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## Automeris liberia (Cramer) (Lepidoptera: Saturniidae) in Trinidad

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#### **ABSTRACT**

The unidentified saturniid larva illustrated in Cock (2003, *Living World*, Plate 2, No. 12) which I photographed on a Convolvulaceae vine at Morne Bleu Textel, 18.i.1988 is now identified as a fifth instar *Automeris liberia* (Cramer), by comparison with images on the internet and written descriptions of Trinidad observations. The Trinidad literature referring to this species under at least three different names is summarised, and adult male and female moths are illustrated.

In Cock (2003, Plate 2, No 12) I illustrated an unidentified saturniid larva which I photographed on a Convolvulaceae vine at Morne Bleu Textel, 18.i.1988 (not 1985 as given in the plate legend). I have now identified the larva as a fifth instar *Automeris liberia* (Cramer), by comparison with images on the internet (Riekirt 2004; Wenczel 2004; Wolfe 2004), and written descriptions of Trinidad observations (below). This note is to place this identification on record, but to also summarise the Trinidad literature referring to this species under at least three different names.

Guppy (1911) treats this species as "Hyperchiria sp." noting incorrectly that Automeris is a synonym. Guppy refers in a footnote to H. F. Wilson captured a specimen of this moth at light in 1892, and included it in his list of butterflies and moths of Trinidad. In this paper, Wilson (1894) lists 29 moth species, and "Hyperchiria sp." is the only Saturniidae species. Wilson comments "Taken at light in Woodford House; yellow forewings, reddish under wings with large eye." This short description could apply to more than one Automeris sp., so it seems likely that Guppy had personal information in making his statement.

Kaye (1901) recorded this species from Trinidad as *Automeris erisichton* Boisduval, based on a specimen his brother, S. Kaye, captured at Verdant Vale (Arima Valley). Kaye and Lamont (1927) repeat this record and add new records from Guaico (18.iv.1915, N. Lamont) and Palmiste (1.ii., 17.iii., 4.iv.1922, N. Lamont). *Automeris erisichton* is a synonym of *A. liberia* (e.g. Lemaire 1996).



Fig. 1. Automeris liberia male, Arima Valley, Scott Quarry, at light, 28.x.1978 (M. J. W. Cock); scale bar 1 cm.

Subsequent collecting has shown this species to be widespread and quite common all over Trinidad, and there are identified specimens in various collections including the University of the West Indies, CABI Bioscience, the Natural History Museum (London), Oxford University Museum, etc. Adult specimens are shown as Fig. 1 (male) and Fig. 2 (female) The F is shades of light brown in both sexes, as is the margin H; the base and disc UPH is orange-brown, brighter in the male. This is a distinctive species in Trinidad, as the arrangement of the spots within the "eye" of the hind wing is unique.



**Fig. 2.** *Automeris liberia* female, Morne Bleu, Textel Installation, at light, 13.ix.1978 (M. J. W. Cock); scale bar 1 cm.

The first observations on the biology of this species in Trinidad are those of Guppy (1911) who as noted above refers to it as *Hyperchiria* sp. He describes larvae collected from coconut as "formidable looking light green caterpillars covered with numerous needlepointed branched spines, and there is a long narrow whitish stripe running along each side edged with reddish brown. The spiracles ... are dull yellow." Urich (1915) clarifies that the species treated by Guppy was *A. liberia*. Lamont and Callan (1955) add *A. liberia* to the Trinidad list of moths, quoting Urich (1915).

Box (1953) includes a Trinidad record of *A. erisichton* from sugarcane in his list of sugarcane insects, but no details are provided. In his paper on Lepidoptera attacking cacao in Trinidad, Kirkpatrick (1954) found larvae of *A. erisichton* on cacao, but suggests that they normally feed on *Erythrina*, and drop onto the cacao beneath

and complete development. He records the larvae as 60 mm long, "bright grass green, the abdomen with a cream-coloured lateral stripe narrowly bordered above with crimson. Each segment with three pairs of bright green scoli bearing numerous urticating spines; the lateral scoli, situated just below the lateral stripe, smaller than the dorsal and subdorsal ones, which are nearly as long as the diameter of the body. Thoracic legs crimson, abdominal prolegs green with a crimson spot on the outer side just above the large slate-grey planta. Pupa in a rather thin but tough cocoon spun between leaves."

Thus, the published records for Trinidad show that this species is highly polyphagous, and potentially a minor pest on a variety of crops and trees.

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### **ADDENDUM**

## Synotaxidae, another Trinidadian Spider (Araneida) Family

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In Sewlal and Cutler (2003) on the spider families of Trinidad and Tobago, one family was inadvertently omitted.

**Synotaxidae** – Small to medium, pale green (in life), elongate spiders with long, thin, spineless legs. They resemble some Pholcidae and Theridiidae. Found in forests, they spin a very characteristic "chicken wire fence" web with rectangular mesh work. Webs are built in vegetation at least a half meter above the ground, and are built at night and taken down during the day.

See Anarsson (2003) for the latest reference.

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