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A new species of *Hemerodromia* Meigen, 1822 from Sierra Leone with key to species of Afrotropical Region
(Insecta, Diptera, Empididae)

Riassunto: Una nuova specie di *Hemerodromia* Meigen, 1822 dalla Sierra Leone, con legenda per le specie della Regione Afro-tropicale (Insecta, Diptera, Empididae).

Viene descritta una nuova specie di *Hemerodromia* Meigen, 1822: *Hemerodromia curvinervis* n. sp. affine a *Hemerodromia portia* Jones, 1940, ne differisce per le nervature R_{4+5} e M_1 ondulate e convergenti all'apice, M_2 sinuosa e completa fino al margine dell'ala; la tibia posteriore sprovvista di setole apicali, nonché per la morfologia dei terminali maschili.

Abstract: A new species of *Hemerodromia* Meigen, 1822 from Sierra Leone is described: *Hemerodromia curvinervis* n. sp. is related to *Hemerodromia portia* Jones, 1940, from which it differs in having the veins R_{4+5} and M_1 undulate and converging apically, M_2 sinuous and reaching to coste of wing, hind tibia apically lacking setae and for the shape of male terminalia.

Key words: Sierra Leone, *Hemerodromia* Meigen, 1822, New species.

INTRODUCTION

In the material of Diptera Empididae collected by Prof. Walter Rossi (University of L'Aquila, Italy) in Sierra Leone and housed in the Museo di Storia Naturale in Venice (Italy), I found a specimen belonging to a new species.

Taxonomy according to Jones (1940), Smith (1969, 1980), Wagner & Andersen (1995) and Yang Ding *et al.* (2007); morphology and terminology according to Merz & Haenni (2000) and Sinclair (2000).

Key to the Afrotropical Region species of *Hemerodromia* Meigen, 1822:

1. Wing with dark brown markings2
- Wing clear or diffusely infuscated, but without distinct dark markings.....3
2. Wing with a dark patch over R_4
.....*ultima* Jones, 1940
- Wing with a dark patch over R_4 and a dark band along costal margin over radial cell.....
.....*spectabilis* Smith, 1969
3. Abdomen with venter yellowish or yellow-brownish.....4
- Abdomen wholly brownish or blackish.....8

4. Pleura light chestnut brown; ovopositor very short5
- Pleura blackish or dark brown; ovopositor long... ..7
5. Tip of vein R_{2+3} placed before base of fork of M_{1+2}*gonatopus* Speiser, 1908
- Tip of vein R_{2+3} placed beyond beginning of fork of M_{1+2}6
6. Antenna and mothparts brown.....
.....*denticulata* Wagner & Andersen, 1995
- Antenna and mouthparts yellow
.....*tarda* Jones, 1940
7. Halter dark or brown.....*susanna* Jones, 1940
- Halter yellow*resurrecta* Jones, 1940
8. Halter blackish.....*icenae* Jones, 1940
- Halter yellowish.....9
9. Front coxa or femur at least brown or black.....10
- Front coxa and femur yellowish14
10. Front coxa yellow, remainder of legs brown
.....*ursula* Jones, 1940
- Front coxa dark brown brown to blackish11
11. All legs brown.....*gogi* Smith, 1969
- Front coxa and femur brown, remainder of legs yellow12
12. Wing brownish tinged along centre of wing and

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- tip; a black species.....*duce* Jones, 1940
 - Wing clear; a brownish species.....13
 13. Prothoracic collar with 2 setulae and some shorter hairs on each side; wing clear
*cincinnus* Smith, 1969
 - Prothoracic collar hairless; wing greyish.....
*splendens* Smith, 1969
 14. Eyes distinctly separated on face15
 - Eyes subcontiguous on face20
 15. Wing distinctly brownish; median and hind femur brownish at tip; tibiae brownish
*alida* Smith, 1969
 - Wing greyish or clear, at most faintly brownish; mid- and hind femur yellow16
 16. Flagellomere clear yellow.....17
 - Flagellomere partly darkened19
 17. Arista longer than flagellomere
*maia* Jones, 1940
 - Arista shorter than flagellomere18
 18. Thorax reddish-yellow with broad dark median stripe*lativitta* Smith, 1969
 - Thorax dark brown.....*magogi* Smith, 1969
 19. Flagellomere mostly darkened, only yellowish at base below.....*basalis* Smith, 1969
 - Flagellomere darkened apically
*apicalis* Smith, 1969
 20. Fork of veins M_1 and M_2 beginning before tips of R_{2+3} and M_{3+4}*goya* Jones, 1940
 - Fork of veins M_1 and M_2 beginning opposite tips of R_{2+3} , and M_{3+4}21
 21. Hind tibia with a conspicuous comb of yellow setae; M_2 straight, not reaching to costae
*portia* Jones, 1940
 - Hind tibia without comb of setae; M_2 very sinuous, reaching to costae.....*curvinervis* n. sp.

