The genus Lycomorphodes is distributed widely throughout Latin America. Of the ± 15 species in the genus, L. sordida is the most northerly in distribution, with the majority of the species occurring in South America (Seitz 1940: 252–254). Although there is some resemblance to the zygaenid genera Triprocris Grote and Pyromorpha Herrich-Schaeffer, confusion is more likely with the lithosiine genera Lycomorpha Harris and Ptychoglene Felder (also apparent lycid beetle comimics), some species of which are sympatric with Lycomorphodes sordida in northern Mexico. Specimens of lithosiine arctiids that have been collected in south Texas and determined as Lycomorpha or Ptychoglene sp. should be reexamined closely to determine if they represent additional U.S. records of Lycomorphodes sordida.

I thank J. R. Heitzman for allowing me to have and examine the male *L. sordida*, and Douglas Ferguson and Nancy L. Jacobson for verification of the identity of the specimen and critically reviewing the manuscript.

LITERATURE CITED

HODGES, R. W., T. DOMINICK, D. R. DAVIS, D. C. FERGUSON, J. G. FRANCLEMONT, E. G. MUNROE & J. A. POWELL (eds.). 1983. Check list of the Lepidoptera of America north of Mexico. E. W. Classey, Ltd. and The Wedge Entomological Research Foundation, London, 284 pp.

SEITZ, A. 1940. The Macrolepidoptera of the World (Vol. 6): The American Bombyces and Sphinges (text and plates). Alfred Kernan, Stuttgart.

JAMES K. ADAMS, Dalton College, 213 N. College Drive, Dalton, Georgia 30720.

Received for publication 7 October 1991; revised and accepted 3 March 1992.

Journal of the Lepidopterists' Society 46(2), 1992, 161–163

LIFE HISTORY NOTES ON CATOCALA SAPPHO AND CATOCALA ULALUME (NOCTUIDAE)

Additional key words: larvae, rearing, foodplants, Lepidoptera.

I present new life history information for two Nearctic species of underwing moths, including a description of the larva of *Catocala sappho* Strecker, and a wild foodplant record for *Catocala ulalume* Strecker.

Catocala sappho. In Florida, adults of this underwing species can be found in ravine bottomland habitats between late May and early August. Adult males are collected most easily in mid to late afternoon as they rest on tree trunks about 1–3 m above the ground; females are encountered less frequently. The preferred microhabitat of the species seems to be low-lying hardwood hammocks that flood in the late winter and early spring, and whose characteristic trees include pignut hickory (Carya glabra [Mill] Sweet; Juglanda-ceae), bayberry (Myrica cerifera L.; Myricaceae), sweetgum (Liquidambar styraciflua L.; Hamamelidaceae), and several species of oaks (Quercus [Tourn.] L.; Fagaceae).

In July of 1986, three adult female *Catocala sappho* were collected from tree trunks in Gainesville, Alachua County, Florida, and a fourth was taken in a bait trap in Jacksonville, Duval County, Florida. Each female was put in a separate large paper bag and supplied with suitable food on a daily basis (sucrose solution placed on a small piece of sponge), and small twigs of hickory (the presumed foodplant; see below) to stimulate oviposition. The bags were misted with water every two days to prevent desiccation. One of the Gainesville females deposited approximately 50 eggs on 14–15 July 1986; the others died without ovipositing, although dissections revealed the presence of mature eggs in each. Eggs were deposited in clusters in the folds of the paper bag, on the sides of the bag, and on the sponge. The eggs subsequently were transferred to baby food containers with screened lids, which were stored outdoors in a shaded location through the winter.



FIG. 1. A–C, mature (sixth instar) larva of *Catocala sappho* Strecker: A, lateral view, scale bar = 5 mm; B–C, enlargements of head capsule and prothoracic regions. D, scanning electron micrograph (SEM) of egg: at $80 \times$ magnification, scale bar = 0.2 mm; note larval exit hole at bottom.

