

AN ATTEMPTED INTERFAMILIAL MATING
(LYCAENIDAE, NYMPHALIDAE)

Interspecific courtships and matings are seldom reported in butterflies (Downey 1962, J. Lepid. Soc. 16: 235-237). The rarity of such reports involving phenotypically similar sympatric species suggests the widespread occurrence of effective prezygotic reproductive isolating mechanisms, at least some of which may have evolved as a result of selection against deleterious hybridization (Remington 1968, Evol. Biol. 2: 321-428). Although species from widely different groups might be expected to differ in so many ways as to make courtship and mating very unlikely, it is conceivable that such taxonomically wide behavioral "mistakes" may be at least as frequent as those between sympatric congeners. The actual records are far too fragmentary to allow a conclusion one way or the other. This note reports a mistaken courtship involving representatives of two butterfly families which, however, did not result in copulation.

On 26 May 1972 a fresh male *Lycaena helloides* (Boisduval) (Lycaenidae) was seen courting a fresh female *Cynthia annabella* Field (= *Vanessa carye* auct.) (Nymphalidae) in a vacant lot at Southport, Yolo County, California. The pair was first encountered at 1357 hours. The male fluttered behind the female, which sat on a leaf just above the ground. Repeated attempts at genital contact elicited only a shuffling sideways movement in the female, which finally flew desultorily some ten feet and lit on the ground, only to be overtaken at once by the male. This sequence was repeated four times in nine minutes. The courtship was terminated when the observer's shadow was inadvertently passed over the female and she left the area. The behavior of the female *C. annabella* was in no way dissimilar to that shown by the species when being courted by its own males, but not disposed to mating. However, *C. annabella*, like most "Vanessas," seems to mate principally in the late afternoon and at dusk.

Lycaena helloides was abundant in the area and several unsuccessful courtships within that species were seen during the early afternoon; female *L. helloides* invariably fanned their wings intermittently in response to the activity of the male, differing in this respect from the response of the *C. annabella*. The female *annabella* approached was the only individual of its species in the field during most of the afternoon. The pheromones, if any, of neither species have been studied. The *C. annabella* was fully twice the size of an *L. helloides* female, and resembled it superficially only in general color.

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ISSIKI COLLECTION OF MICROLEPIDOPTERA TO THE
SMITHSONIAN INSTITUTION

With considerable assistance and cooperation from the United States Department of Agriculture and the United States Forest Service, the Smithsonian Institution has recently acquired the finest collection of Japanese and Formosan Microlepidoptera ever assembled. The collection represents the lifelong effort of Professor Syuti Issiki, a renowned Japanese entomologist, who, with his famous teacher S. Matsumura, pioneered the study of Oriental Microlepidoptera.

The total size of the Issiki Collection is not unusually large, numbering 16,236 moths, but the rich representation of Eastern Palearctic and Oriental species makes the collection an extremely valuable research tool. Probably 95% of the known

Japanese microlepidopterous fauna is represented in addition to nearly all of the described Formosan species. The collection is particularly strong in the primitive families, an area in which Dr. Issiki specialized. Seventy-eight holotypes are present and nearly 200 secondary types, several of the latter having been contributed in recent years by Prof. Issiki's former students. In addition to Microlepidoptera, the order Mecoptera was also an early research interest of Dr. Issiki. As a result, his collection also contains over 1,000 specimens of this order which, likewise, exhibits excellent coverage of both Formosa and Japan.

The Formosan collection represents the only serious attempt to survey the Microlepidoptera of that country and was accumulated during Dr. Issiki's tenure as Professor of Agriculture at the Imperial University at Taipei from 1920 to 1948. Examples of this material were sent to Edward Meyrick and, thus, formed the basis of Meyrick's studies on Formosan moths. Unfortunately, the collection was considerably larger than at present but was partially destroyed due to neglect following Prof. Issiki's permanent departure to Japan in 1948. The only material known to survive of the original Formosan collection, other than those duplicates retained by specialists such as Meyrick, is the synoptic representation which Issiki was able to transport at the time of his departure. During his residence in Formosa, Prof. Issiki also collected for a brief interval in New Guinea, assembling a small but select representation of Microlepidoptera from that area.

In 1949 Dr. Issiki was appointed Professor of Agriculture at the University of Osaka Prefecture, a post he held until his retirement in 1961. It was during this period that the major portion of his Japanese material was acquired. His influence as a teacher was also impressive, as several of the present generation of Japanese microlepidopterists studied under him during this period. Dr. Issiki now resides with his family in Itō City where he still actively pursues his interests on the biology of Japanese Microlepidoptera.

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A NEW GENERIC NAME IN MIDILINAE (PYRALIDAE)

Eupastranaia Becker, new genus

Pastranaia Munroe, 1970, p. 63-64; preocc. by *Pastranaia* Orfila, 1955, p. 30-31.

The genus *Pastranaia* was erected by Orfila (1955) for a new species of Nemopteridae (Neuroptera). Unfortunately Munroe (1970) chose the same name in his excellent work "Revision of the subfamily Midilinae (Lepidoptera: Pyralidae)," for the *fenestrata* group of this subfamily.

This homonymy was communicated to Dr. Munroe who recommended that the author propose a new name and that it continue to honor Dr. J. A. Pastrana.

The author is very grateful to Dr. Munroe for recommending that he publish the new name.

References

- MUNROE, E. 1970. Revision of the subfamily Midilinae (Lepidoptera: Pyralidae). *Men. Entomol. Soc. Can.* 74, 94 p.
- ORFILA, R. N. 1955. Un nuevo Nemopteridae (Neuropt.) americano con una sinopsis de la familia. *Rev. Soc. Entomol. Argent.* 17: 29-32.

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