## A NEW HINDWING ABERRATION OF CATOCALA MICRONYMPHA GUENÉE FROM KENTUCKY

CHARLES V. COVELL, JR.1

Department of Biology, University of Louisville, Louisville, Kentucky 40208

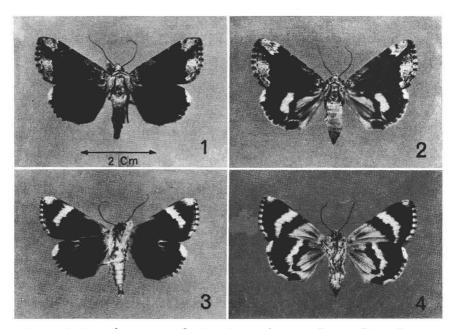
ABSTRACT. An aberration of the underwing Catocala micronympha Guenée with forewings like "form gisela" and entirely black hindwings is described from Oldham County, Kentucky. It is informally named "form sargenti" in honor of Dr. T. D. Sargent.

Catocala micronympha Guenée was very common in Kentucky in June and July 1977, and a large number of specimens representing the various forewing variations was collected in several counties. On the night of 15 June I took at blacklight a single male of what appears to be the first known individual with forewings of form "gisela" Meyer, but with hindwings completely black on the upperside except for the yellowish-white terminal line, fringe, and apical patch (Fig. 1). The underside of the hindwing has a diffuse remnant of the median yellow band below the costal margin (Fig. 3). Wingspan is 4.4 cm. A typical form "gisela" from Bernheim Forest, Kentucky, also taken on 15 June 1977, is shown for contrast (Figs. 2, 4).

The locality from which this specimen was taken was the University of Louisville's research farm, the Horner Bird and Wildlife Sanctuary, about 20 miles (32 km) southeast of Louisville in Oldham County, near the hamlet of Brownsboro. No *Catocala* aberrations of any kind had been collected or seen there in over 12 years of fairly heavy collecting until this collection was made. No achromatic hindwing aberrations of *C. micronympha* were reported in Barnes and McDunnough (1918), Forbes (1954), or Sargent (1976). Personal communication with Drs. T. D. Sargent and D. C. Ferguson leads me to conclude that this specimen is unique.

Sargent (1976) states that, "... hindwing polymorphisms are virtually unknown ..." in *Catocala* (p. 77), while the forewings in some species (such as *micronympha*) are highly polymorphic. Single examples of hindwing aberrations are also rare. He further states (p. 111) that, "In the *Catocala* the most prominent "sports" are those involving substantial alterations of the normally invariable hindwings of a species." Those eastern North American underwings for which there are named aberrations involving all-black or nearly all-black hindwings, where contrasting light-colored bands are typical, include the following (with descriptions from

<sup>&</sup>lt;sup>1</sup> Univ. of Louisville Contributions in Biology No. 190 (New Series).



Figs. 1–4. Catocala micronympha Guenée. 1. aberration "sargenti" Covell, upperside; 2. form "gisela" Meyer, upperside; 3. aberration "sargenti," underside; 4. form "gisela," underside.

Sargent): C. muliercula Guenée, ab. "peramens" Hulst ("HW almost entirely black"); C. ilia (Cramer), ab. "normani" Bartsch ("blackish FW from base to pm line, and extended black on HW"); C. unijuga Walker, ab. "fletcheri" Beutenmuller ("HW entirely black"); C. grynea (Cramer), ab. "constans" Hulst ("HW almost totally black"); and C. habilis Grote, ab. "depressans" Sargent, named by him on the basis of a single specimen with nearly all-black hindwings which escaped his killing jar (Sargent, 1976, p. 111, 113; Plate V, 2).

While Latinized names for aberrations have no standing in zoological nomenclature, Dr. Sargent coined "depressans" and 3 melanic form names in his book as convenient "handles" for such forms. I am therefore following his example and name the new aberrant form *Catocala micronympha*, aberration "sargenti," in honor of Dr. Theodore D. Sargent in recognition of his contributions to the study of North American *Catocala*.

The specimen on which this name is based is now in my possession, but will be deposited in the U.S. National Museum of Natural History at a later date.

Note added in proof: On 6 July 1978, Loran D. Gibson collected a second male of this new form at light at Otter Creek Park, Meade County, Kentucky. The specimen was in worn condition, and is in the collection of the University of Louisville.

## LITERATURE CITED

Barnes, W. J. & J. McDunnough. 1918. Illustrations of the North American species of the genus *Catocala*. Mem. Amer. Mus. Nat. Hist. 3 (1), 47 p., 22 pls.

Forbes, W. T. M. 1954. Lepidoptera of New York and neighboring states. Part III, Noctuidae. Cornell Univ. Agr. Exp. Sta. Mem. 329, 433 p.

SARGENT, T. D. 1976. Legion of Night: The Underwing Moths. Univ. of Mass. Press, Amherst. xii + 222 p., 8 pls.

Journal of the Lepidopterists' Society 32(3), 1978, 223

## CONFIRMATION OF THE OCCURRENCE OF AN ALBINISTIC FEMALE FORM OF *PHOEBIS PHILEA* (PIERIDAE) IN EXTREME SOUTHERN TEXAS

Phoebis philea (Johansson) is a large pierid butterfly common in tropical America. Individuals from Mexico enter southern Texas often (annually according to Howe, 1975, The Butterflies of North America, Doubleday, Garden City, N.Y., 633 p.). Males of this species are easily recognized by the striking contrast of yellow and orange portions of the dorsal forewings and hindwings. Females have the marginal dark markings typical of females of the genus, with the yellow and orange wing portions somewhat less contrasting. An albinistic form of philea was named "obsoleta" by Niepelt (1920, Int. Entomol. Zeit. 14: 17); this form corresponds to albinistic female forms in other species of Phoebis.

On 12 August 1961 I collected one "obsoleta" in Brownsville, Cameron County, Texas. The dorsal wing surfaces were quite faded with scales totally lacking in isolated areas, particularly on the forewing discal cell area. Scales still present tend to be lightly greenish white. The ventral wing surfaces were also faded, but orange scales remain in sufficient numbers to provide the general color.

One previous report of "obsoleta" from the extreme southern tip of Texas is known. Stallings and Turner (1946, Entomol. News 57: 44) reported a specimen collected in the Lower Rio Grande Valley. H. A. Freeman, who collected this first specimen, has kindly provided the data as follows: 23 August 1944 at a roadside park between Pharr and Hidalgo, Hidalgo County. My second specimen is of interest because local lepidopterists probably are unfamiliar with this form.

Occurrence of *philea* in southern Texas is seasonal, with most specimens being reported from September to November (McGuire & Richard, 1974, An Annotated Checklist of the Butterflies of Bentsen—Rio Grande Valley State Park and Vicinity, Texas Parks & Wildlife Department, Mission, Texas, 21 p.). The worn condition of my specimen indicates that it arrived here after long-distance migration from somewhere in northern Mexico. Substantial numbers of *philea* were found at least as far north as central Texas in late summer 1971 following an unusual climatic regime (Neck, unpub. data); no "obsoleta" were seen at this time by local collectors.

RAYMOND W. NECK, Pesquezo Museum of Natural History, 6803 Esther, Austin, Texas 78752.