The first larvae hatched on 22 March 1987. The remainder of the batch hatched within a few days. The young larvae were very active and readily accepted young leaves of pignut hickory, but refused mockernut hickory (*Carya tomentosa* [Poir.] Nutt.; Juglandaceae). Several larvae from the same brood in the care of L. F. Gall and W. A. Miller readily accepted shagbark hickory (*Carya ovata* [Mill.] K. Koch; Juglandaceae) and pignut hickory, but fed sparingly on pecan (*Carya illinoiensis* [Wang.] K. Koch; Juglandaceae). My rearing procedure was to place young larvae in small plastic containers with tight fitting lids, and to change leaves every other day. The more mature larvae were transferred to large screened plastic cages, with foodplant leaves "potted" in test tubes containing water. The mature larvae had a habit of dropping from the foodplant and thrashing and twisting when disturbed. Feeding at all stages of growth was usually at night, although daytime feeding did occur. The larvae passed through six instars; the first pupated on 19 April 1987. The first adults hatched on 19 May 1987. The cocoons were typical for *Catocala*: loosely spun silk, incorporating paper towels and/or leaf litter at the bottom of the rearing containers.

The mature larva of *Catocala sappho* is shown in Figs. 1A–1C. The larval ground color is whitish gray, finely stippled with black atoms; some larvae are sparsely covered with a waxy white bloom; the dorsal tubercles are small and red, set inside whitish rings; the fifth abdominal segment is raised only slightly dorsally, and has an indistinct, mottled dark gray lateral "saddle patch;" the two dorsal stripes are black, prominent (especially on the mesothorax), but interrupted throughout their length; the latero-dorsal stripes are black, prominent, and less interrupted than the dorsal stripes; short, thin fleshy "filaments" are scattered sparingly along the latero-ventral margins; the venter is whitish, with indistinct pinkish spots rimmed with gray on the abdominal segments; the head capsule is whitish gray, with fine pinkish-red and black striations, with neither a lateral band nor conspicuous submandibular dash.

Pecan (*Carya illinoiensis*) is listed, without supporting evidence, as a larval foodplant for *Catocala sappho* by Forbes (1954), Kimball (1965), and Sargent (1976). Kimball additionally listed "hickory" as a foodplant for *Catocala sappho*, and cited Watson (1919), although Watson stated only that: "Its life history is entirely unknown. Its relatives spend their caterpillar days on the hickory and it is probable that this one does likewise. It is found only in woods with hickories." On the basis of (1) my experience with the habitat of adult *Catocala sappho*, which agrees with Watson's observations, (2) the rearing notes presented herein and by Gall (1992), and (3) the overall geographic range of the moth, it seems unlikely that pecan is a wild host of any significance (being either recorded in error, given that misidentifications of hickories are common; or in confusion with *ex ovis* foodplant acceptability). Hickories in section §*Eucarya* DC. of *Carya* (e.g., *Carya glabra*) seem much more probable candidates.

Catocala ulalume. On 26 May 1986, I collected a full grown larva of what subsequently proved to be Catocala ulalume on a small mockernut hickory (Carya tomentosa) in Liberty County, Florida. The habitat in which the larva was found was dominated by scrubby oak, with a mixture of mockernut hickories and species of hawthorn and blueberries. The larva pupated on 31 May 1986, and an adult female emerged 29 June 1986. I am not aware of any previously published wild foodplant records for *C. ulalume*. Brower (1922) provided a description of the larva based on *ex ovis* rearings.

I thank H. D. Baggett and R. M. Gillmore for stimulating my interest in *Catocala*, and for sharing their considerable knowledge about these moths in Florida. L. F. Gall helped edit the manuscript and hunt down references.

Received for publication 19 November 1991; revised and accepted 14 March 1992.

LITERATURE CITED

BROWER, A. E. 1922. Preparatory stages of *Catocala ulalume* Stkr., with larva of *C. lacrymosa* for comparison (Lepid., Noctuidae). Entom. News 33:234–236.

FORBES, W. T. M. 1954. Lepidoptera of New York and neighboring states. III. Noctuidae. Mem. Cornell Univ. Agric. Expt. Sta. 329:1-433.

GALL, L. F. 1992. Evolutionary ecology of sympatric *Catocala* moths (Lepidoptera: Noctuidae). I. Experiments on larval foodplant specificity. J. Res. Lepid. 29:173-194.

KIMBALL, C. P. 1965. The Lepidoptera of Florida: An annotated checklist. Fla. Dept. Agric., Gainesville. 363 pp.

SARGENT, T. D. 1976. Legion of night: The underwing moths. Univ. Massachusetts Press, Amherst. 222 pp.

WATSON, J. R. 1919. The chase of Catocala. Fla. Buggist 3:8-11.

JEFFREY R. SLOTTEN, 5421 NW 69th Lane, Gainesville, Florida 32606.