

AN ATTEMPTED INTERFAMILIAL MATING  
(LYCAENIDAE—NYMPHALIDAE)

Recent reports of an attempted interfamilial mating (Shapiro 1973, J. Lepid. Soc. 27: 159) and an interfamilial courtship (Shapiro 1972, J. Res. Lepid. 11: 197-198) suggest these may occur at least as frequently as the rare pairings and courtships of sympatric congeners, which have received some attention in the literature (Downey 1962, J. Lepid. Soc. 16: 235-237). Another recent study of butterfly mating behavior (Scott 1972 [1973], J. Res. Lepid. 11: 99-127) has provided welcome data for verifying such attempts at copulation by behavioral traits. The purpose of this note is to report another attempted interfamilial mating—♂ *Lycaena phlaeas americana* Harris (Lycaenidae) and ♀ *Phyciodes tharos tharos* (Drury) (Nymphalidae)—and to comment on its significance.

The instance occurred between 1522 and 1528 hrs. on a lawn in New Paltz (Ulster County), New York, on 17 September 1973. While observing mating behavior of a number of *P. tharos* at this site, I particularly noticed one pair attempting copulation atop a clump of grass. It was a fresh female *P. tharos* and fresh male *L. phlaeas*. The latter was approximately 8 mm smaller in expanse than the former. The male, in the characteristic position behind and facing the same direction as the female, made repeated attempts at genital contact by arching its abdomen beneath and to (what appeared to be) both sides. The female remained docile, wings horizontal except for a slow, occasional fanning to an angle of about 30 or 40 degrees. The male held its wings at a 45 degree angle throughout. Having no success at contact, the male moved forward until its head and forelegs were atop the female's abdomen. This apparently startled the female, which flew lazily away to a site about 1.5 m away. The male followed, slowly, and similar behavior ensued at the second site. For an unapparent reason the female then flew to a third site, very near the first. The male followed, but this time became quite pugnacious and upon aggressively approaching the female caused her to fly off quickly. The male was unable to follow and was collected for sexual verification.

These species are phenotypically similar: both exhibit predominantly orange and black wing characters, mostly in "spotted" patterns, and males of both species are usually smaller than the female, as in the case of this attempted pairing. Further, both species seek mates by "patrolling" (Scott, loc. cit.). The female *P. tharos* was apparently receptive, displaying none of the rejection postures known to butterflies, but exhibiting instead the stationary and "basking" behaviors often mentioned as receptive traits (Scott, loc. cit.). She flew off only after notable pugnacity on the part of the male, a fact which may be doubly significant since both species are noted for this aggressive trait (Klots 1951, A Field Guide To The Butterflies, Houghton Mifflin, Boston).

Females of *Lycaena helloides* (Boisduval) reportedly fan their wings as a receptive trait (Shapiro 1973, loc. cit.), and if *L. phlaeas* females do likewise, this might have encouraged the male *L. phlaeas*' advances. Two attempted matings of *L. phlaeas* were noted at the same locality at 1540 and 1600 hrs. Characteristic of these was apparent rejection behavior by the female (wings closed tightly above the thorax, and a quick "waddling" through the grass) and extreme pugnacity by the male (following quickly behind, trying to "steer" the female into an appropriate mating position). All of these observations support the conclusion that the *P. tharos* female and *L. phlaeas* male noted above were attempting copulation.

Scott (loc. cit.) states that coloration, movement, and size are important to the visual components of butterfly mating. Shapiro (1972, 1973, loc. cit.) notes the evident importance of phenotypic similarities (and also pheromones) in eliciting such mating mistakes. He discusses the surprising phenotypic dissimilarities of his interfamilial "mates." As with his species, the pheromones of *P. tharos* and *L. phlaeas* have not been studied. If eventual pheromone data do not indicate other-

wise, this attempted mating of *L. phlaeas* and *P. tharos* may represent a more "classic" example of similar phenotypes eliciting an attempted interfamilial mating—the type which would seem most probable if such events do occur more frequently than lepidopterists have suspected.

I would like to thank Br. (Dr.) Adam McCoy, Holy Cross, for editorial assistance.

KURT JOHNSON, (Br.) *Novitiate, Order of the Holy Cross, West Park, New York 12493*, and *Museum Research Associate, Museum of Natural History, University of Wisconsin, Stevens Point 54481*.

---

#### TORTYRA SLOSSONIA COLLECTED AT UV LIGHT ON KEY LARGO, FLORIDA (GLYPHIPTERYGIDAE)

Glyphipterygid moths are diurnal and usually associated with blooming plants favored by the particular species, in addition to their hostplant. Reports of glyphipterygids at lights are as infrequent as for other diurnal insects and only *Tortyra slossonia* (Fernald), *Choreutis carduiella* Kearfott, and a *Glyphipteryx* sp. have been sparingly encountered this way, in addition to what is tentatively identified as *Choreutis leucobasis* Fernald. These Florida reports, however, involve only one or two individuals at a time, as do light collection records of *Anthophila pariana* (Clerck) from the Northeast. The *T. slossonia* records are mainly from light trap collections made by Mrs. Spencer Kemp on Key Largo and also involve only one or two specimens some nights.

Collections of diurnal insects at light have been attributed to the fact that the light has been set up near the resting place of the insect which moves to the light upon being disturbed. The large number (70+) of *Tortyra slossonia* collected at a blacklight near Tavernier, Key Largo, the evening of 20 June 1973 from about 2000 to 2300 hours indicates that it may be nocturnally active unlike other glyphipterygids. Two nights earlier on the north end of Key Largo, about 12 *T. slossonia* moths were also taken at a blacklight.

(Florida Agricultural Experiment Station Journal Series No. 5275.)

JOHN B. HEPPNER, *Department of Entomology and Nematology, University of Florida, Gainesville, Florida 32611*.

---

#### URANIA FULGENS (URANIDAE) CAPTURED IN FLORIDA

A worn male specimen of the neotropical day-flying moth, *Urania fulgens* Walk. (Uranidae), was captured by V. J. Farkas in downtown Fort Walton Beach, along Santa Rosa Sound, on the Gulf of Mexico side of northern Florida, at 1400 hrs. on 9 September 1973. It was hovering over a lantana bush in a weedy summer-cottage area. A common migratory species in Yucatan and mainland Mexico, this specimen was probably blown northeast to Florida by tropical storm "Delia" which passed over the Yucatan Peninsula around 5 September and then continued into the Gulf. This appears to be a new record for Florida (not listed in Kimball, 1965, *Lepidoptera of Florida*, Florida Department of Agriculture) and for the eastern United States.

THOMAS C. ENMEL, *Department of Zoology, University of Florida, Gainesville, Florida 32601*.

V. J. FARKAS, 722 Hollywood Boulevard, Mary Esther, Florida 32569.