***Hemerodromia curvinervis* n. sp.**

COMPARATIVE REMARKS. *Hemerodromia curvinervis* n. sp. is similar to *Hemerodromia portia* Jones, 1940, in having the abdomen brownish, the halter yellow and the fork of M_1 and M_2 beginning opposite tips of R_{2+3} and M_{3+4} . It differs from the latter species mainly in the following characters: the veins R_{4+5} and M_1 undulate and converging apically (R_{4+5} and M_1 not undulate and parallel apically in *H. portia*), M_2 sinuous and reaching to costae (straight and interrupted in *H. portia*), hind tibia lacking setae (with comb of yellow setae in *H. portia*), the gonocoxite long and ovoidal (broad and round in *H. portia*), the gonocoxal

apodeme broad with broad arms (narrow with narrow arms in *H. portia*) and the aedeagus short and narrow (long and broad in *H. portia*) (Figs. 1-4).

TYPE MATERIAL. Holotype ♂ from Sierra Leone, W. Area, Sugar Loaf, 17.XII.1992, Walter Rossi leg.

BODY LENGTH: 2.1 mm.

DESCRIPTION. Male. Head: brownish, dark microtomentose; eyes contiguous on face; antenna yellow; palpus and proboscis yellow; 2 occipital setae; 2 vertical setae; 2 orbital setae; 2 frontal setae; 2 ocellar setae and a small row of fronto-orbital setulae (all setae and setulae dark).

Thorax: scutum brownish with yellowish microtomentum; scutellum yellowish; postpronotal lobe and propleuron yellowish; other pleura brownish; all pleura with yellowish microtomentum; 2 rows of small acrostichal setulae; 1 row of small dorsocentral setulae; 2 notopleural; 2 prealar; 1 postalar; 1 row of small setulae along the margin of scutellum; wing only slight infuscate; fork of M_{1+2} placed after the tip of R_{2+3} ; veins R_{4+5} and M_1 undulate and converging apically; M_2 sinuous and reaching to costae; halter yellow

