

LXIV.—*Notes on the Genus Acronycta of Authors and its Position in the Classification of Heterocerous Lepidoptera.*

By A. G. BUTLER, F.L.S., F.Z.S., &c.

IN the 'Transactions of the Entomological Society' for 1879 I proposed (pp. 313–317) to break up the old genus *Acronycta* and distribute it, chiefly on account of its very distinctive larval characters, amongst the various families of Bombyces &c. to which the peculiarities of the larvæ seemed to show affinity. It must, however, be borne in mind that my conclusions were based chiefly upon the larvæ of the British species and the published illustrations of Abbot; nevertheless I examined the neuration of the species in each group, comparing it with that of each of the families to which the larval types seemed to point.

Unfortunately, at the time when I wrote my paper the importance of the position of certain veins in the wings of moths, as having more than generic value, was not so fully appreciated as at the present time; therefore, although I correctly represented the venation of the Notodontidæ, I failed to see that the position of the median branches and lower radial of the primaries in that family precluded the possibility of any *Acronycta* being regarded as even remotely allied to it. On the other hand, it is now known that the Liparidæ and Arctiidæ are much more nearly related to the Noctuæ than was formerly supposed; so that the similarity in neuration is by no means surprising, nor is there any reason why larval characters found in the former should not also occur in a genus of Noctuæ.

A recent study of the transformations of *Acronycta* in Abbot's unpublished volumes has now clearly shown that the differences in the clothing and outline of the larvæ characteristic of the Bombycid families already referred to occur in various species of the same group in *Acronycta*, and so are valueless as indicative of their affinities. I am therefore obliged to renounce my former opinion and admit that *Acronycta* is in truth a genus of Noctuæ, probably nearest allied to *Polia*.

The sections into which *Acronycta* has been divided may still be used (as having the value of numerals only) to indicate the near affinities of the species; and, as the Museum series is represented by nearly eighty species, I propose to indicate them below. I must, however, first point out that *Acronycta simplex* of Walker is *Xylomyges crucialis* of Harvey, and

that *Hadena externa* of Walker (which I formerly placed in *Triana*) is probably a very worn and stained specimen of *Bryophila muralis*, Forst.; its neuration certainly corresponds closely with that of *Bryophila*, and such markings as can be traced are also found in *B. muralis*. I have failed to recognize *Acronycta declarata*, Walk., *A. telum*, *interrupta*, and *pachycephala*, Guen.; though the description of *A. interrupta* is rather suggestive of *A. vinnula*, Grote, the absence of the illustration upon which M. Guenée based it from the Museum collection of drawings prevents its being satisfactorily identified. Possibly *A. telum* and *pachycephala* may be known to our American friends; but we possess no specimens so labelled.

Grote's group *Merolonche* seems to me to be far more distinct than the other sections of *Acronycta* and may perhaps prove to have generic value, the thicker antennæ of the males and the well-developed lateral anal tufts, combined with the regular fasciated character of the markings, should, I think, have some significance. *A. lithospila*, Grote, appears to me to be closely allied to the European *Scotochrosta pulla*, and cannot, I think, be an *Acronycta*; nor can I believe that *A. lanceolaria* and *insolita*, Grote, should be widely separated from the latter or from *Cucullia*. I therefore admit *Eulonche*, for these two species, as a genus.

One or two of the American species which have been wrongly identified I shall be obliged to rename.

ACRONYCTA (*Acronicta*, sic, Ochs.).

Typical Section.

1. *A. leporina*, Linn., and var. *bradyporina*, Treit. Europe.
- *2. *A. felina*, Grote. United States.
3. *A. lepusculina*, Guen., and var. *populi*, Riley. Hudson's Bay &c.
- *4. *A. insita*, Walk. United States and Canada.
- *5. *A. innotata*, Guen. New York, Hudson's Bay, Canada, &c.

Of the above we possess the types of 2, 4, and 5. To save trouble I shall indicate all species of which we possess the type specimens by an asterisk.

Section MEGACRONYCTA, Grote.

1. *A. americana*, Harris.
A. acericola?, Guen. New York and Foo-chow.
- *2. *A. dactylina*, Grote. United States.
3. *A. hastulifera*, Sm. Abb.
 *♂. *A. contacta*, Walk. New York and Hudson's Bay.

