

Manitou, September 29th, on Salix (Gillette).

*Typhlocyba trineincta* Fh.

Det. Gillette.

Fort Collins, September 27th, on grass (Gillette).

*Typhlocyba vitifex* Fh.

Det. Gillette.

Fort Collins, September 4th, on Virginia Creeper (Baker).  
Fort Collins, September 27th, on grass; Spring Canon, eight miles south-west of Fort Collins, May 11th (Gillette).

*Typhlocyba vitifex* Harr. var. *coloradensis* Gill.

Det. Gillette.

Fort Collins (Gillette, 6).

Fort Collins, March 8th, hibernating under dead leaves in vineyard (Baker). Fort Collins, May 18th to August 19th, on grape (Gillette).

*Typhlocyba vitis* Harr.

Colorado (Van Duzee, 5).

This record is certainly a doubtful one, and probably refers to vitifex.

*Typhlocyba vulnerata* Fitch.

Det. Gillette.

Spring Canon eight miles south-west of Fort Collins, May 11th; Fort Collins, June 23d on Virginia Creeper (Gillette).  
Fort Collins, March 8th, hibernating under leaves in vineyard, and September 4th on Virginia Creeper (Baker).

*Psylla coryli* Riley Ms.

Det. Riley.

Steamboat Springs, July 26th (Gillette). Manitou, July (Tucker).

*Psylla gillettei* Riley Ms.

Det. Riley.

Fort Collins, May 23d; Rist Canon, April 10th (Gillette).  
Rist Canon, April 20th on willow; Fort Collins, May 7th on alfalfa; Cameron Pass July, 5th, above timber on a dwarf Salix (Baker).

*Psylla negundinis* Riley Ms.

Det. Riley.

Fort Collins, June 4th (Gillette). Fort Collins, June 9th on alfalfa (accidental), and September 26th, abundant on box-elder; on the latter date a black ant was found carrying a living specimen from the tree to the ground (Baker).

*Psylla purshiae* Riley Ms.

Det. Riley.

Rist Canon, May 29th; Steamboat Springs, July 26th; Trinidad, May 14th (Gillette).

*Psylla 4-lineata* Fitch.

Det. Riley.

Soldier Canon, five miles west of Fort Collins, May 19th (Gillette).

*Psylla ribis* Riley Ms.

Det. Riley.

Spring Canon, May 11th and June 5th; Fort Collins, October 15th and May 9th; Trinidad, May 14th (Gillette). Dixon's Canon, May 6th on *Ribes cereum* (Baker).

*Pachypsylla celtidis-umbilicus* Riley.

Det. Riley.

Golden, April 30th (Gillette).

*Euphyllura arctostaphyli* Riley Ms.

Det. Riley.

Spring Canon, July 24th, imagos and nymphs on *Arctostaphylos uva-ursi* (Cowen).

*Aphalara angustipennis* Riley Ms.

Det. Riley.

North Park, July 20th; Steamboat Springs July 26th; Montrose, June 24th; Fort Collins, July 4th; Dolores, June 18th; Estes Park, July 11th; Colorado Springs, August 2d (Gillette). Fort Collins, June 12th, on alfalfa (Baker).

*Aphalara calthae* L.

Det. Riley.

Fort Collins, May 8th; Rist Canon, May 29th (Gillette). Fort Collins, May 16th to 31st on alfalfa, and May 7th on gooseberry; Steamboat Springs, July 12th on *Carex* (Baker). Canon City, October 15th in all stages on tomato (John Gravestock). Green Mountain Falls, Colorado Springs, July (Tucker).

*Aphalara epilobii* Riley Ms.

Det. Riley.

Ouray, June 22d (Gillette).

*Aphalara harrisii* Riley Ms.

Det. Riley.

Near West Cliff, Custer County (Cockerell, 10).

North Park, July 19th; Fort Collins, June 14th; Estes Park, July 12th (Gillette).

*Aphalara marginata* Riley Ms.

Custer County, midalpine (Cockerell, 10).

*Aphalara occidentalis* Riley Ms. Det. Riley.

Ouray, June 22d (Gillette).

*Aphalara solidaginis* Riley Ms. Det. Riley.

Fort Collins, July 4th (Gillette).

*Aphalara utahensis* Riley Ms. Det. Riley.

Steamboat Springs, July 12th on *Artemisia tridentata* (Baker). Green Mountain Falls, Colorado Springs, July (Tucker).

*Trioza amelauchieris* Riley Ms. Det. Riley.

Horsetooth Gulch, May 21st (Baker).

*Livia vernalis* Fitch. Det. Riley.

Trinidad, May 14th; Fort Collins, June 4th (Gillette).

*Chermes* sp.\*

"Winged female: Body very dark brown, about 1 mm. long. Alar extent about 3.75 mm. Antennae about 0.20 mm. long, the third, fourth and fifth joints with about nine annulations each. Wings rather long and narrow. Fore wing with subcostal vein wavy, first and second discoidals slender, stigmatal obsolete at base, stigma sharp pointed and oblique at base. Hind wings with the discoidal obsolete. Legs short."

Fort Collins, June 19th, winged and wooly apterous individuals on *Pseudotsuga douglassi* (Cowen).

*Pemphigus fraxinifolii* Riley.

Fort Collins, July 17th in typical pseudo-galls on *Fraxinus americana*. Mostly wingless (Cowen).

*Pemphigus populicaulis* Fitch.

Fort Collins, July 12th, in typical galls on *Populus monilifera*. In several cases *Chaitophorus populicola* was found associated with this species in the partly open galls (Cowen).

*Pemphigus populi-conduplicifolius* Cowen n. sp.

"Winged viviparous female: Length 1.8-2.2 mm. Alar expanse 6.85 mm. Nearly black, pruinose. The abdomen is deep green when the glaucous matter is removed by placing the insect in alcohol. Antennae 1 mm. long, joints slender, fifth and sixth with about six or seven annulations each. Stigma short and broad. Unguis usually with a constricted neck. Similar to ramulorum but larger and the antennal joints not nearly so strongly annulated.

Apterous individuals yellowish, with a thick mat of wooly secretion enveloping the abdomen. Eyes black."

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\*In the Aphididae all the determinations were made by Mr. Cowen, who also wrote all the descriptions and collated the records. The undetermined and undescribed species mentioned in the Custer County List (see Cockerell, 10) are not referred to except in cases where there is a probability of their being identical with species mentioned in this list.

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OF THE

HEMIPTERA OF COLORADO

BY C. P. GILLETTE AND CARL F. BAKER

*Approved by the Station Council,*

*ALSTON ELLIS, President.*

FORT COLLINS, COLORADO:

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