

A NEW SPECIES OF *APOSPASTA sensu lato* FROM SÃO TOMÉ (LEPIDOPTERA: NOCTUIDAE: HADENINAE)

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ABSTRACT.—*Apospasta tamsi* n. sp. is described from São Tomé, and its relationships are discussed.

KEY WORDS: Africa, *Apospasta tamsi* n. sp., Ethiopian, *Rougeotiana*, taxonomy, Uganda.



Fig. 1. *Apospasta tamsi* n. sp.: holotype male (left), female allotype (right).

This collaborative paper marks the first results of an ongoing project (by JW) to identify and catalogue the macrolepidoptera fauna of the island of São Tomé. During a research trip to study the collections in The Natural History Museum (BMNH), London, England, a new species of the genus *Apospasta* was identified from material collected in September 1990 and from historical material in The Natural History Museum. The species is here described and dedicated to Mr. W. H. T. Tams (1891-1980) who collected a large series of this species on the Percy Sladen and Godman Trust Expedition to this island in 1932 (Tams, 1933, 1934, 1934a).

Apospasta tamsi Honey & Wojtusiak, new sp.

Description.—Forewing length: 14mm, male and female.

MALE (Fig. 1).—**Head:** brownish yellow. Eyes large, globular, covered with short hairs. Frons relatively smoothly scaled, vertex with median tuft of hairs. Labial palpi short and thick with a very small apical segment. Antennae simple with paired lateral setae at the apex of each segment; ventrally covered with dense cilia, dorsally scaled brownish yellow, the basal half with rings of black scales on each segment. **Thorax:** covered with brownish yellow scales, those near margin of

patagia tipped with black. **Forewing:** ground colour brownish yellow, tinged with olive in the outer half of the wing. Orbicular and reniform spots of the ground colour, orbicular surrounded by a thin ring of black scales and reniform ringed posteriorly with white scales which extend to base of wing as a white line, claviform dark brown. Postmedial fascia between veins marked proximally by brown scales. Antimedial fascia edged distally with brown scales. Scales on submarginal fascia yellow cream, at apical region forming a spot of the same colour. Terminal line consisting of small, dark brown, triangular spots. Cilia of the ground colour, darkened distally with brown spots. **Underside:** fuscous, with paler terminal fascia. **Hindwing:** heavily suffused with fuscous scales on the veins and terminal area, paler towards base. Terminal line thin, brown. **Underside:** pale cream with short, fuscous, postmedial fascia extending from anterior margin to M_2 . **Abdomen:** brown. **Male genitalia** (Fig. 2-3). Uncus slender, curved, slightly broadened at its base. Vinculum u-shaped. Neck of the cucullus curved ventrally, long and narrow with a slight medial bulge; cucullus broadly spatulate bearing spines on the inner surface. Basal part of the valvae broad, trapezoidal. On the right valva a narrow band of short spines parallel to the anteroventral edge, extending from anteriodorsal angle to inner surface of a flattened lobe which is curved towards the dorsal edge of the valva. On the left valva, inner surface of the sacculus extended to form a medial, semicircular ridge and a broad, rounded lobe situated anteriorly.

Aedeagus short, rounded at its anterior end, slightly curved; vesica with three clusters of spines, as illustrated (Fig. 3).

FEMALE (Fig. 1).— As in male apart from the following.

Head: cream yellow. **Thorax:** cream yellow, some scales on patagia with black tips. **Forewing:** pattern as in male but with cream yellow ground colour, less suffused with brown scales. **Female genitalia** (Fig. 4-5). Operculum with broad, u-shaped sclerotisation. Ductus bursae short, with two broad, sclerotised longitudinal stripes. Bursa copulatrix with two small, oval signa near anterior end; posterior end trilobed, outer lobes containing a dense patch of small spines. Between the outer lobes, at the junction of the ductus bursae with the bursa copulatrix, is a third lobe extending posteriorly. Tergite and sternite of the eighth abdominal segment as illustrated (Fig. 6).

Immature Stages.— Unknown.

Foodplant.— Unknown.

Distribution.— São Tomé island.

Types.— *Holotype* ♂ (Fig. 1) SÃO TOMÉ, Bombaim, Sep 1990, leg. T. Pycz. *Allotype* ♀ (Fig. 1) *ibid.* *Paratypes* 1♂, 1♀ *ibid.* (all in Zoological Museum, Institute of Zoology, Jagiellonian University, Krakow, Poland); 14♂, 11♀ W. Africa, São Thomé I., [various dates between 29 Oct 1932 and 23 Nov 1932], W. H. T. Tams, B.M. 1933-39; 1♂ St Thomé, Oct-Nov [18]99, (Mocquerys), Rothschild Bequest B.M. 1939-1 (all in The Natural History Museum (BMNH), London).

