

A NEW SPECIES OF THE GENUS *STACTOBIA*  
MCLACHLAN FROM ETHIOPIA  
(INSECTA, TRICHOPTERA: HYDROPTILIDAE)

MEY, W.

*Museum für Naturkunde, Humboldt-Universität  
Invalidenstr. 43, D-10115 Berlin, Germany. E-mail: Wolfram.mey@museum.hu-berlin.de*

*Stactobia gozmanyi* sp. nov. is described as high-altitude inhabitant of the Afroalpine Biome in Ethiopia. The wing venation and the genitalia of the male are illustrated. The new species belongs to the *vaillanti* group and is closely related to *S. aurea* MOSELY.

Key words: Insecta, Trichoptera, taxonomy, *Stactobia gozmanyi* sp. n., Ethiopia, Afromontane.

*Stactobia* MCLACHLAN, 1880 is one of the larger genera of the family Hydroptilidae (MCLACHLAN 1–1). To date about 120 species have been described (MORSE 2001). They are arranged systematically in 7 species groups including a group of isolated and unplaced species (SCHMID 1983). The genus is an Old World taxon with a range comprising the Palearctic, Oriental and Afrotropical Biogeographical Regions. The larvae live in running waters, especially in mountain ranges, where they occur in rivers from low to high elevations. A concentration of species was registered along the southern slopes of the Himalaya Mountain Chain (SCHMID 1959, 1983). In the Afrotropical Region the genus appears to be a rare element. Only four species are known: *S. aurea* MOSELY, 1939 described from the Ruwenzori Mts, *S. fahjia* MOSELY, 1948 from Yemen, *S. vaillanti* SCHMID, 1959 from Guinea and *S. kaputensis* WELLS et ANDERSEN, 1995 from Tanzania. The genus is unrecorded from the Eastern Highlands, Central and South Africa (DE MOOR 1993, JOHANSON 1992). However, the occurrence of *S. vaillanti* in the lowlands of West Africa suggests a much wider distribution of the genus in Africa. Most of the mountain ranges in Africa are poorly explored. They might provide further, so far undetected species.

Depositories: BMNH = The Natural History Museum, London (formerly British Museum of Natural History), MNHU = Museum für Naturkunde, Humboldt-Universität, Berlin,

***Stactobia gozmanyi* sp. n.**

Type material – Holotype ♂ (genitalia slide Mey 05/04) and 9 ♂♂, 8 ♀♀ paratypes, Ethiopia, Simien Mts., Jinbar River, ca. 3400 m, (38°05' E 13°15' N), 15.1.1996, (male genitalia slide Mey 56/06), leg. W. MEY (deposited in alcohol, 1 male pinned, MNHU).

Description – Length of anterior wing 2.9–3.0 mm. Head and thorax dark brown. Frons between antennal sockets with a tuft of yellow hairs. Ocelli white. Antenna yellow, with 16 flagellomeres. Legs brown, spurs 1.2.4. (males), 0.2.4. (females). Abdominal sternum II with three venulae (Fig. 3), sternum VII with a short mesial process.

Male genitalia (Figs 1–2): Tergum IX without anterior apodemes, sternum IX largely membranous with slightly sclerotised distal margin. Inferior appendages divided into a small dorsal and a

