

## THE COLEOPTERA OF CANADA.

BY H. F. WICKHAM, IOWA CITY, IOWA.

XXI. THE CHRYSOMELIDÆ OF ONTARIO AND QUEBEC — (*Concluded*).

Tribe X.—HISPINI.

The form alone of these little beetles is amply sufficient for their separation from the other tribes of Chrysomelidæ. They are more or less wedge-shaped, the elytra often broadly and squarely truncate behind and with rows of deep punctures, sometimes costate as well. Only two of the North America genera have been recorded from our territory, *Microrhopala*, with 8-jointed antennæ (owing to the fact that the last four joints are closely connate), and *Odontota*, in which the antennæ are 11-jointed. The middle tibiæ are straight in both of these genera.

## MICRORHOPALA, Chev.

- A. Elytra with only eight series of punctures.
  - b. Head usually red, thorax red, elytra blue-black with side margin and discal vitta red. .21-.25 in. . . . . *vittata*, Fabr.
  - bb. Head, thorax and elytra unicolorous (bluish, greenish or bronzed).
    - Punctures of the outer rows of elytra larger than inner. .20 in. . . . . *excavata*, Newm.
    - Punctures of outer rows like those of the inner. .22-.25 in. . . . . *cyanea*, Say.
- AA. Elytra with more than eight series of punctures on a part of their length, the fourth interval bearing four rows near the apex.
  - Form more elongate. .12 in. . . . . *porcata*, Mels.

## ODONTOTA, Chev.

- A. Elytral punctures in ten rows; more or less distinctly costate.
  - Elytra reddish or yellowish, with black sutural stripe. .24-.26 in (fig. 10) . . . . . *dorsalis*, Thunb.
  - Elytra blackish, humeri sometimes reddish.
    - Body beneath black, thorax in part and humeri of elytra red. .22-.28 in. . . . . *scapularis*, Oliv.
    - Body beneath and thorax red, elytra black. .24 in. . . . . *bicolor*, Oliv.



FIG. 10.

Elytra rosy or reddish yellowish, much broader at apex, and with serrate, explanate margin, the disc indistinctly marked with

- dark spaces. Under surface variable in colour, thorax coloured like the elytra. .24-.26 in. .... *rubra*, Web.
- AA. Elytral punctures in eight rows, costæ acute. Colour variable, usually with head dark, thorax and elytra pale with dark spots of irregular shape. .15 in. .... *nervosa*, Panz.

## Tribe XI.—CASSIDINI.

These are the "tortoise beetles" or "helmet beetles" found on morning glories and other convolvulaceæ. They are easily recognized on account of the peculiar form, which is circular or elliptical in outline, the upper surface convex, the margins of elytra and thorax explanate (to a varying degree), the head concealed. Some of them, notable *Coptocycla aurichalcea*, which, with its larva, is often abundant on the morning glory, are of most brilliant golden and greenish tints when alive; these, however, being lost at or after death. The three genera found in Canada are as follows:

Size large (.38-.46 in.), form more elliptical.

Head partially exposed, thorax and elytra spotted. . *Chelymorphism*.

Head entirely covered, thorax spotted, elytra plain. . . . *Physonota*.

Size small (.20-.30 in.), head entirely covered, antennæ longer than thorax. . . . . *Coptocycla*.

## COPTOCYCLA, Chev.

Three species are recorded, one of which, *C. clavata*, Fabr., is easily known by its size (.30 in.), the brown elytra, which are roughened and gibbous, and the transparent spot on the middle of the outer margin. It occurs on the "ground cherry." The others have the elytra nearly even without gibbosities, and are closely allied. Mr. Crotch separates them by the fact that in *aurichalcea*, Fabr., the body beneath and the last four joints of the antennæ are black, while in *guttata*, Oliv., the sides of the body beneath are reddish and the last two joints of the antennæ are black. Both are of about the same size, a trifle under a quarter of an inch in length.

## PHYSONOTA, Boh.

A rather large insect of a greenish or pale yellow colour, the thorax spotted, the principal and most constant spot being a large one near the middle. Two others are usually present near the base. Elytra not maculate. It is described by Say as *P. unipunctata*.

## CHELYMORPHA, Chevrolat.



FIG. 11.

Represented by *C. argus*, Licht., of the size of the preceding species (.36-.48 in.), yellowish or reddish above, black beneath. Thorax with four black spots in a curved transverse row, behind which are often two others. Elytra usually with six black spots on each, arranged as shown in Fig. 11, and a common spot just posterior to the scutellum. Legs usually black. The prosternum is rather deeply longitudinally grooved and produced in front.

