Systematic notes on Dolichopodidae (Diptera) of Tristan da Cunha

I.Ya. Grichanov

Grichanov, I.Ya. 2005. Systematic notes on Dolichopodidae (Diptera) of Tristan da Cunha. Zoosystematica Rossica, 14(1): 171-172.

Hydrophorus carmichaeli (Walker), H. christopherseni Frey and H. tristanensis (Macquart) are transferred to Hydatostega. New records are given for H. carmichaeli and H. tristanensis.

I.Ya. Grichanov, All-Russian Institute of Plant Protection, Shosse Podbelskogo 3, St. Petersburg, Pushkin 196608, Russia. E-mail: grichanov@mail.ru

Introduction

Only three species of long-legged flies are known from the South Atlantic Tristan da Cunha Islands (Frey, 1954). Two of them were originally described in the genus *Medetera* Fischer von Waldheim, 1819 (Dyte, 1967). All the species have been included in the Afrotropical catalogue within the genus Hydrophorus Fallén, 1823 (Dyte & Smith, 1980). Later, Grichanov (1997) has not mentioned them in his review of Afrotropical Hydrophorinae because of their uncertain position.

I have examined recently the material of all three species listed by Frey (1954) and deposited in the Helsinki Zoological Museum (ZMH). The examination has revealed that they should be transferred to the hydrophorine genus Hydatostega Philippi, 1865. The cluster of long pale hairs on the mesanepimeron just anterior to the spiracle distinguishes this genus from all others in the subfamily (Hurley, 1995).

Hydatostega has been recently restored and separated from Hydrophorus by Hurley (1995). Three species of the genus are known from the Nearctic and restricted mainly to montane regions (Pollet et al., 2004). At least five species have been found in the Neotropics; they are confined to high altitudes or high latitudes (Hurley, 1995). Two of these species are known from the Juan Fernández Islands in the Pacific Ocean, and one species, from the environs of the Straight of Magellan (Robinson, 1970). Also Hydrophorus antarcticus Schiner, 1868 known from the female collected on Saint-Paul Island (south of the Indian Ocean) possibly belongs to *Hydatostega*. I have not seen the latter species. The genus Hydatostega is apparently absent in the Afrotropics, Europe and Asia.

Additional material on Dolichopodidae from Tristan da Cunha has been found in the collection of the Natal Museum, Pietermaritzburg, South Africa (NMP). Three species of Hydatostega have been identified. H. carmichaeli (Walker) is for the first time recorded from Inaccessible Island and H. tristanensis (Macquart), from Nightingale Island. Thus, all Hydatostega species inhabit three major Tristan da Cunha islands.

Below, the material examined by the author in ZMH and previously listed by Frey (1954) is not cited, except for the type specimens.

Hydatostega carmichaeli (Walker), comb. n.

= Medeterus [sic] carmichaeli Walker, 1849: 654.

Material examined. Tristan da Cunha: 11 ♂♀, Inaccessible I., Malaise trap, on slight cliff face, on water surface, and net sweeping along water edge; 6, 10 and 19.X. 1989 (A.J. Gardiner & H. Barber) [NMP].

Hydatostega christopherseni (Frey), comb. n.

= Hydrophorus christopherseni Frey, 1954: 14.

Type material. 1 ♀, "Nr 86 – 100 m, Tristan, 16.01. 1938" / "120-42" / "Spec. Typ. No" [red label]; 1 9, "Inaccessible" / "Tristan da Cunha" / "Spec. Typ. No" [red label] (ZMH).

Additional material examined. Tristan da Cunha: 1 of, Nightingale I., main r[oa]d, plateaux - loast, 20.X.1989 (A.J. Gardiner); 1 of, *Inaccessible I.*, Phyticas above squa bog, Malaise trap, 10.X.1989 (A.J. Gardiner & H. Barber) [NMP].

Hydatostega tristanensis (Macquart), comb. n.

- = Medeterus [sic] tristanensis Macquart, 1847a: 72 (in separate, 1847b: 56).
- = Medeterus [sic] tristramensis Walker, 1849: 654.

Material examined. **Tristan da Cunha**: 1 9, *Nightingale I.*, main r[oa]d, plateaux – loast, 20.X.1989 (A.J. Gardiner) [NMP].

Key to Hydatostega species of Tristan da Cunha

- Fore femur with at least 5 long setae, as long as femur diameter. Palpus and fore coxa (anteriorly) densely covered with long yellow hairs. Larger species: body length 6-7 mm..... tristanensis (Macquart)
- Fore femur with setae that are not longer than half of femur diameter. Hairs on palpus and fore coxa sparser and shorter. Smaller species: body length 4-5 mm
 ... carmichaeli (Walker)

Acknowledgements

I express sincere gratitude to Dr. Pekka Vilkamaa (Helsinki) and Dr. David Barraclough (Pietermaritzburg) for their kindness in furnishing an opportunity to study the collections of their museums.

References

Dyte, C.E. 1967. Two Dolichopodidae (Diptera) from St. Helena Island, South Atlantic. *Entomologist*, 100: 174-176.

- Dyte, C.E. & Smith, K.G.V. 1980. Family Dolichopodidae. *In*: Crosskey, R.W. (Ed.). *Catalogue of the Diptera of the Afrotropical Region*: 443-463. London: British Museum (Natural History).
- Frey, R. 1954. Diptera Brachycera und Sciaridae von Tristan da Cunha. *Res. Norw. sci. Exped. Tristan da Cunha 1937-1938*, 4(26): 1-55.
- Grichanov, I.Ya. 1997. A brief review of the Afrotropical fauna of the subfamily Hydrophorinae (Diptera: Dolichopodidae) with description of *Cemocarus stuckenbergi* sp. n. *Int. J. dipterol. Res.*, 8(3): 149-157.
- **Hurley, R.L.** 1995. Dolichopodidae: Hydrophorinae. *Flies Nearctic Reg.*, **6**(6/2): 113-224.
- Macquart, J. 1847a. Diptères exotiques nouveaux ou peu connus. 2me supplément. Mém. Soc. Roy. Sci. Agric. Arts, Lille, 1846: 21-120.
- Macquart, J. 1847b. Diptères exotiques nouveaux ou peu connus. 2me supplément: 5-104. Paris: Roret.
- Pollet, M.A.A., Brooks, S.E. & Cumming, J.M. 2004. Catalog of the Dolichopodidae (Diptera) of America north of Mexico. *Bull. Amer. Mus. natur. Hist.*, 283: 1-114
- Robinson, H. 1970. Family Dolichopodidae (Diptera).
 In: Papavero, N. (Ed.). A catalogue of the Diptera of the Americas south of the United States, 40: 1-92.
 São Paulo: Secretaria da Agricultura.
- Walker, F. 1849. List of the specimens of dipterous insects in the collection of the British Museum. Parts II-IV: 231-1172. London: British Museum.

Received 18 September 2004