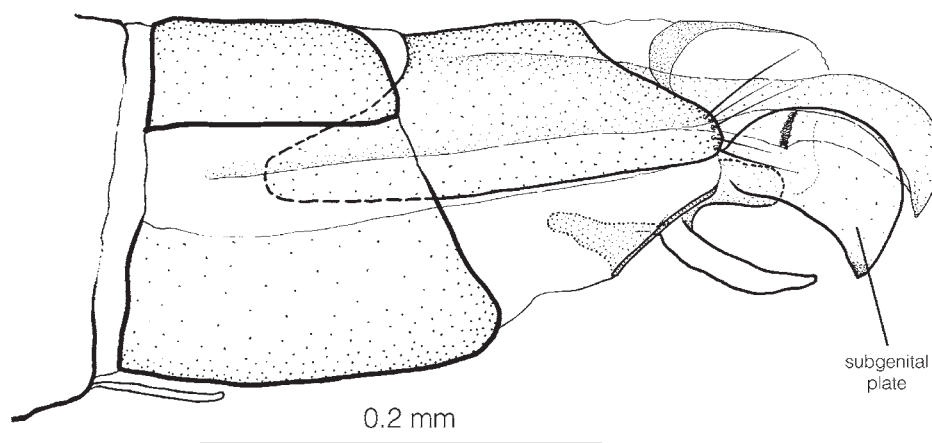
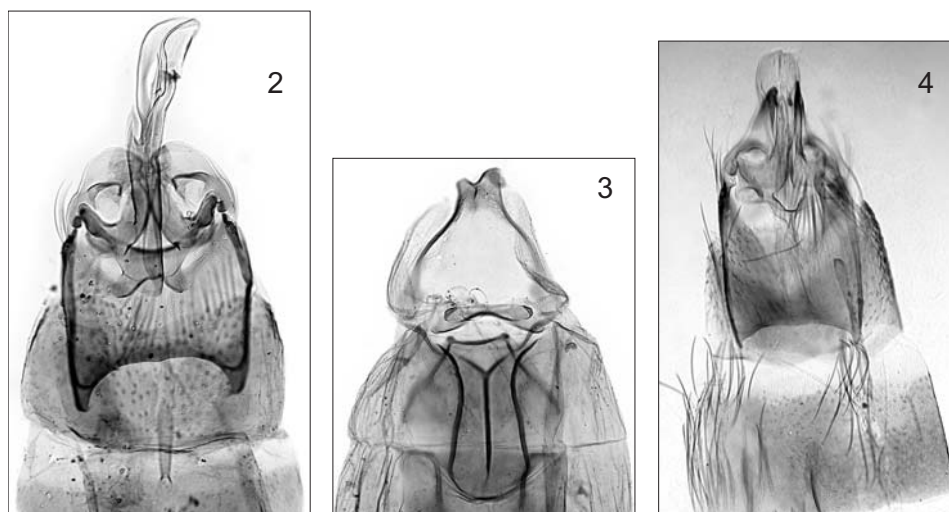
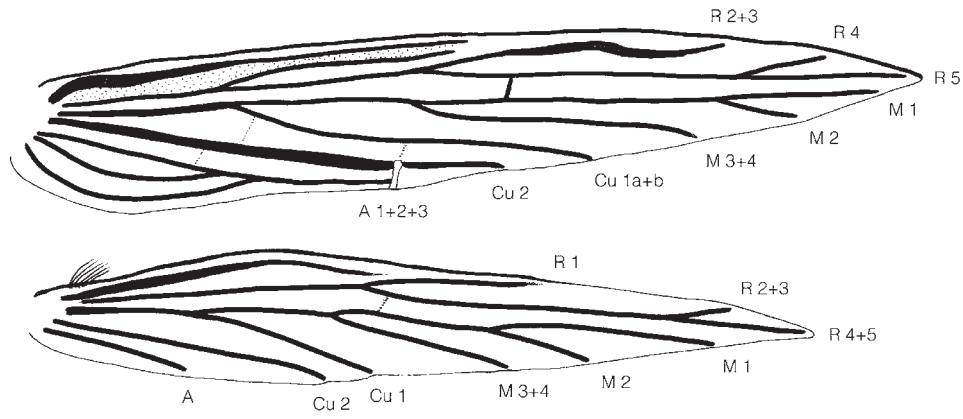


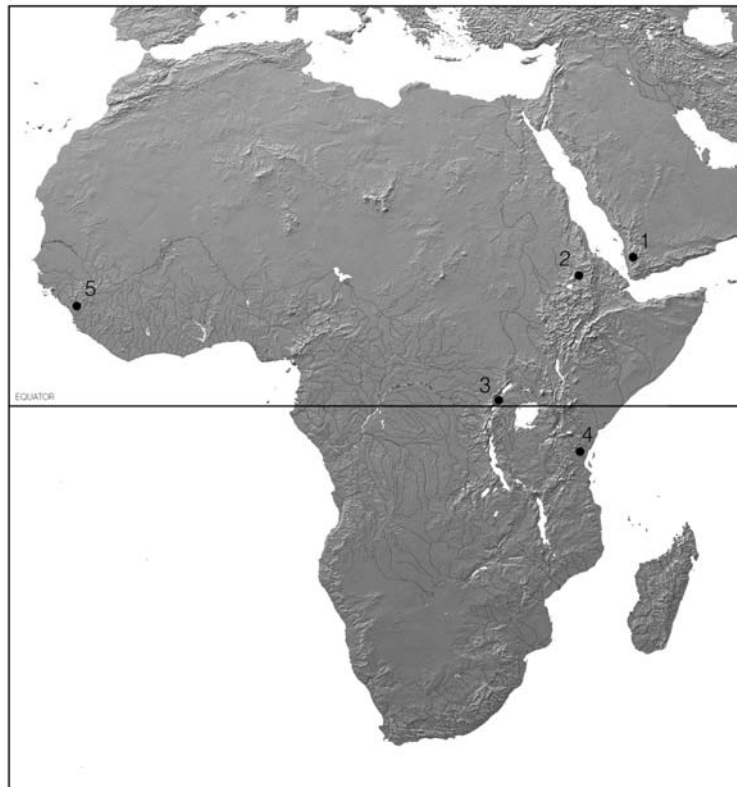
Fig. 1. *Stactobia gozmanyi* sp. n., male genitalia, lateral view



Figs 2–4. 2–3 = *Stactobia gozmanyi* sp. n., male: 2 = genitalia ventral view, 3 = first and second abdominal segment, ventral view. 4 = *Stactobia aurea* MOSELY, holotype, male genitalia, ventral view



**Fig. 5.** *Stactobia aurea* MOSELY, holotype, wing venation



**Fig. 6.** Known localities of *Stactobia* MCLACHLAN in the Afrotropical Region: 1 = *S. fahjia*, 2 = *S. gozmanyi* sp. n., 3 = *S. aurea*, 4 = *S. kaputensis*, 5 = *S. vaillanti*

long ventral part. Appendages of the subgenital plate very broad and with an inwardly-bent hook on the ventral margin. Segment X small, weakly developed, without sclerotised spines. Phallic apparatus a long tube without paramers, aedeagal tip swollen, umbrella-like and with a pair of black, minute spines on the ventral side near the gonopore.

