



Hall, M. C.
Sc. Ser. XII,
No. 10.



(IV.) ANNULATA.

I. HIRUDINEA.

PLACOBDELLA RUGOSA:—Host (?). Coll. Hall, 1907, Canon City, det. J. Percy Moore.

ERPOBDELLA PUNCTATA:—Host (?). Coll. Hall, 1907, Canon City, det. J. Percy Moore.

(V.) ARTHROPODA.

I. CRUSTACEA.

ACHTHERES or LERNAEOPODA:—Trout; mouth and gills. Coll. D. C. Beaman, Denver (?). In Dr. Ward's collection.

Dr. Charles Branch Wilson informs me that he knows of no parasitic copepods from Colorado, and has no records of any in MS. notes of G. G. Gurley, Richard Rathbun, M. T. Thompson or Edwin Linton. Dr. Harriet Richardson tells me that she knows of no parasitic isopods from Colorado.

2. INSECTA.

(1.) PLATYPTERA.

COLPOCEPHALUM ASSIMILE:—Whooping crane (*Grus americana*, per Kellogg 1900); skin. Coll. and det. Gillette, Lamar. Reported by Osborn (1896).

COLPOCEPHALUM LATICEPS:—*Botaurus lentiginosus*; skin. Coll. A. C. Stephenson, Fort Collins. Reported by Osborn (1902).

DOCOPHORUS DISTINCTUS:—*Corvus corax sinuatus*; skin. Reported by Kellogg (1900).

DOCOPHORUS SIALII:—*Sialia sialis*; skin. Kellogg (1900) lists this from "Merriam, Colo." and refers it to Osborn (1896). Osborn, however, in his description of this new species refers it to "Merriam Coll.", presumably an abbreviation of "Merriam Collection." There is no record from Colorado, as far as the writer is aware.

DOCOPHORUS SP.:—*Asio flammeus*; skin. Coll. and det. Cockerell, 1910, Boulder County.

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- DOCOPHORUS SP.:—*Cynomys ludovicianus*; skin. Coll. and det. Hall, 1911, Natural Corral, El Paso County. Insects of this genus are obviously errant when found on hosts other than birds. The probable true host of this insect is *Speotyto cunicularia hypogaea*, but the parasite is not *D. speotyti*.
- DOCOPHORUS SPEOTYTI:—*Speotyto cunicularia hypogaea*; skin. Coll. C. F. Baker, Fort Collins; described as a new species by Osborn (1896).
- LIPEURUS DOCOPHOROIDES:—*Gallus gallus*; skin. Coll. Chas. Euler, 1907, Boulder; det. Kellogg. (Data from Cockerell).
- MENOPON BISERIATUM:—*Gallus gallus*; skin. Coll. and det. Kaupp, 1908-'11, Fort Collins (common).
- MENOPON PALLIDUM:—*Gallus gallus*; skin. Coll. and det. Kaupp, 1908-'11, Fort Collins (common); coll. Cockerell, 1888, Westcliffe.
- PHYSOSTOMUM HASTATUM:—*Junco hyemalis oregonus*; skin. Coll. A. C. Stephenson, Fort Collins. Described as a new species by Osborn (1902).
- PHYSOSTOMUM SP.:—Song sparrow; skin. Coll. H. de W. Betts, 1910, Boulder; det. Cockerell.
- TRICHODECTES LIMBATUS:—*Capra hircus angoriensis*; skin. Coll. and det. Hall, 1911, Colorado Springs in goat from Amo. 1 case.
- TRICHODECTES MEPHITIDIS:—*Taxidea taxus*; skin. Coll. J. A. Rowher, 1907, from badger collected by Warren near Jefferson; det. Cockerell.
- TRICHODECTES PILOSUS:—*Equus caballus*; skin. Coll. and det. Kaupp, 1909, northern Colorado. 1 case.

(2.) HEMIPTERA.

- ACANTHIA LECTULARIA:—*Homo sapiens*; skin. Coll. and det. Hall, 1911, Colorado Springs. This widely distributed parasite, the bedbug, is getting increasing attention as the carrier of diseases.
- HAEMATOPINUS ASINI:—*Equus caballus*; skin. Coll. and det. Kaupp, 1911, northern Colorado. 1 case.