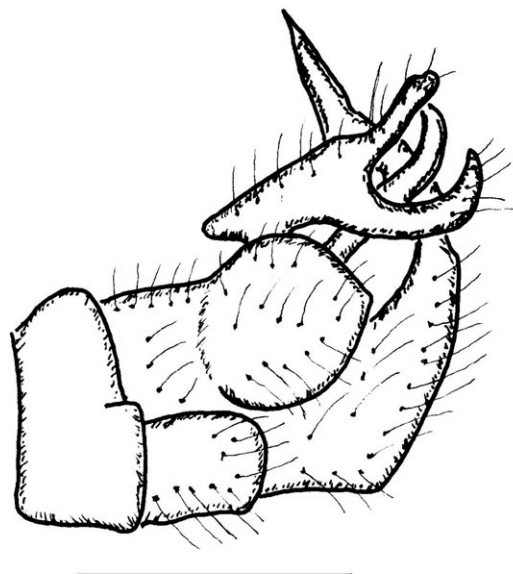


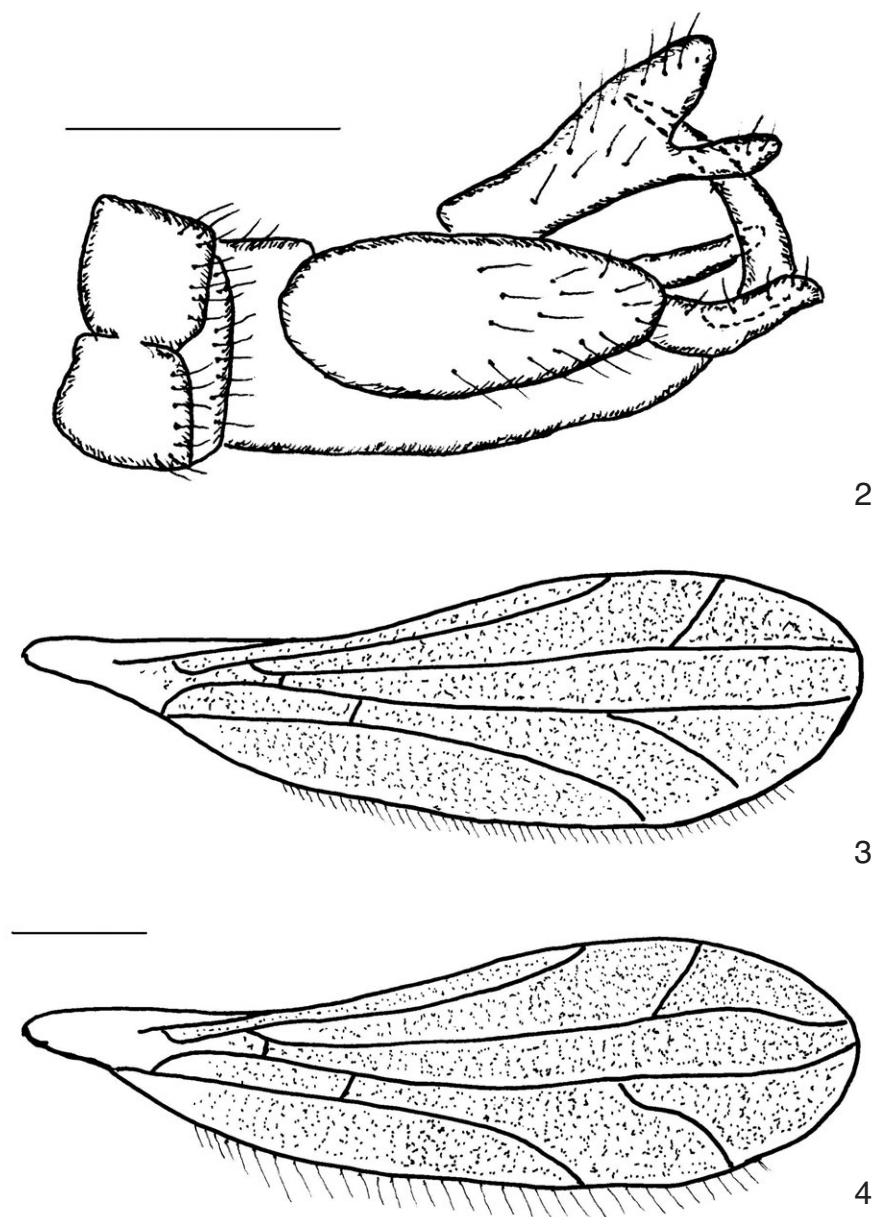
Fig. 1. *Hemerodromia portia* Jones, 1940: external male terminalia (from JONES C. GARRET, 1940). Scale bar: 0.10 mm.

with brownish knob; legs yellow with tarsi slightly brownish; fore femur with a row of ventral spiniform setulae; fore tibia with a row of ventral spiniform setulae, with black, pointed, apical spur.

Abdomen: tergites brownish; sternites yellow-brownish with sparsely silvelly hairs.

Male terminalia: gonocoxite long and ovoidal, gonocoxal apodeme broad with broad arms, aedeagus short and narrow.

ETIMOLOGY: the species epithet, *curvinervis*, refers to the very sinuous shape of vein M_2 .



Figs. 2-4. External male terminalia (2), wing (3-4) of *Hemerodromia curvinervis* n. sp. HT ♂ (2,4) and *Hemerodromia portia* Jones, 1940. Scale bar: 0.1 mm.

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