

## A note on *Gamelia bennetti* Cock & Rougerie (Lepidoptera: Saturniidae) and its caterpillar in Tobago, West Indies

We report adults, a caterpillar and a food plant of *Gamelia bennetti* Cock & Rougerie in Tobago. This species was described from Trinidad by Cock and Rougerie (2021), who included a photographic record from Tobago. The species can be distinguished from other members of the *G. abas* group (*G. abas* (Cramer), *G. berliozii* Lemaire, *G. lichyi* Lemaire, *G. rubriluna* (Walker) and *G. septentrionalis* (Bouvier)) based on details of the male genitalia and DNA barcodes.

Arlene Blade found the caterpillar documented here on 20 December 2024 at Mason Hall, on the introduced ornamental, Rangoon Creeper (*Combretum indicum* (L.) DeFilipps, Combretaceae; = *Quisqualis indica* L.) (Fig. 1). The caterpillar was maintained in a large glass jar with cut foliage of the food plant until it formed a cocoon between spun leaves on 25 December [iNaturalist 256201050]. An adult female emerged on 14 January 2025, but the wings were crumpled.

The mature caterpillar (Figs. 2-5; [iNaturalist 255707902, 255788310]) measured approximately 6 cm when collected. The head and body were pale greenish white, slightly darker laterally on the body, and paler ventrally. The head was smooth and uniformly coloured apart from a contiguous group of small black spots over the stemmata. The subdorsal, dorsolateral and lateral scoli were concolorous, with green spines (some partially white); the scoli and spines extended uniformly the length of the body, except that the subdorsal



**Fig. 1.** The food plant, Rangoon Creeper *Combretum indicum* in situ at Mason Hall.

and dorsolateral scoli of thoracic segment 2 extended about the same length again as a fine, black and white branched spine. Legs, prolegs and claspers greenish white, paler than the body; the prolegs each with a marking laterally at the base, comprising an upper red band and a lower black band. Spiracles white, inconspicuous. On 24 December (the day before cocoon formation), the caterpillar acquired a uniform yellow tone (Fig. 5; [iNaturalist 255788310]).



**Figs. 2-5.** Final instar caterpillar of *Gamelia bennetti*, Mason Hall, Tobago. **2**, 20 December 2024, 6 cm; **3-4**, 21 December 2024; **5**, prepupa, 24 December 2024.



Lemaire (2002, Pl. ES3.4) recorded notes on the life history and included a colour photograph of a final instar caterpillar of *G. lichyi* from Barinas, Venezuela, reared in captivity on temperate trees (Fabaceae, Salicaceae, Fagaceae). Lampe (2010, pl. 199) documented the entire life history of *G. lichyi* from Carabobo, Venezuela, reared in captivity on temperate Salicaceae. Their photographs of the final instar caterpillar appear identical to the caterpillar of *G. bennetti* illustrated here from Tobago, confirming that the two species are very closely

related. No natural food plants are known for this group of *Gamelia* species, so our record from *Combretum* is the first.

Cock and Rougerie (2021) reported that *G. bennetti* was present in Tobago based on a photograph of a female near Speyside. Since then, CM has photographed several males at Mason Hall, which show a range of colour forms (Figs. 6-9) greater than that observed by Cock and Rougerie (2021), and clarifying that this is a variable species rather than a dimorphic one.



**Figs. 6-9.** Adult males of *Gamelia bennetti*, Mason Hall, Tobago, C. Mejias. **6-7**, 9 October 2024 [iNaturalist 246542727]. **8**, 8 January 2025 [iNaturalist 257873454]. **9**, 15 May 2024 [iNaturalist 216038791].

MJWC gratefully acknowledges the technical and logistical support of CABI, an international intergovernmental organization with core financial support from its member countries (see <https://www.cabi.org/about-cabi/who-we-work-with/key-donors/> for full details).

## REFERENCES

**Cock, M.J.W. and Rougerie, R.** 2021. *Gamelia bennetti* sp. nov. a new Saturniidae species from Trinidad and Tobago (Lepidoptera: Bombycoidea). *Zootaxa*, 942(3): 339–350.

<https://doi.org/10.11646/zootaxa.4942.3.2>

**Lampe, R.E.J.** 2010. Saturniidae of the World. Pfauenspinner der Welt. Munich: Dr. Friedrich Pfeil. 368 p, 336 pl.

**Lemaire, C.** 2002. The Saturniidae of America. Hemileucinae. Keltern, Germany: Goecke & Evers. 1388 p., 140 pl.

**Cavan Mejias<sup>1</sup> and Matthew J.W. Cock<sup>2</sup>**

1. [congea54@gmail.com](mailto:congea54@gmail.com)

2. [m.cock@cabi.org](mailto:m.cock@cabi.org) / [mjwcock@btinternet.com](mailto:mjwcock@btinternet.com)