- HAEMATOPINUS MONTANUS:—Western gray squirrel; skin. Coll. Baker, Fort Collins; described as a new species by Osborn (1896).
- HAEMATOPINUS PEDALIS:—*Ovis aries*; skin. Coll. and det. Kaupp, 1908-'11, Fort Collins. 1 case.
- HAEMATOPINUS SP.:—*Eutamias amoenus operarius*; skin. Coll. and det. Hall, 1911, Clyde.
- HAEMATOPINUS SUIS:—*Sus scrofa domestica*; skin. Coll. and det. Kaupp, 1908-'11, Fort Collins. Common.
- PEDICULUS CAPITIS:—*Homo sapiens*; in hair of head. The writer recalls seeing this in Denver in 1887 and knew of several cases in Colorado Springs about 1898. In the last case, the lice were spread among pupils at school, apparently by the general use of a comb kept in the girls' cloak room. The individual comb is, of course, practically as desirable as the individual drinking cup, and for much the same reasons.

(3.) DIPTERA.

- AEDES CURRIEI:—Host (?). Coll. E. P. Taylor, 1906, Grand Junction; Cockerell, Florissant; S. A. Rohwer, 1907, Florissant; det. Dyar and Knab. Recorded from Grand Junction by Dyar (1907).
- AEDES NIGROMACULIS:—Host (?). Coll. H. L. Shantz, 1909, Akron; S. A. Rohwer, 1907, Boulder; det. Dyar and Knab.
- AEDES SP.:—Host (?). Coll. C. Dwight Marsh, 1910, Mount Carbon, det. Knab.
- AEDES SYLVESTRIS:—Host (?). Coll. E. P. Taylor, 1906, Grand Junction; Cockerell, Boulder; det. Dyar and Knab. See *Culex stimulans*.
- ANOPHELES SP.:—[*Homo sapiens*.] Coll. G. P. Weldon, 1911, Delta County, according to letter from Professor Gillette. This record is very important. See *Plasmodium sp.*
- CALLIPHORA VIRIDESCENS:—Host (?). Coll. C. Dwight Marsh, 1910, Mount Carbon, det. Coquillett.

- CALLIPHORA VOMITORIA:—Host (?). Coll. C. Dwight Marsh, 1910, Mount Carbon, det. Coquillett.
- CERATOPOGON COCKERELLI:—Host (?). Coll. Cockerell, Custer County. Described as a new species by Coquillett (1901).
- CERATOPOGON SPECULARIS:—Host (?). Described as a new species, partly on Colorado material, by Coquillett (1901).
- CHRYSOPS CARBONARIUS:—Host (?). Recorded by Hine (1904).
- CHRYSOPS COLORADENSIS:—Host (?). Recorded by Hine (1904).
- CHRYSOPS COQUILLETII:—Host (?). Recorded by Hine (1904) p. 246. Apparently an error as p. 221 specifies California exclusively and apparently correctly.
- CHRYSOPS DISCALIS:—Host (?). Recorded by Hine (1904).
- CHRYSOPS FULVASTER:—Host (?). Coll. Titus, 1904, Delta, det. Coquillett. A record by Hine (1904) may be based on Titus's record in the Bureau of Entomology.
- CHRYSOPS LUPUS:—Host (?). Recorded by Hine (1904).
- CHRYSOPS VITTATUS:—*Bos taurus*; skin. Coll. and det. Kaupp, 1908-'11, in mountains around Fort Collins. Common.
- CULEX CONSOBRINUS:—Host (?). Det. Coquillett. Reported by Howard (1900). The correct name of this species is *Culiseta inornatus* q. v.
- CULEX STIMULANS:—Host (?). Det. Coquillett. Reported by Howard (1900). The correct name of this species is *Aedes sylvestris*, q. v.
- CULEX TARSALIS:—Host (?). Coll. S. A. Rohwer, 1907, Florissant; E. P. Taylor, 1906, Grand Junction; E. S. Tucker, Denver; det. Dyar and Knab.
- CULISETA INCIDENS:—Host (?). Coll. at Burke; coll. E. P. Taylor, 1906, Plateau Canon; det. Dyar and Knab.
- CULISETA INORNATUS:—Host (?). Coll. Cockerell, 1908, Boulder, det. Dyar; coll. S. A. Rohwer, 1907, Florissant; E. S. Tucker, Denver: det. Dyar and Knab. See *Culex consobrinus*.