The following bibliography gives the names of the principal papers on the North American Chrysomelidæ; a few short articles have been omitted to economize space, since the genera have been treated in the more extended papers cited.

- 1845-1848.—Lacordaire, Th. Monographie des Coléoptères subpentamères de la famille des Phytophages. 2 Vols. Mem. Soc. Roy. Liege, Vols. III. and V.
- 1849.—Haldeman, S. S. Cryptocephalinorum Borealis Americæ diagnoses. Jour. Acad. Nat. Sci., N. S., I.; Proc. Acad. Nat. Sci., IV.
- 1852-1854.—Suffrian, E. Monographie und kritisches Verzeichniss der Nordamerikanischen Cryptocephaliden. Linnæa Entom., VI. and VII.
- 1856.—Rogers, W. F. Synopsis of the species of Chrysomela and allied genera inhabiting the United States. Proc. Acad. Nat. Sci., VIII.
- 1862-1865.—Stal, C. Monographie des Chrysomelides de l'Amérique. Upsal.
- 1865.—Leconte, J. L. On the species of Galeruca and allied genera inhabiting North America. Proc. Acad. Nat. Sci., Philadelphia.
- 1866.—Leconte, J. L. Practical Entom., II., p. 9 [Prasocuris].
- 1873.—Crotch, G. R. Material for the study of the Phytophaga of the United States. Proc. Acad. Nat. Sci., Philadelphia.
- 1880.—Leconte, J. L. Short studies of North American Coleoptera. Tr. Am. Ent. Soc., VIII. [Cryptocephalini].
- 1883.—Horn, Geo. H. Chrysomelidæ, Hispini. Miscellaneous notes and short studies of N. A. Coleoptera. Trans. Am. Ent. Soc., X.
- 1889.—Horn, Geo. H. A synopsis of the Halticini of Boreal America. Tr. Am. Ent. Soc., XVI.
- 1891.—Leng, Chas. W. Revision of the Donaciæ of Boreal America. Tr. Am. Ent. Soc., XVIII.

- 1892.—Horn, Geo. H. Studies in Chrysomelidæ. Tr. Am. Ent. Soc., XIX.  
1892.—Horn, Geo. H. The Eumolpini of Boreal America. Tr. Am. Ent. Soc., XIX.  
1893.—Horn, Geo. H. The Galerucini of Boreal America. Tr. Am. Ent. Soc., XX.  
1896.—Linell, M. L. A short review of the Chrysomelas of North America. Jour. N. Y. Ent. Soc., IV.

Since the note on the genus *Zeugophora* was printed (on p. 73 of the previous volume) two other species have been received from Mr. R. J. Crew, of Toronto: *Z. Kirbyi*, Baly (*Reinecke*, Grote), which is uniformly yellowish above, and *Z. scutellaris*, Suffr., in which the head and thorax are entirely yellow, while the elytra are black, with large punctures, separated by more than their own diameters. Collectors should be on the lookout for *Z. consanguinea*, Cr., which differs from *scutellaris* in having the occiput black, while the elytral punctures are close. It is known to me from Wisconsin, Illinois, and Manitoba.

Attention should be called to a clerical error in the table of *Chrysomela*. The name *labyrinthica* should read *pnirsa*. Dr. Leconte is said to have distributed it under the manuscript name of *labyrinthica*, and in thinking of it by this characteristic cognomen the error was committed.

## ON THE MEXICAN BEES OF THE GENUS AUGOCHLORA.

BY CHARLES ROBERTSON, CARLINVILLE, ILLINOIS.

In the Transactions of the American Entomological Society, XX., 147, after notes and descriptions of five species of *Augochlora*, I gave the following note: "All of the species of *Augochlora* mentioned above agree in having the hind spur serrate with numerous fine teeth, and form a distinct section of the genus. Another section, to which belong *A. lucidula*, Sm., *A. sumptuosa*, Sm., and *A. humeralis*, Ptn., is characterized by having this spur provided with four or five long teeth."

In the January number of this journal, XXIX., 4-6, Prof. Cockerell makes use of these distinctions—under more obscure terms, however—and has given special names to these sections, and that, too, without referring to my note. I have no objections to his giving names to the sections, however, for I have had ample opportunity to do so, if I had