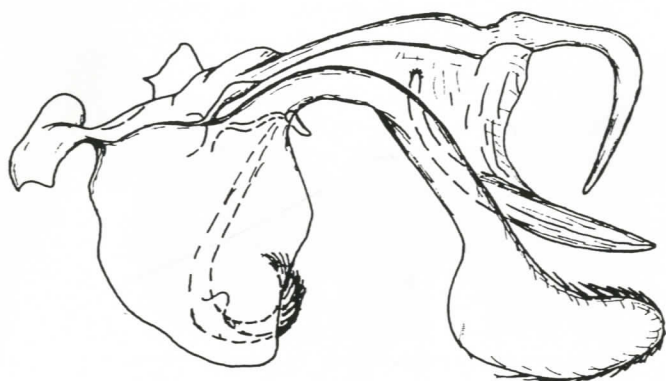
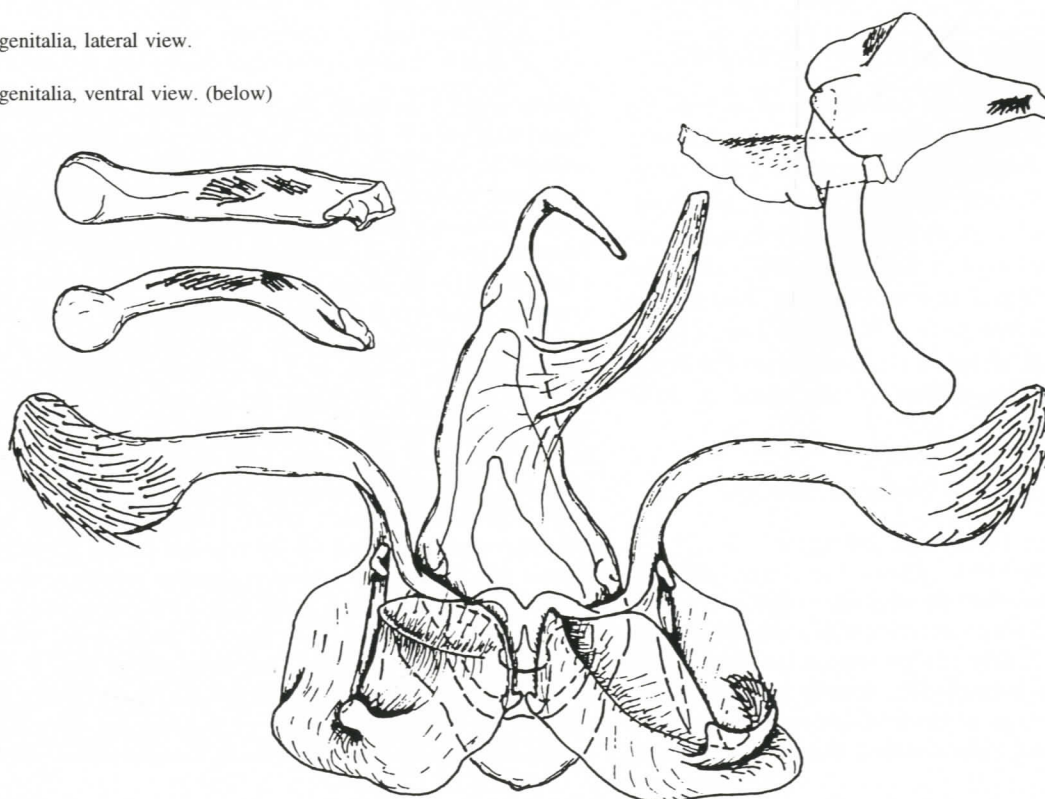


Fig. 2. Male genitalia, lateral view.

Fig. 3. Male genitalia, ventral view. (below)



Remarks.— This species was first collected in 1899 by Mocquerys, probably Albert (1860-1926). The specimen concerned was found by MRH among unidentified African material that was previously housed in the Rothschild collection at Tring, Hertfordshire and was therefore unknown to Miss A.E. Prout at the time of her 1927 list of the Noctuidae of São Tomé. The only species of *Apospasta* that she recorded was the endemic *A. deprivata* (Prout). The presence of a second species of *Apospasta* on São Tomé has been known from specimens in the collection at the BMNH for some time but its description has been prompted by the recent collection of fresh material.

A further species, closely related to *A. tamsi* but apparently undescribed, has also been found by MRH among material from Uganda in the BMNH collection. As it is currently only known from a single male, we have declined to describe it here in the hope of discovering more material in the future. The external facies of *A. tamsi* and its close relative place it apart from the rest of its African congeners. Both species show quite strong bilateral asymmetry of the male genitalia which is confined to the structures on the inner surface of the sacculus. Although this asymmetry would seem to be a feature common to many hadenine genera, Fletcher made no mention of it when he described *Apospasta* (Fletcher, 1959) or when he described the new species from the Ruwenzori Expedition material (Fletcher, 1961).