In the Grote collection an example of *A. americana* was labelled *A. hastulifera*; but the figure corresponds far more closely with a female recognized as the latter and labelled by M. Guenée. We have a fourth species of this group from Ichang †.

Section ARCTOMYSCIS, Hübn.

1. *A. aceris*, Linn. Switzerland, Christiania, Livonia, &c.
2. *A. abscondita*, Treit. North Germany, Hungary.
3. *A. euphrasiæ*, Esper. Sicily, Russia.
4. *A. euphorbiæ*, Gmel. Switzerland, Germany, &c.
- *5. *A. sperata*, Grote. New York.
- *6. *A. tota*, Grote. Texas.

No. 6 is so much nearer to the dark variety of *A. aceris* than to any species of the section *Triæna*, that I have without hesitation placed it here.

Section APATELA, Grote (APATELÆ, part., Hübn.).

1. *A. hercules*, Feld. Yokohama and Tokio.
2. *A. rubricoma*, Guen. Philadelphia and Texas.
3. *A. luteicoma*, Grote. Kansas.
- *4. *A. pallidicoma*, Grote. Illinois.
- *5. *A. impressa*, Walk.
A. fasciata, Walk., and Verrillii, Grote.
A. brumosa, Grote (not Guen.). Hudson's Bay &c.

† I hesitate to describe the latter, Messrs. Leech and Oberthür having done so much work in the Chinese fauna of late years as to render such a course risky.

- *6. *A. distans*, Grote. United States.
- 7. *A. megacephala*, Schiff. Zurich, Frankfort, &c.
- 8. *A. noctivaga*, Grote. New York and Canada.
- 9. *A. superans*, Guen. New York and Canada.
- *10. ♀. *A. brumosa*, Guen.
 ♂. *A. longa*?, Guen.
 * ♀. *A. persuasa*, Harv. Florida and Yokohama.
- *11. *A. perdita*, Grote. Sanzalito.
- 12. *A. afflicta*, Grote.
 A. brumosa, var., Guen. Florida.
- 13. *A. xyliniformis*, Guen. Rhode Island, Florida, &c.
- *14. *A. extricata*, Grote. Texas? (locality not on labels).
- 15. *A. obliterata*, Sm. Abb. New York, Ohio, Nova Scotia, Canada, &c.

Section LEPITOREUMA, Grote.

- 1. *A. rumicis*, Linn.
 A. diffusa, Walk. Zurich, Brussa, Turkey, Ichang, Japan.
- 2. *A. leucoptera*, Butl. Yokohama.
- 3. *A. impleta*, Walk.
 A. subochrea, Grote (on label and in Check-List, p. 23. n. 66). New York.

In Grote's Revised Check-List the author (p. 4) states that there is no such species as *A. subochrea*. If this is the case, how did he come to label one specimen as his type of that species, a second specimen as also "*Apatela subochrea*, Grote," and to include it in his Check-List of 1882? It may not be a distinct species from the following, but it is certain that at one time it was so regarded by Grote.

- *4. *A. hamamelis*, Guen. United States.

Our example is evidently a co-type, though not mentioned by Guenée, since it still bears his label; probably as it has no abdomen he thought it not worth recording under the description.

- *5. *A. hæsitata*, Grote. United States.

- *6. *A. dentata*, Grote. United States.
- *7. *A. increta*, Grote. New York.
- *8. *A. dissecta*, Grote. Philadelphia, New York, Kansas.
- *9. *A. clarescens*, Guen. Trenton Falls, New York, Nova Scotia.
- *10. *A. modica*, Walk.
**A. exilis*, Grote. New York and Texas.
- *11. *A. spinigera*, Guen.
**A. Harveyana*, Grote. New York.
- *12. *A. ovata*, Grote. Texas.
- *13. *A. alborufa*, Grote. New York.
- *14. *A. grisea*, Walk. Hudson's Bay.

Section PHARETRA, Hübn.

- 1. *A. auricoma*, Schiff. Zurich, Livonia, &c.
- 2. *A. orientalis*, Mann. Bithynia.
- 3. *A. menyanthidis*, View. St. Petersburg, Berlin, &c.

Section TRIÆNA, Hübn.

