



A new synonymy and a new species of Mydidae (Diptera) from Madagascar

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Kondratieff *et al.* (2005) proposed a new genus of mydas fly, *Hessemydas* from Madagascar and included two new species, *H. parkeri* Kondratieff, Carr and Irwin and *H. tulear* Kondratieff, Carr and Irwin. Additionally, the previously described *Leptomidas seyrigi* Séguy, the only mydas fly previously known from the island was placed in *Hessemydas*. Séguy (1960) originally described this species from a single male collected at Behara. Kondratieff *et al.* (2005) indicated that despite numerous inquiries to the Muséum National d'Histoire Naturelle, Paris, France, the holotype of *L. seyrigi* was unavailable for examination. However, recently, through the courtesy of Christophe Daugeron, the holotype was located and made available for examination. Unfortunately, *H. tulear* was determined to be a junior subjective synonym of *H. seyrigi*. Also recently, Norman D. Penny, California Academy of Sciences made additional specimens of mydas flies available from Madagascar for determination. Among this material, a new species of *Hessemydas* was discovered and is described below.

Hessemydas seyrigi (Séguy)

Leptomidas seyrigi Séguy 1960: 154. Type locality: Madagascar, Tuléar Prov., Behara.

Afroleptomidas seyrigi, (Séguy) – Bowden 1980: 330.

Hessemydas seyrigi (Séguy) – Kondratieff, Carr and Irwin 2005: 3.

Hessemydas tulear Kondratieff, Carr and Irwin 2005: 3. Type locality: Madagascar: Tuléar Prov., Ifaty. **new synonymy.**

Comments. Séguy (1960) described *H. seyrigi* from a single male specimen and his original description did not include any specific details of the genitalia, characters necessary for species identification. Kondratieff *et al.* (2005) provided a complete description of the male of this species under *H. tulear*, including providing illustrations of the genitalia. Comparison of recently collected specimens (Kondratieff *et al.* 2005) with the holotype of *H. seyrigi* indicated only one difference that the pilosity of the face of the holotype is predominantly black, whereas all other material examined exhibited white to yellow pilosity. The holotype specimen appears to be slightly greased.

Hessemydas daugeroni, sp. nov.

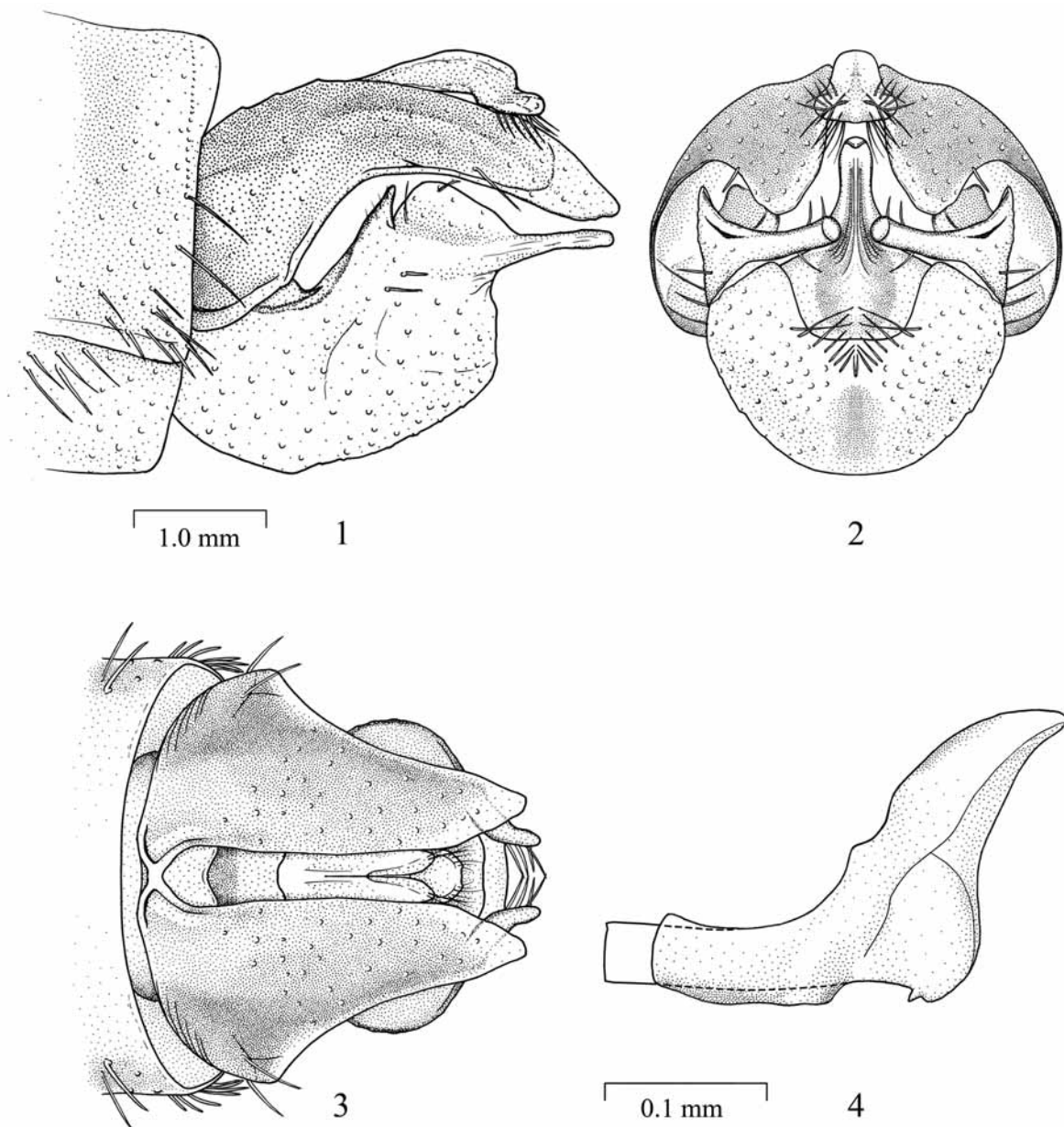
(Figs. 1–4)

