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Matt Kelly

veganpeace@earthlink.net

Matthew J.W. Cock

m.cock@cabi.org; mjwcock@btinternet.com

The caterpillar of *Rothschildia vanschaycki* (Lepidoptera, Saturniidae), a little known silk moth from Trinidad, W.I.

On 9 March 2018, one of us (DSH) found and photographed a large, strikingly colourful caterpillar (Fig. 1) at Guapo Beach, near Point Fortin (approximately 10.19N, 61.67W), on a species of mangrove growing on land. The caterpillar was large, at least 6 cm long so probably in the final instar. It was stationary on a stem about 1.5m off the ground, and we presume that it was on its food plant since there were few other potential food plants nearby, and it wasn't actively searching for a pupation site. Based on this image, the food plant is either white mangrove (*Laguncularia racemosa* (L.) Gaertn. f., Combretaceae) or red mangrove (*Rhizophora mangle* L., Rhizophoraceae), but key diagnostic features are not visible (Y. Baksh-Comeau pers. comm.).

The size and arrangement of spined scoli indicate that it is a species of Saturniidae. Comparison of the image with



Fig. 1. Presumed final instar caterpillar of *Rothschildia vanschaycki*.

published images of Saturniidae caterpillars (e.g. Lampe 2010, Janzen & Hallwachs 2018) showed that *Rothschildia* is the only genus from Trinidad which shows this configuration of short-spined, small subdorsal, dorsolateral and lateral scoli on all thoracic and abdominal segments. *Rothschildia* is a genus of New World atlas moths, with at least 25 species distributed primarily in the Neotropical Region (Lemaire 1978, 1996). In recent years, several new species have been described, and some subspecies have been revised to species (e.g. Brechlin and Meister 2012). There are only three species of *Rothschildia* known from Trinidad: *R. erycina erycina* (Shaw), *R. aurota aurota* (Cramer) and *R. vanschaycki* Brechlin and Meister (Kaye & Lamont 1927, Brechlin and Meister 2012, M.J.W. Cock unpublished data). The mature caterpillar of *R. erycina erycina* is black with white bands and partial orange-red bands, and that of *R. aurota aurota* is yellow-green dorsally, blue green ventrally, with a pale lateral line, small red scoli, red spiracles and no bands (Lampe 2010). As the specimen in question is very different from both of these, we infer that it is the hitherto unknown caterpillar of *R. vanschaycki*. Caterpillars of some subspecies of the closely related *R. lebeau* (Guerin-Méneville) are known (Lampe 2010, Janzen & Hallwachs 2018). Lemaire (1978, 1996) treated the widespread *R. lebeau* as having six subspecies, some of which are now treated as valid species (Brechlin and Meister 2012). Two subspecies might be found in Trinidad: *R. lebeau lebeau* is found in northern Venezuela to the west of Trinidad, while *R. lebeau amacurensis* Lemaire is known from the Orinoco Delta to the south of Trinidad, with one doubtful record from Trinidad (Lemaire 1978) which may prove to be the recently described *R. vanschaycki*. The caterpillar of the latter is unknown, but that of *R. lebeau lebeau* from Carabobo Province, northern Venezuela, is illustrated by

Lampe (2010, plate 231). In the penultimate instar the body is fairly uniformly green darker ventrally, with small red scoli, yellow-brown spiracles and bands of grey (anteriorly) and white (posteriorly) on the dorsal and lateral parts of the abdominal segments. The final instar is similar, but the red scoli are missing. In some characters the Guapo Beach caterpillar is close to those of *R. lebeau lebeau*: the rather uniform green ground colour, small red scoli, absence of a lateral line and the presence of transverse bands. However, it also differs significantly, as the transverse bands of the abdomen are much more striking, being white anteriorly in the dorsal half, red posteriorly from the subdorsal scolus on one side dorsally to the other side, and black from the subdorsal scolus to the bottom of the prolegs, which have a red spot laterally, and the spiracles in the black band are concolourous. Unfortunately the head of the Guapo Beach caterpillar is not visible in the photo.

Rothschildia vanschaycki was recently described from Trinidad based on a single specimen collected at Port of Spain (Brechlin and Meister 2012). MJWC had been aware of this as a rare species in Trinidad, but identified it as *R. lebeau*. In addition to the type specimen, there are two further specimens known to us from Trinidad: a male collected at Valpark Shopping Plaza, Valsayn South (10.633N 61.418E, 26 June 1978, M.J.W. Cock) and a female from 'Trinidad' (no other data) in the Natural History Museum, London. Further, KS has photographed an adult male about 3km from Valsayn South at the Caroni Swamp Visitor Centre, on the eastern side of Caroni Swamp (10.605N 61.434W, 2 November 2014; Fig. 2), and at least three images of males from the same area have been posted on the internet: late June 2011 (What's that Bug? 2011), 30 May 2016 (Rutherford 2016), 4 November 2017 (rainingrainers 2017). It is a rarely encountered species in Trinidad, and the places where it has been seen suggest an association with coastal swamps, which this provisional mangrove food plant association supports.

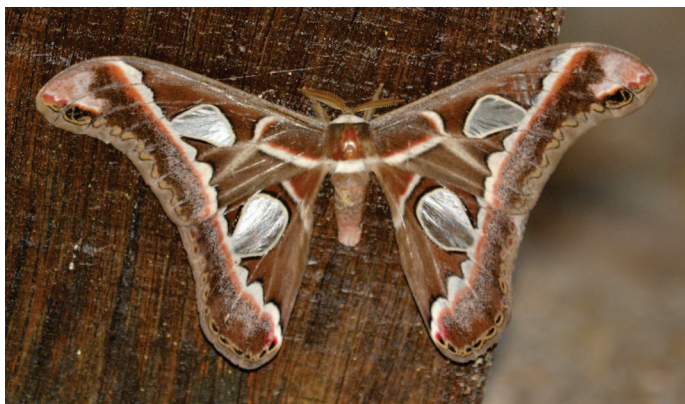


Fig. 2. Living *Rothschildia vanschaycki* male, Caroni Swamp Visitor Centre, 2 November 2014 (K. Sookdeo).

Although we are confident of our identification of this striking caterpillar, it would be desirable to locate additional specimens to rear through to confirm this and the food plant. Its distinctiveness supports Brechlin and Meister's (2012) decision to treat *R. vanschaycki* as a separate species rather than as a subspecies of *R. lebeau*.

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David S. Huggins

031479@gmail.com

Kris Sookdeo

kris.a.sookdeo@gmail.com

Matthew J.W. Cock

m.cock@cabi.org; mjwcock@btinternet.com