- 1. *A. psi*, Linn. Regensburg &c.
- *2. *A. increta*, Butl. Yokohama.
- 3. *A. tridens*, Gmel. Frankfort &c.
- *4. *A. leucocuspis*, Butl. Yokohama and N. China.
- *5. ♂. *A. lobeliæ*, Guen.
* ♀. *A. thoracica*, Grote. New York.
- 6. *A. Grotei*, sp. n.
A. lobeliæ, Grote (not Guen.).

Half as large again as *A. lobeliæ*, the longitudinal black streaks on the primaries slightly more elongated, but all the markings very similar: secondaries decidedly darker, with more golden gloss, the grey markings also darker. Expanse of wings, ♂ ♀ 56 millim. (one dwarfed male 47 millim.).

New York and Kansas.

It is possible that this may be no more than a large dark form of *M. Guenée*'s species; but it is clear that it is not so regarded in America, and therefore I name it.

7. *A. furcifera*, Guen. New York.
8. *A. cuspis*, Treit. Germany.
9. *A. maxima*, Moore. Kúlú and Murree.
- *10. *A. anædina*, Butl. Hakodaté and Tokio.
11. *A. vinnula*, Grote. New Jersey.
12. *A. Smithii*, sp. n.
A. clarescens, Grote (not Guen.).

Primaries above chalky white, irrorated and clouded with sandy greyish or yellowish and grey mixed, somewhat after the manner of *A. morula*; the submedian basal black streak has somewhat the character of that of the true *A. clarescens*, only it is more elongated, sharply defined, and its upper margin is regularly tridentate; the reniform and orbicular spots are narrowly black-edged; the twin discal or post-median lines are sigmoidal and dentate-sinuate, the outer line being partly black; the subapical longitudinal dash is vague and diffused, and the dagger-mark has a brown background, which gives it a blurred appearance; in other respects the species is like *A. furcifera*, the male having whitish and the female more or less golden-brown secondaries with the usual markings. Expanse of wings 40-45 millim.

New York and Kansas.

- *13. *A. pauperata*, Grote. United States.
14. *A. occidentalis*, Grote. Rhode Island, New York, Buffalo, Kansas.
"A. furcifera, Pack." (not Guen.), on Zeller specimen.
15. *A. morula*, Grote. New York and Canada.
- *16. *A. falcula*, Grote. United States.
- *17. *A. parallela*, Grote. Colorado.
- *18. *A. Radcliffei*, Grote. New York and Vancouver.
19. *A. tritona*, Hübn. New York and Florida.
20. *A. hasta*, Guen. "Amherst" (United States or Canada?).
- *21. *A. quadrata*, Grote. Kansas.

Section HYBOMA, Hübn.

1. *A. strigosa*, Fabr. N. Russia, Livonia, &c.

*2. *A. nigrivitta*, Hamps. Nilgiris.

3. *A. divisa*, Moore. Dharmsala.

Section JOCHEÆRA, Hübn.

1. *A. alni*, Linn. Ausbach, Livonia, &c.

*2. *A. connecta*, Grote. New York.

We also have a pretty species from Madagascar. It has probably been named by Herr Saalmüller or M. Mabile; but at present I cannot spare the time to look it up. Grote's *A. funeralis* is unknown to me, but (if confounded with *A. americana*) can hardly belong to the section *Jochæra*.

Section MASTIPHANES, Grote.

*1. *A. denticulata*, Moore. Dharmsala and Sabathu.

*2. *A. edolata*, Grote. Arizona.

Section MEROLONCHE, Grote.

*1. *A. spinea*, Grote. California.

2. *A. Lupini*, Behr. Mendocino.

It is possible that one or two of the Japanese and Chinese forms enumerated above may be synonymous with species described from East Siberia; but the illustrations to the 'Lepidopteren Ost-Sibiriens' and 'Reisen und Forschungen im Amur-Lande' are so poor that, without seeing examples from the Amur, it would not be possible to be certain of the identity of the species, in a genus containing so many closely related forms.

LXV.—Notes on some Mexican *Oryzomys*.

By OLDFIELD THOMAS.

DR. A. C. BULLER has lately sent to the British Museum a specimen of an *Oryzomys* from Jalisco which appears to be new, and in working this out I find that some confusion exists as to Alston's *Hesperomys Couesi*, in clearing up which a second species in the Museum collection proves to need description.



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