

Some Notes on Collecting Lepidoptera at Repton, 1917.

By H. C. HAYWARD.

THE season of 1917 will probably live in the memory of collectors as one of the most prolific ever experienced. No doubt the long and severe winter is responsible for this. In the first place pupae were protected to a considerable extent from their natural enemies by the long-continued frost which rendered the ground unworkable, and in the second place the very severe conditions of the spring occasioned the death of so many of the smaller insectivorous birds, that hibernating larvae found themselves largely unmolested when they recommenced feeding with the advent of milder weather. The result was that many species usually considered scarce were comparatively common. Unfortunately I had far less leisure for collecting than in some recent years, but a single afternoon's collecting was often more productive than many days would have been in a normal season. Amongst records of some interest for Repton in the larger families the following are noteworthy. A specimen of *Spilosoma Mendica* was taken in the Shrubs, and a number of specimens of *Orthosia Suspecta* at Willington; neither of these species figure in our local records, though both occur in the county lists from other places. *Selenia Lunaria* was also taken, *Geometra Papilionaria*, usually scarce, was common, and of *Tethea Subtusa* a number of specimens occurred. An imago of *Acherontia Atropos* was taken in my garden in October.

Amongst larvae, one specimen of *Acronycta Alni* was found at Willington, and larvae of *Acronycta Tridens* and *Bombyx Quercus* also occurred there, whilst numerous larvae of *Notodonta Dictaea* and *Panolis Piniperda* were found in the Shrubs. The latter species had not previously been observed there by me, though there is an old record of its occurrence.

Amongst larvae of *Trochilium Crabroniformis* collected in osier sticks in the spring was one of *Sesia Formiciformis*, which fed in the pith, pupated in the hollow thus formed and emerged through the hole at the cut end of the stick exactly after the manner of *Crabroniformis*. The larva of this species usually feeds and pupates just under the bark of osier or willow. The adoption of this abnormal habit seems to have affected the size of the resultant imago which is unusually large.

Outside the Repton area *Argynnis Adippe* was reported by Mr. G. H. Sale from Breadsall Moors where one was taken and several seen by Mr. Peter Woore of Little Eaton, whilst the most noteworthy capture of the year was that of a specimen of *Chaerocampa Nerii* at Littleover by Mr. Oliver. *Sphinx Convolvuli* was recorded from Ripley by Mr. W. H. Sankey, *Chaerocampa Porcellus* at Coxbench, and the abundance of the *Vanessids*, particularly of *V. Io*, usually so scarce in the county, has been a pleasant feature of the autumn. Mr. Sale again records *Eupithecia Coronata* from Coxbench, this year in considerable numbers, and a specimen of *E. Pygmaeata* was taken on the occasion of a field day of the Derbyshire Society in the Via Gellia on June 9th. This visit produced three species not recorded in the *Victoria County History* list. These were *Argyrolepis Hartmanniana*, of which a single specimen only was taken; *A. Subbaumanniana*, which was found in abundance locally on the steep limestone slopes of the valley, and *Anesychia Funerella*. Though this latter

insect is not included in the list, I have been told by the Rev. R. H. Fuller that he observed it occasionally on the moors round Bakewell. This locality also furnished an abundance of *Ino Geryon*, *Ennychia Cingulata* and *Pyrausta Aurata* and a few *Onocera Ahenella*. From Dr. St. John of Derby I received a quantity of flour infested with larvae, from which were bred a large number of *Ephestia Kuhniella*, a species new to the county list.

In the Repton area itself the following additions were made to the list: *Coccyx Splendidulana*, *C. Ochsenheimeriana*, a rare species first recorded from Norfolk in 1878 by Lord Walsingham, *Sericoris Bifasciana*, *Nephopteryx Spicissella*, *Laverna Hellerella* and *Micropteryx Semipurpurella*. Many of the species recorded last year for the first time were also taken, and among them melanic specimens of *Prays Curtisellus*, of which the type only was then observed. *Conchylis Straminea*, recorded with a query from Repton, was taken at Willington, thus confirming the doubtful record.

Amongst species normally scarce here which were found in some numbers may be mentioned: *Crambus Pinetellus*, *Retinia Pinicolana*, *R. Pinivorana*, and the scarce *Cnephasia Sinuana*, all of which were abundant in the Shrubs. As this locality was worked systematically last year for the smaller species and with such good success that no less than 35 new records for the county were established, it may be of interest to add a list of those species which, though previously recorded, escaped detection in 1916 and were found, some of them commonly, in 1917. They are as follows: *Crambus Falsellus*, *Ephestia Elutella*, *Phycis Betulae*, *Tortrix Sorbiana*, *T. Rosana*, *Penthina Pruniana*, *Hedya Dealbana*, *Sciaphila Hybridana*, *S. Octomaculana*, *Grapholitha Nisella*, *Paedisca Ophthalmicana* and *P. Sordidana*, both common, *Epphiphora Pflugiana*, *E. Brunnichiana*, *E. Trigeminana*, *Dicrorampha Plumbana*, *Lemnathophila Phryganella*, *Scardia Corticella*, *Micropteryx Cal-*

thella, *Coleophora Anatipennella*, *C. Gryphipennella* and *Elachista Argentella*.

Last year I took in the Shrubs some specimens of a tortrix which were referred by the experts to whom I submitted them to *Paedisca Solandriana*, together with many other forms of this protean insect, taken three weeks later. On various grounds connected with the time of appearance, habits and coloration of these insects I felt a strong suspicion that the earlier insects belonged to a distinct though unrecognised species. This year I found them again in fair numbers and was able to send a series to Mr. F. N. Pierce, F.E.S., of Liverpool, for genitalic examination. Mr. Pierce took infinite pains with the question, examining a large number of specimens of all the recognised *Solandriana* forms from various collections and he has arrived at the conclusion that my suspicions were well founded, and that these forms, previously known as *var. Sinuana* are really specifically distinct. The genitalia show distinctions which, though slight, are constant and in conjunction with the other observed points of difference may be regarded as conclusive. This view is shared by the Rev. J. W. Metcalfe, F.E.S., to whom the specimens have also been submitted, and Mr. Pierce is about to send the detailed results of the whole investigation to the Entomological Journals. *Paedisca Sinuana* may therefore be regarded as another addition to the Derbyshire list. The insect is not scarce and is widely distributed, but has always hitherto been confused with its very variable congener *Solandriana*. Fortunately it possesses in all its observed range of variation readily recognised peculiarities of wing-markings so that its identification is not difficult apart from an examination of the genitalia.