

SHORT NOTE

Correction and identification of louse-flies (Diptera: Hippoboscidae) collected from a North Island robin (*Petroica longipes*) on Tiritiri Matangi Island

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Berggren (2005) recorded the presence of louse-flies (Insecta: Diptera: Hippoboscidae) in the plumage of North Island robins (*Petroica longipes*) on Tiritiri Matangi I, including a photograph of a specimen. She sent 2 voucher specimens to the Museum of New Zealand where RLP identified them as *Ornithoica* sp. These specimens have been examined recently by CA who confirmed that RLP's identification is correct.

The specimen depicted by Berggren (2005: Fig. 1) was identified in the caption as *Ornithoica* sp., probably assuming it belonged to the same genus which RPL had identified for the other 2 louse-flies. However, the louse-fly shown in Berggren (2005: Fig. 1) does not present an important diagnostic feature of the genus *Ornithoica* Rondani, 1878, i.e., distal half of wing vein R4-5 placed very close to the costal margin (Fig. 1b; see also Fig. 1 in Maa 1966:

14). Instead, we have identified this fly as belonging to the genus *Ornithomya* Latreille, 1802 because the photograph shows a complete separation of the vein R4-5 from the costal margin of the wing (Fig. 1a). The fly also shows small and narrow antennae and a scutellum with 4 or more bristles, all typical features of the genus *Ornithomya* (see Maa 1963; 1986).

Wing lengths were measured from photographs using software Image J (version 1.44p Wayne Rasband, National Institutes of Health, USA) with a background grid. Wing lengths of the 2 louse flies deposited at the Museum of New Zealand by Berggren measure 3 mm and 3.2 mm; they also have setal tufts around spiracles 4 and 5, and tergite 6 has 2 pairs of bristles. These features match Maa's (1966) description of the female *Ornithoica exilis* (Walker, 1961). Furthermore, using Maa's description (1986: 88), we identified the louse-fly depicted in the photograph published by Berggren (2005: Fig. 1) as *Ornithomya variegata* (Bigot, 1885) because of its wing length, measuring 4.8 mm, and

Received 8 Aug 2013; accepted 1 Oct 2013

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the presence of 2 pairs of long setae, longer than the 2 pairs of scutellar bristles.

During her ectoparasite survey of North Island robins on Tiritiri Matangi I, Berggren (2005) collected louse-flies belonging to 2 genera. These louse-flies represent the first record of 2 species of Hippoboscidae living within the same host population at the same time in New Zealand. The presence of these 2 louse-fly genera, both regarded as polyxenous, opens a new research opportunity for studying the community structure and possible interspecific competition among louse-flies on Tiritiri Matangi I.

LITERATURE CITED

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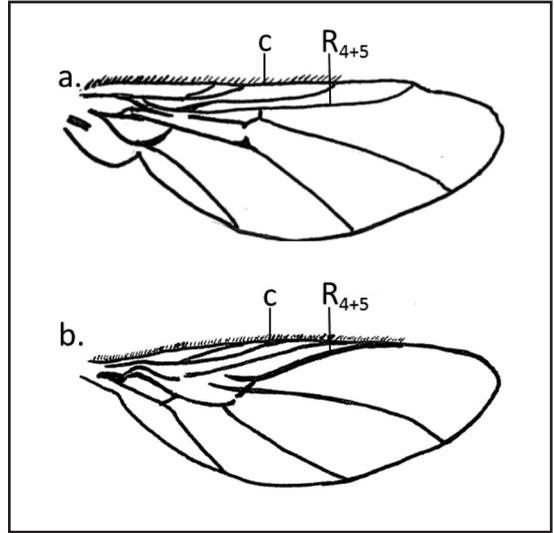


Fig. 1. Wings showing venation: a. *Ornithomya* sp.; b. *Ornithoica* sp. (R, radial vein; C, costal margin).

Keywords correction; identity; louse-fly; *Ornithoica*; *Ornithomya*; Diptera; Hippoboscidae