

Hind femora unspined.

Vertex very broad and blunt, one-half as wide or wider than the distance between the eyes; tegmina and wings usually abbreviated; cerci of male long, acuminate at tip. *Xiphidium occidentale*.

Vertex less than half as wide as distance between eyes; tegmina and wings variable, but covering whole of abdomen or more; cerci of male short, strongly depressed at tip. *Xiphidium vicinum*.

MORE ABOUT THE RED-WINGED CATOCALÆ.

BY G. H. FRENCH, CARBONDALE, ILL.

At the time of writing my article* on the "Red Wing" species of Catocalæ I was in doubt about a few forms, as there were some I had not seen. Since writing that, Mr. O. C. Poling, of Quincy, Ill., kindly sent me for examination some of these, and many others from his large collection; besides enriching my cabinet with several species it did not before contain. To bring the "Red Wings" into what seems to be their proper relationship my last article needs a revision, which I will here make before taking up the "Yellow Wing" forms.

Marmorata should probably precede *Concumbens*, where it may be found in this series. Mr. Poling's new species, *Frenchii*, should follow *Californica* and its varieties. Mr. Henry Edwards described both *Jessica* and *Portia* as related to *Californica*. These, with Mr. Poling's species, *Hippolyta* and *Luciana*, it seems to me should constitute what might be called the *Californica* group.

Next I would place the *Junctura* group, from 32 to 38. This group has been a puzzle to all students of the genus from the time Mr. Grote began working on it to the present. From a careful study of Mr. Poling's large series, what my own cabinet contains, and some from the cabinet of Supt. A. J. Snyder, of Belvidere, Ill., I believe I have identified the forms so far as names are concerned. As to their value as species, that can not be decided definitely without breeding, nor can breeding decide the question unless we know what forms a brood make after they are bred. I have bred one of these, *Stretchii*, and have in my series a good representation of its variations. I would place *Cassandra* just before this, a species that is also somewhat variable. I have taken *Walshii* here for more than twenty years, and Walker's description of *Junctura* does not fit any specimen I have ever taken. It seems to me

* CAN. ENT., XXXIII., 12 (Jan., 1901).

to be as much entitled to specific rank as any of the group. *Aspasia* is a Colorado form that extends very little outside that State. *Babayaga* and *Arizonae* are both to be found in Arizona. The general tone of the first is reddish gray, that of the second bluish gray. A specimen before me from Texas differs from all the others in the group in having a greenish tint and in being larger than the others. Mr. Dodge, of Louisiana, Mo., has another specimen from the same locality that is like this. It may be that when more material is obtained of this and of *Arizonae* they may be sufficiently distinct to merit a name.

Circe is another species of which some doubt has been felt. For this reason I placed it as a variety of *Coccinata* in my former article. I have occasionally taken the form here, and have seen it in other cabinets, and it has always been *Circe*, without any variation toward *Coccinata*. The late Henry Edwards expressed the opinion that it was a valid species. I will here follow what has been my own conviction as to the form, and place it in the list as a distinct species. Beginning with *Cara*, I would group the species as follows :

- | | |
|----------------------------------|----------------------------------|
| 22. <i>Cara</i> , Guenée. | 34. <i>Aspasia</i> , Strecker. |
| var. <i>Sylvia</i> , Hy. Edw. | var. <i>Sara</i> , French. |
| var. <i>Carissima</i> , Hulst. | 35. <i>Walshii</i> , Edw. |
| 23. <i>Amatrix</i> , Hubner. | 36. <i>Junctura</i> , Walker. |
| var. <i>Nurus</i> , Walker. | 37. <i>Cassandra</i> , Hy. Edw. |
| 24. <i>Marmorata</i> , Edw. | 38. <i>Stretchii</i> , Behr. |
| 25. <i>Concumbens</i> , Walker. | 39. <i>Augusta</i> , Hy. Edw. |
| var. <i>Diana</i> , Hy. Edw. | 40. <i>Rosalinda</i> , Hy. Edw. |
| var. <i>Hillii</i> , Grote. | 41. <i>Pura</i> , Hulst. |
| 26. <i>Californica</i> , Edw. | 42. <i>Semirelecta</i> , Grote. |
| var. <i>Perdita</i> , Hy. Edw. | 43. <i>Unijuga</i> , Walker. |
| var. <i>Cleopatra</i> , Hy. Edw. | 44. <i>Beaniana</i> , Grote. |
| 27. <i>Frenchii</i> , Poling. | 45. <i>Meskei</i> , Grote. |
| 28. <i>Jessica</i> , Hy. Edw. | 46. <i>Mariana</i> , Hy. Edw. |
| 29. <i>Hippolyta</i> , Hy. Edw. | var. <i>Francesca</i> , Hy. Edw. |
| 30. <i>Portia</i> , Hy. Edw. | 47. <i>Grotiana</i> , Bailey. |
| 31. <i>Luciana</i> , Hy. Edw. | 48. <i>Hermia</i> , Hy. Edw. |
| <i>Nebraska</i> , Dodge. | 49. <i>Briseis</i> , Edw. |
| var. <i>Somnus</i> , Dodge. | 50. <i>Faustina</i> , Strecker. |
| 32. <i>Babayaga</i> , Strecker. | var. <i>Zillah</i> , Strecker. |
| 33. <i>Arizonae</i> , Grote. | var. <i>Verecunda</i> , Hulst. |

- | | |
|--------------------------|--------------------------|
| var. Allusa, Hulst. | var. Ophelia, Hy. Edw. |
| 51. Irene, Behr. | var. Votiva, Hulst. |
| var. Virgilia, Hy. Edw. | 59. Ultronia, Hubner. |
| var. Volumnia, Hy. Edw. | var. Celia, Hy. Edw. |
| var. Veleria, Hy. Edw. | var. Mopsa, Hy. Edw. |
| 52. Parta, Guenée. | var. Adriana, Hy. Edw. |
| var. Perplexa, Strecker. | var. Herodias, Strecker. |
| var. Petulans, Hulst. | 60. Ilia, Cramer. |
| 53. Coccinata, Grote. | var. Zoe, Behr. |
| var. Sinuosa, Grote. | var. Uxor, Guenée. |
| 54. Circe, Strecker. | var. Osculata, Hulst. |
| 55. Aholibah, Strecker. | 61. Innubens, Guenée. |
| 56. Chiricahua, Poling. | var. Flavidalis, Grote. |
| 57. Violenta, Hy. Edw. | var. Hinda, French. |
| 58. Verilliana, Grote. | var. Scintillans, Grote. |

ON LABELING INSECTS.

There is a great lack of uniformity in labeling insects; owing to which it is often impossible to distinguish the name of the locality from that of the collector; and with reference to the date of capture, it is impossible to discover what is meant (when the day of capture is less than the 13th), on account of some collectors placing the day of the month first, and others the month.

For instance, a specimen taken on May 10, 1901, would by some be labeled 10, 5, 1901, and by others (chiefly amongst Americans) 5, 10, 1901. On passing from one collection to another, the recipient would be undecided as to whether the figures referred to May 10 or Oct. 5.

Again, now that exchange abroad is much more common than formerly, it is insufficient to give simply the village or wood in which the insect is taken.

The province or county should also be given, in full if possible, unless the name of the country be also added, when both the latter may be abbreviated; as for example: "Bradford, Yorks., Eng.," or "Shovel Mount, Burnet Co., Tex."

It must be remembered that there are counties of Middlesex, Surrey and Cornwall in Jamaica; that there are similar instances everywhere, and hosts of towns with well-known English names in the United States, in Canada and other colonies; so that specimens so ambiguously labeled