SUPPLEMENTARY NOTES TO RECENT PAPERS IN THE NEWS

SYMPOSIUM ON TAXONOMY OF LEPIDOPTERA: — W. Hovanitz in his paper "The role of genetics" (Lepid. News 11:12; 1957) makes the following statement: — "Colias hyale and Colias croceus of Europe blend together in southern Russian territory and separate on the other side as two different species Colias erate and Colias fieldi." This appears to imply that erate, for example, is only hyale plus certain genes received from croceus and minus others lost to fieldi. Is there any real evidence that this is so? Would it not be more correct to say that a Western yellow and orange pair (hyale and croceus) meet a similar Eastern pair (erate and fieldi) in Southern Russia and there form a hybrid population? Personally I was not aware that the yellow and orange species were known to hybridize in Southern Russia, though I knew well that this area produced hybrids between hyale and erate and between croceus and fieldi.

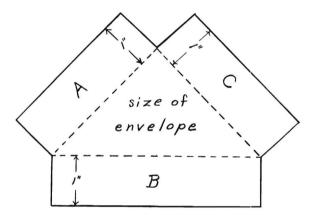
EARLY STAGES OF EUTACHYPTERA PSIDII (LASIO-CAMPIDÆ): — The ova of the European Lasiocampa quercus L. and L. trifolii Esp. are always laid loose, so that the fact that the ova of E. psidii are laid in a similar manner is not so surprising. (Lepid. News 11: 100; 1957.)

OBTAINING OVA FROM RHOPALOCERA: — With reference to the remarks at the Seventh Annual Meeting of the Society (*Lepid. News* 11: 158-9; 1957) I have found that almost all species of Rhopalocera will lay freely if confined with fresh sprays of the food-plant in a screw-top glass jam jar illuminated by an ordinary table lamp. The lamp should be placed close enough to give a really bright light without an appreciable rise in temperature inside the jar. Many butterflies so confined will lay an adequate number of eggs almost immediately, so that the necessity of feeding is avoided. As regards the size of the jar, I have found the usual one pound size quite large enough for butterflies of up to about 2½ inches in wing expanse, with proportionately larger sizes for larger ones. In East Africa exposure to sunshine is almost always fatal as the temperature inside the jar rises to a lethal height.

LIGHT AND LIGHT TRAPPING: — I was surprised to read the remarks (*Lepid. News* 11: 161; 1957) on this subject. In England a 125 Watt Mercury Vapour Bulb used wiith a voltage of 200-250 is considered to be far and away the best, and has become almost standard. I use a similar lamp in East Africa with the greatest success.

STORING AND SHIPPING PAPERED LEPIDOPTERA: — With reference to Messrs. Kendall's and Thorne's notes on this subject (Lepid. News 11: 168; 1957), I do not think that the old-fashioned triangular paper con be bettered. With this the specimen can be easily packed with its antennæ properly protected between the forewings, it can be extracted without any risk of breakage, it can even be relaxed without removing it from its paper and, if full data is written on the outside, the need for visibility is greatly reduced if not abolished altogether. Against these advantages the glassine envelope offers visibility only; the insect cannot be arranged inside with any ease, it is extremely liable to breakage when being taken out, the envelope does not take writing easily and the insect must be removed from the envelope for relaxing.

If the triangular papers are made in definite sizes they can be stored easily in triangular boxes made of thin card or stout papeer cut as per the diagram below.



Two similar pieces are cut. The flaps A, B and C are folded along the dotted lines, the two are fitted together and the flaps A and A and C and C are stuck together, leaving flap B open for the insertion of the papered specimens. I use boxes of a uniform height of one inch, *i.e.* the flaps are one inch in breadth. These boxes can be numbered and stored in large tins with naphthaline or paradichlorbenzene and a separate list maintained giving the contents of each numbered box.

If the actual triangular papers, and their triangular containers, are made so that short side of each is half the length of the long side of the next larger size, packing is still further facilitated. For folding the papers, I use rectangles measuring (in inches) 8×5 , $5 \times 3\frac{1}{2}$, $4 \times 2\frac{1}{2}$, $2\frac{1}{2} \times 1\frac{3}{4}$ and $2 \times 1\frac{1}{4}$. A sheet of paper 8×5 , half the standard letter size, will make one envelope of size 1, four of size 3 and sixteen of size 5, or, by cutting an inch off the end, two of size 2 and eight of size 4.

I have sent consignments of papered insects from East Africa to several Society members, and they will, I think, agree with me on the merits of this packing.

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A SWARM OF NOCTUID MOTHS IN SOUTHEASTERN KANSAS

On May 9, 1958, I was returning from a butterfly collecting trip in Southeastern Texas where I had spent the preceding week collecting Papilio palamedes, P. troilus ilioneus, Atlides halesus, and a number of other butterflies all in Harris County, Tex. All the way back to Kansas I stopped along the way wherever I encountered anything likely in the way of Lepidoptera. Stopping for breakfast one morning at Conroe, Texas, yielded a good catch of Automeris io and Actias luna rubromarginata at a roadside cafe in the pine and palmetto barrens. The weather in Texas was warm and humid. As we crossed Oklahoma in the Kiamichi Mountains we drove through intermittent downpours. In one place the highway was washed out over one of the normally dry washes in the Ouachita ranges and we had to detour miles out of our way through Fort Smith, Ark., to reach Kansas. We crossed the Kansas line at Baxter Springs at about eleven o'clock that evening. By this time we had left Oklahoma's storms behind us and the evening air at Baxter Springs was still, warm and humid with only a few flashes of lightning in the southern horizon. We stopped at the south end of Baxter Springs at a filling station for gas. I saw a sight that was more spectacular than any of the southern butterflies I had caught. There were swarms of noctuid moths flying about the gas station. There were thousands of them. We had to stop every few blocks to wipe the crushed bodies off our car windshield. As we drove down the main street of Baxter Springs there were so many moths flying around the street lights that the thoroughfare was darkened by their flights casting an eerie sight to the pavement below. Since I had my collecting equipment in the car I asked my driver to stop the car and I got out and netted a quantity of the moths. Since I have a rather extensive collection of the Noctuidæ I had no trouble identifying all of the species that made up the swarms. Over half proved to be the common Army Worm, Pseudaletia unipuncta. Fully a third of the remaining half were the common Chorizagrotis introferens. The remainder were a mixture of Autographa brassica, A. ou, A. biloba, A. simplex, Plusia ærea, and a few specimens of Plusiodonta compressipalpis.

Curiously enough members of other moth families did not seem to participate in their frenzied ranks. I searched very diligently for other moth species and found only one specimen of Estigmene acræa and a single specimen of Isia isabella, the "Isabella Tiger Moth", both Arctiids seated sedately on a Dairy Creme stand. They seemed independent of the noctuid hordes and made no attempt to join in their flight. It is thus doubtful that these two arctiid moths had any association with the noctuid flight. We reached Pittsburg, Kansas, where we spent the night before coming up to Ottawa and there were no inordinate flights of noctuids at all. These spectacular flights were apparently confined to the immediate Baxter Springs area. The flight took place on May 9th, 1958. There was no directional flight evident in the swarm, only an aimless flight about the lights. All the specimens were in good condition and looked freshly emerged and had not flown in from any major distance, in all probabilities. What factors were responsible for such a swarm I have not the remotest idea. I have never seen such a swarm of Lepidoptera personally before.

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