Material examined. Holotype ♂, MADAGASCAR: Tulear Prov., Mikea Forest, NW of Manombo, Malaise trap in deciduous dry forest, elev. 37 m, 22°54.22'S 43°28.53'E, 28 March–8 April 2002, M. E. Irwin & R. Harin'Hala. Paratypes. Same as holotype but 27 November–6 December 2001, 1 ♂; 17–28 January 2002, 1 ♂, 22°54.80'S 43°28.93'E, Malaise trap in spiny forest, elev. 37 m, 22 June–2 July 2002, 1 ♂, 29 May–8 June 2002, 1 ♂.

Diagnosis. The male of *H. daugeroni* is most similar to the male of *H. seyrigi* but can be distinguished by the shape of the gonocoxite bearing an elongate, subparallel process (Figs. 1–3). Illustrations of the male genitalia of *H. seyrigi* (*H. tulear*) as for comparison are provided by Kondratieff *et al.* (2005); the process of the gonocoxite is broad proximally and distally tapers to a curved, blunt apex. Females are presently not associated. All the material listed below was collected by malaise traps and these specimens are imperfect, missing in part mouthparts, legs or antennae.

Description. Male: Length 14–15mm mm, length of wing 8.0–8.5 mm. *Head:* Black, frons silver-gray pollinose, pilosity of face long, white to yellow; oral cavity narrow, triangular or narrowed dorsally; occiput with long white to yellow pilosity; postocciput with white pilosity. Labium black, extending anteriorly equidistant to pedicel, apical portion

covered with stiff, erect, short pale yellow setae, basal portion with long, pale yellow setae ventrally; palpi brown, subequal to length to width of labium, covered with long, white setae. Antennae brown tinted with black, gray pollinose, apicoflagellomere expanded apically, clavate, with apical knob containing pit with small spine. *Thorax*: Mesonotum dull black, gray pollinose, pair of submedian and lateral gray pollinose stripes, marked by white short pilosity, short medial stripe; lateral edges of scutum and notopleuron gray-white, with long white pilosity; anteprenotal lobe enlarged, brown; anepisternum, anepimeron, and katepisternum polished black; scutellum and mesopostnotum gray pollinose, scutellum with large sculptured indentures on anterolateral corners; postpronotal lobe enlarged with long white pilosity; post alar callus brown, silver pollinose posteriorly. Wings hyaline, venation brown, typical for genus. Halter white. Legs brown, darker basally, covered with short, brown setae, tibiae and tarsal segments with a row of stiff brown macrosetae ventrally, with apex, pulvilli, with yellow pollinose and a row of short setae ventrally; claws with apical $\frac{1}{3}$ black; hind legs with two ventrolateral rows of thick, brown spines; thicker, erect, and arising from tubercles on femora; coxae with short, thin, stiff brown setae. *Abdomen*: Black, tergite 2 with long white pilosity, bullae brown, with black line along anterior margin; tergum 3 with long white pilosity, dorsally and laterally; tergites 2–7 with posterior margins white, pilosity brown to black; sternite light brown, pilosity black. *Male genitalia*: Cercus light brown, with apical light brown setae; epandrium black, lateral edges yellow, lobes extend medially, broadly acute, margins thin (Figs. 1–3). Hypandrium dark brown,



FIGURES 1–4. *Hessemydas daugeroni*, sp. nov. **1.** Male genitalia, lateral view. **2.** Male genitalia, caudal view. **3.** Male genitalia, dorsal view. **4.** Aedeagus, lateral view.

covered with pale yellow pilosity. Gonocoxite process elongate, subparallel, obtusely pointed, extending caudally, apical $\frac{1}{3}$ curved medially (Figs. 1–3). Parameral sheath thick basally (Fig. 4), with a single opening apically; ejaculatory apodeme long, narrow, ovate apically; aedeagus thick, sculptured; caudal process long, truncate apically, extended parallel to ejaculatory apodeme enclosing nearly all of ejaculatory apodeme (Fig. 4).

Comments. The holotype is deposited in the California Academy of Sciences, San Francisco, California, paratypes in the Muséum National d'Histoire Naturelle, Paris, France, and C. P. Gillette Museum of Arthropod Diversity, Colorado State University.

Etymology. The patronym honors Christophe Daugeron, Muséum National d'Histoire Naturelle, Paris, France.

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References

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