The genus *Apospasta* is a large assemblage of primarily African species: 31 were listed by Poole (1989) and a further four were added by Holloway (1989). Recent discussions with Dr László Ronkay and Dr László Peregovits (Hungarian Natural History Museum, Budapest, Hungary) indicate a possible relationship between the type species of *Apospasta* (*A. sabulosa* Fletcher) and other montane African species that are currently placed in the genus *Rougeotiana* Laporte. The extent of these relationships will be a subject for future research.

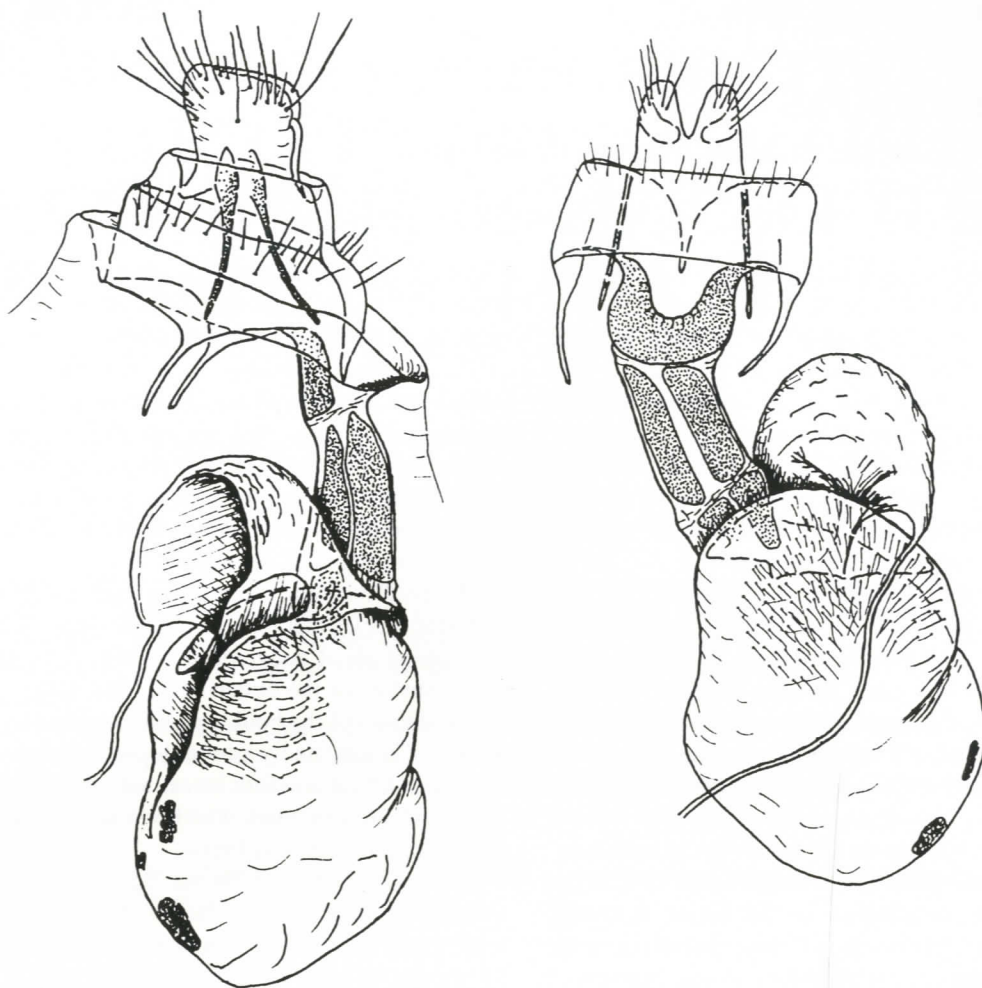


Fig. 4-5. Female genitalia: 4) lateral view; 5) dorsal view.

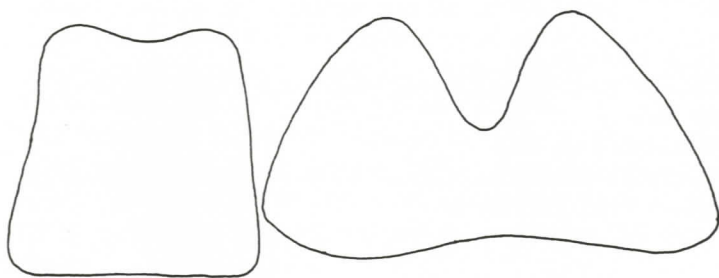


Fig. 6. Female 8th abdominal sternite (left) and tergite (right).

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