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A Note on the Food Plant and Early Stages of *Justinia gava* Evans (Lepidoptera: Hesperiidae) in Trinidad, West Indies

Matthew J.W. Cock

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A Note on the Food Plant and Early Stages of *Justinia gava* Evans (Lepidoptera: Hesperiidae) in Trinidad, West Indies

When rearing Lepidoptera for identification or to establish life histories, one of the problems that may be encountered is that the adult butterfly or moth forms up in the pupa, but then fails to emerge, or emerges with difficulty so that the wings do not expand. Sometimes this is due to damage to the pupa when newly formed, but often there is no apparent reason. If the caterpillar or pupa was being reared to obtain a cabinet specimen, this is a disaster, but if it is being reared for identification or to establish a life history, all is not lost. While the dead or dying butterfly or moth is still fresh and supple, it is possible to remove it from the pupal case, so that the pattern can be examined on the unexpanded wings, and the genitalia are fully formed and can also be examined. When rearing Hesperiidae, I try to salvage crippled adults such as this, so that an identification can be made or confirmed, and this has led to several rearing and food plant records that would not otherwise have been obtained.

One such example is a caterpillar which I collected together with the late F. Clive Urich on the summit ridge of the Trinity Hills, Trinidad, 4 April, 1982, feeding on what I identified as *Scleria latifolia* Sw., a relatively large sedge with broad leaves, widespread in Trinidad (Adams 1992). My identification was based on what I considered to be the same species identified by the National Herbarium of Trinidad and Tobago the previous month, which I had collected as the food plant of *Orses cynisca* Swainson (Cock 2005). I did not prepare any notes on the caterpillar or its shelter at the time, and it pupated with the caterpillar cast skin stuck over the distal abdomen segments and the cast head capsule partially stuck over the front of the pupa. Nevertheless, I was subsequently able to extract the butterfly when it formed up and preserved it for future

study. When I examined this material recently, I was able to identify it as a male *Justinia gava* Evans, based on the partially visible forewing markings and the genitalia.

The cast head capsule is split in half, and the clypeus and adfrontals are missing. The epicrania are pale brown; the posterior margin dark; a diffuse brown band from apex to stemmata; epicranial and adfrontal sutures brown; ventrally darker. The pupa from which the adult was extracted, is flimsy and pale brown. It has a distinctive (albeit rather crushed) pale brown, slender, T-shaped frontal projection, just over 1mm wide and 1mm long.

I treated *J. gava* in Cock (2009) and at that time, the life history and food plants were unknown. This new record means that both *Justinia* spp. found in Trinidad feed on *Scleria* spp. sedges and it seems likely that the whole genus is associated with this family as food plants.

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Matthew J. W. Cock

CABI Europe - Switzerland, Rue des Grillons 1,
CH-2800 Delémont, Switzerland.
m.cock@cabi.org