

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. berliozi* 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). Lampke (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].

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