

Macrosiphum niwanista (Hottes). Columbus, July 9, 1938, on *Solidago* (?).

Hamamelistes spinosus Shimer. Columbus, May 12, 1938, and May 20, 1939, on *Betula* sp. This aphid was seriously damaging a young birch tree that was being used for ornamental purposes.
