Journal of the Lepidopterists' Society 39(3), 1985, 238

EUREMA NISE IN JAMAICA

One of the most fascinating accounts of butterfly rediscovery in recent years is that of *Eurema nise nise* in Jamaica (Klots & Heineman, 1957, Proc. R. Entomol. Soc. Lond. (B)26:206–214, Plate I). *E. nise*, originally described and figured from Jamaica by Cramer in 1775, eluded collectors in Jamaica until a young enthusiast, G. Irving Latz, accompanying experienced lepidopterist Bernard Heineman, netted one in March 1951 in St. Ann Parish. In the 175 years between the description and the capture by Latz, there was much discussion in lepidopterological literature regarding the true origin or identity of Cramer's nise. During that time, also, nise was widely and commonly found in other Antillean Islands and on the continent from the extreme southern USA to Uruguay and mid-Argentina and was described under various names, a number of which are considered today as valid subspecies.

Since 1951, a quantity of *nise* specimens have been collected in Jamaica. Riley in his popular guide (1975, A field guide to the butterflies of the West Indies, p. 120) states, "Reported only in January and February, i.e. the winter brood, but a summer brood must also occur." This, however, is not true, since Klots and Heineman (1957) and Brown and Heineman (1972, Jamaica and its butterflies) cite known specimens from Jamaica dated June, July, August and September, some of which are figured and are clearly of the summer phenotype. What is true, is that the great majority of the specimens collected thew winter phenotype.

I have had many years' experience with, and have handled hundreds of specimens of, *Eurema nise tenella* (Boisduval) 1836 from northwestern Argentina. There, the winter phenotypes are affected in two ways: (1) There is a progressive reduction of the upperside black borders, and (2) there is an augmentation of the rusty-brown scaling and blotching on the ventral hindwings. These same phenomena also take place in nearly all the other species of *Eurema*, as well as many other coliadine Pieridae flying in Argentina. What is of special interest is that these two phenomena do not necessarily occur simultaneously, which results in a number of distinct winter phenotypes. The literature in recent years has contained many opinions and a number of serious studies (some of which are contradictory) as to the causes of these phenomena in various species of the Coliadinae. Decrease in temperature, decrease in humidity, decrease in photoperiod or a combination of two or more of these factors during the immature stages have all been suggested as the cause. It is not the purpose of this note to add another field-based opinion to the confusion. Whatever the causes, the result is the great diversity of forms of *E. nise* both in Jamaica and Argentina, as are in part illustrated in the works mentioned above.

This note reports the collection of 14 specimens of *E. nise nise* in St. Andrew, Trelawny and Manchester parishes of Jamaica between 22 and 26 November 1983 and that these are basically of what I call the "autumn" phenotype, comparable to specimens of *E. nise tenella* captured in lowland northwestern Argentina in the month of May. This phenotype is very close to the summer one, differing by having a very slight reduction of the dorsal wing borders, but like the summer phenotype showing no or very minimal rustybrown scaling on the ventral hindwing. Voucher specimens from Jamaica have been deposited in the Allen Museum of Entomology and the National Museum of Natural History (Smithsonian).

The specimens taken in St. Andrew Parish constitute a new parish record. Other *Eurema* collected in Jamaica during November 1983 were *E. daira palmira*, *E. messalina*, *E. nicippe* (St. Andrew Parish—record), *E. adamsi*, *E. proterpia*, *E. lisa euterpe* and *E. dina parvumbra*. A number of these are considered in the literature to be scarce. Most were seen, though not captured, in quantities. This would indicate that November is an exceptionally good month for *Eurema* in Jamaica.

I thank Dr. Lee D. Miller and Dr. Robert K. Robbins for their helpful criticisms of the manuscript.

ROBERT C. EISELE, Casilla de Correo 90, 4107 Yerba Buena (Tecuman), Argentina.

Date of Issue (Vol. 39, No. 3): 13 May 1986