

MASSING OF *URANIA FULGENS* AT LIGHTS IN BELIZE (LEPIDOPTERA: URANIIDAE)

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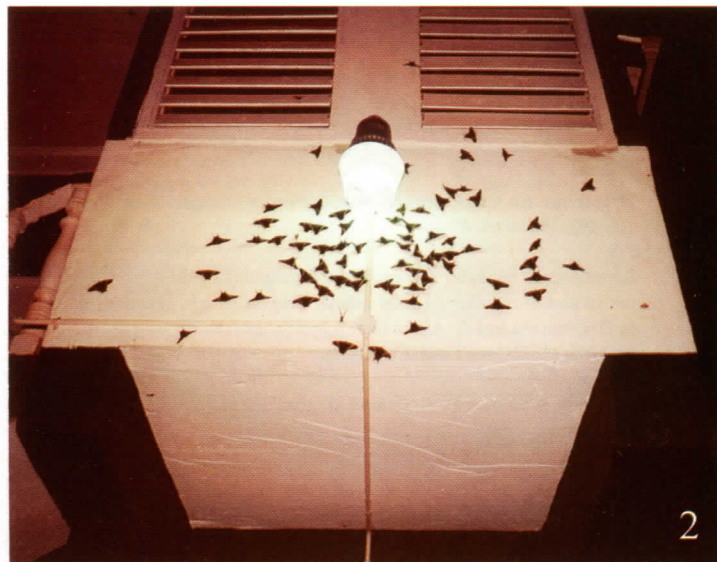


Fig. 1-2. *Urania fulgens* in Belize: 1) adult male; 2) adults attracted to mercury vapor light (71 are visible).

Attraction to lights is poorly documented and believed to be rare in diurnal species of Uraniidae. This behavior was not observed during extensive studies of *Urania* in Panama (Smith, 1992). Chin (2001) reported that Indo-Australian *Lyssa zampa* Butler (Uraniidae) enter lighted houses at night. In 1940, "many" *Urania fulgens* Walker were attracted to lights on board a ship voyaging eastward from Costa Rica (Skutch, 1970). Young (1970) observed that migrating *U. fulgens* in Costa Rica rest for the night in large trees and are occasionally attracted to nearby lights. In Belize, Meerman and Boomsma (1997) reported nine individuals of *U. fulgens* at ultraviolet lights and another attracted to a boat light (incandescent?). Generally uncommon or rare in Belize, *U. fulgens* can become locally abundant during periodic migratory flights. My own observations in Belize show that, under certain circumstances, this species is drawn to lights in large numbers.

During 11-21 September 1998, I participated (with John A. Shuey) in a survey of the butterfly fauna of Belize. Upon my arrival at Belize City, I observed solitary *U. fulgens* rapidly flying across the open expanse of airport tarmac. During the course of our trip, we continued to glimpse solitary individuals in many areas of central and southern Belize. On 20 September, we traveled to the town of Placencia, located on the Placencia Peninsula of Stann Creek District, southern Belize.

The night of 20 September was hot and very humid under clear skies. As we strolled along the narrow, unpaved streets of Placencia,

a single adult *U. fulgens* was found at 2130h resting near a fluorescent light (Fig. 1). Additional individuals were later seen gathering around fluorescent, incandescent and mercury vapor lights throughout the town. Light sources ranged in height from 1.5m to over 4.5m. The most impressive gathering of *U. fulgens* occurred around a mercury vapor light attached to a smooth white wall at a height of approximately 3.5m (Fig. 2). The number of individuals at this location gradually increased during the evening. By 2330h, at least 100 *U. fulgens* were attracted to this light. Dozens clung to the wall and many others were scattered on the ground, vehicles and other illuminated objects in the vicinity. Most were in good condition, but some were extremely worn. The next morning, many remained on the wall, even after others were seen coursing through local fields. Matthew J. C. Barnes (pers. comm.) subsequently collected a single worn specimen of *U. fulgens* on 24 December 1998 near a mercury vapor light trap at Maya Beach, Belize. Maya Beach is also located on the Placencia Peninsula, 13 km (8 mi) north of the town of Placencia.

Due to the apparent lack of suitable hostplants, *U. fulgens* may not be resident in Belize (Meerman and Boomsma, 1997). If the adults observed in 1998 were not of local origin, they may have been migrating northward along the coast (or even across the Gulf of Honduras) from locations within Guatemala and Honduras. Hostplants are present in Honduras and *U. fulgens* is also recorded there as well (Kendall, 1978; Molina, 1975).

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