

369. A remarkable dark var. of *R. phlaeas*, C. G. Barrett, £10 10s.  
 373. *Callimorpha dominula*—black var., Burney coll., £5 5s.  
 344. *C. dispar*, male, large and perfect, Burney coll., £11.  
 375. do. female £11.  
 376. do. male var., left forewing shaded golden, F. O. Morris coll., £10.  
 377. *C. dispar*, female var., fig. Morris, £5.  
 378. *Polygonia c-album* var., Farn. coll., fig. Frohawk, £3 15s.  
 383. *E. cardamines* var., streaked orange on underside, Mason Coll., £2 5s.  
 397. *A. aglaia* dark var., nearly all black, £1 12s. (damaged).  
 400-401. Three bred vars. of *A. urticae* and a *B. selene* var. chocolate brown, £4 10s.

The total of the Sale realised roughly a little under £500 which did not come up to expectations; very many of the specimens, however, were in poor condition. The remaining portion of the Collection will be sold on November 24th, when the well known and much figured wholly black and wholly white vars. of *M. galathea* will be offered.

### Two Myrmecological Notes.

By W. C. CRAWLEY, B.A., F.E.S.

I. SOUTH AMERICAN ANTS IMPORTED INTO ENGLAND.—Among some ants kindly sent me by Mr. H. Britten were the following:—

*Holcaponera striatula*, Mayr., var. *obscura*, Em., ♀.

*Brachymyrmex heeri*, For., var. *aphidicola*, For., ♀.

Both these species were found by Mr. H. Britten, Jun., in a hot-house at York, the former on August 19th, and the latter on October 19th this year.

II. FURTHER LIGHT ON TEMPORARY SOCIAL PARASITISM IN THE GENUS *LASIUS*.—Although it is well established that the ♀♀ of the *umbratus* group found new colonies by the aid of ♂♂ of the *niger* group, there is one point that has not been cleared up. Two years after the acceptance of a ♀ by the host workers, the eggs laid by the ♀ come to maturity. There is therefore a period (which, considering the long life of ants of this genus, should last more than a year) during which the colony consists of more or less equal numbers of both species. Nevertheless it is a rarity to find such colonies in nature. A possible explanation has occurred to me from the behaviour of the host species in one or two instances. In the very first case observed (1896-1900) it was significant that when the colony died, owing to the nest having become too dry, not a sign of any of the host ♂♂ could be found, though when last seen by me there were several hundreds, but there were hundreds of dead ♂♂ of the parasite species. One may rule out the possibility that the pugnacious *L. niger* ♂♂ had been devoured by the timid *umbratus*, and even if this had been possible, there would have been traces left. On the other hand the nest was in a box from which it was possible for ants to escape. In September, 1923, I picked up in a Kensington street a dealated ♀ of *L. umbratus*. This ant carried a dead ♂ of the host species, which she kneaded in the usual



way to obtain the odour of that species. I succeeded in getting her accepted by a colony of *L. niger* s.sp. *alienus*, and this summer the first *umbratus* ♀ ♀ hatched. The nest contained at least 300 ♀ ♀ of *alienus*, and until the *umbratus* ♀ ♀ numbered about 50 they carried on as before. Then, however, they began to become restless, found a crevice from which they could escape from the box, wandered long distances and seldom returned. By September there was only about a dozen left, and I removed the nest to a box from which they could not escape. Nevertheless they continued wandering about the box outside the nest until the cold weather drove them in, when they associated with the *umbratus* as formerly.

The habits of host species undergo certain changes owing to the presence of the parasite (e.g., the killing of their own ♀ ♀ and ♂ ♂ by *Tetramorium caespitum*, when they have accepted a ♀ of *Anergates atratulus*, and I have observed something similiar in *Lasius*), and, though further observation is required, I suggest that it is possible that in nature the host ♀ ♀ desert the nest as soon as the parasitic ♀ ♀ reach sufficient numbers to carry on without them.

### *Acalla reticulata*, Ström.=*contaminana*, Hüb.—Its History and its Variation.

By H. J. TURNER, F.E.S.

(Continued from vol. xxxii., page 96.)

[NOTE.—This article was written and commenced publishing when there was a dearth of matter some five years ago. Matter coming in freely, its publication was suspended and *forgotten* (although in type).—Hv.J.T.]

It is thought that the following description relates to a form of *contaminana*. H.S. definitely says it is the *ciliana*, Hüb. and the opinion of such an authority must be considered.

Zetterstedt. *Tortrix cinereana*. Zett. *Ins. Lap.*, p. 978 [1840].

“Alis anticis griseo-cinereis, atomis fuscis, fascia obliqua maculaque costali pone medium, hepaticis; posticis cinereis. ♀.”

“♀ *Simillima laevigana*, Treit., seu *variana*, Fabr., sed alarum fascia media obscura determinatiori, et alis posticis totis cinereis, nec dimidiatim flavis, ab illa distincta.”

“A *T. dumetana*, Fischer, *Micro.*, 4, p. 35, pl. 20, fig. 4, cui etiam valde similis, fascia alarum anticarum media in medio, nec antice, coarctata, fascia basali nulla, et alis posticis cinereis, nec griseis, facile dignota. Fascia media hepatica in medio ita coarctata est, ut cum macula costali quasi 3 maculas in triangulum depositas formet.”

However, Wocke (*Stettiner e. Zeit.*, 1862, p. 45), after seeing a specimen of this Lapland insect determined by Prof. Boheman as *cinereana*, Zett., does not even mention *contaminana* as an ally. Both these authorities must have been quite conversant with the *contaminana* forms and would undoubtedly have mentioned them in this connection were there any similarities, especially would Wocke have noted the sharp curved apex had there been one in *cinereana*. Staudinger (Wocke) gives *cinereana* (mis-spelt *cinerana*) as a good species in the genus *Dichelia*, *Cat.*, ed. III., 1901.