Derivation nominis – The new species is named after Dr LÁSZLÓ GOZMÁNY on occasion of his 85th birthday and in recognition of his valuable contributions to lepidopterology.

*S. gozmanyi* sp. n. is characterised by the small mesial process of abdominal sternite VII and the enlarged appendages of the subgenital plate. Based on the male genitalia the new species is closely related to *S. aurea* MOSELY from the Ruwenzori Mts in Uganda. Together with *S. vaillanti* and *S. kaputensis* they form the *vaillanti* group of species, which is confined to Africa. Figure 6 shows the distribution of the group in Africa. All species are known from their type localities only.

In a field study LUBINI (1998) has investigated the actual situation of aquatic insects in the Simien Mts National Park. She also studied the Jinbar River and its tributaries, and registered seven species of caddisflies, most of them in the larval stage. *S. gozmanyi* sp. n. escaped her collecting efforts. The stream is on the Gich Plateau and runs through alpine grassland dotted with Giant Lobelias. At the sampling site the stream bed is rocky, composed of boulders, gravel, sand, and organic matter in lenitic settings. The adult caddisflies were collected in the daytime.

#### *Stactobia aurea* (MOSELY, 1939)

Material examined – Holotype ♂ (mounted on separate slides of wings and body and genitalia), “Afrित्रichia/aurea Mosely/Uganda:/Namwamba Valley/6500 ft. XII. 1934 – I. 1935/F.W.E. Edwards/ CB Type” [hand-written with black ink] (BMNH).

The examination of the type specimen revealed the great similarity of the species with *S. gozmanyi* sp. n. The abdomen and genitalia are embedded in a dorso-ventral position. The ventral view fits well to the original illustrations in MOSELY (1939) and is shown in Fig. 4. However, the wing venation of the holotype is slightly different from the figure given by MOSELY. The venations of both wings were redrawn and are depicted in Fig. 5.

\*

*Acknowledgements* – I gratefully acknowledge the support of NIELS HOFF from the graphics department of the Museum for producing the distribution maps, and the help of JASON DUNLOP for correcting the English text. Dr D. GOODGER, Natural History Museum, London, kindly sent me type material under his care. Financial support of field work was provided in part by the Deutsche Forschungsgemeinschaft (Mey 1085/3).

## REFERENCES

- JOHANSON, K. A. (1992) A catalogue of the caddisflies of East Africa (Insecta, Trichoptera). *Steenstrupia* **18**(7): 113–141.
- LUBINI, V. (1998) Aquatic invertebrates of streams and rivers in the Simien Mountains. Pp. 78–83. *In*: NIEVERGELT, B., GOOD, T. & GÜTTINGER, R. (eds): *A survey on the flora and fauna of the Simien Mountains National Park, Ethiopia*. Pano-Verlag, Zürich, 109 pp.
- MCLACHLAN, R. (1874–1880) *A monographic revision and synopsis of the Trichoptera of the European fauna*. Reprint 1968, E. W. Classey, Hampton, 523 pp.
- MOORE, F. C. DE (1993) Factors influencing the distribution of Trichoptera in South Africa. *In*: OTTO, C. (ed.): *Proceedings of the 7th International Symposium on Trichoptera, Umea 1992*. Backhyus Publishers, Leiden, 312 pp.
- MORSE, J. C. (ed.) (2001) Trichoptera World Checklist. Last revised 2005. <http://entweb.clemson.edu/database/trichopt/index.htm>
- MOSELY, M. E. (1939) *1. Trichoptera*. – British Museum (Natural History), Ruwenzori Expedition 1934–35. **3**: 1–40.
- MOSELY, M. E. (1948) *9. Trichoptera*. – British Museum (Natural History), Expedition to South-West Arabia 1937–38, vol. **1**: 67–85.
- SCHMID, F. (1959) Le genre Stactobia McL. *Miscelánea Zoológica, Museo de Zoología Barcelona* **1**(2): 3–56.
- SCHMID, F. (1983) Encore quelques Stactobia McLachlan (Trichoptera, Hydroptilidae). *Le Naturalist Canadien* **110**(3): 239–283.
- WELLS, A. & ANDERSEN, T. (1995) Tanzanian micro-caddisflies (Trichoptera: Hydroptilidae). *Tijdschrift voor Entomologie* **138**: 143–167.

Received , 2006, accepted , 2006, published , 2007