

New Record of the Threatened Butterfly *Drephalys mourei* (Hesperiidae) in a Heavily Disturbed Area in Southeastern Brazil

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NEW RECORD OF THE THREATENED BUTTERFLY *DREPHALYS MOUREI* (HESPERIIDAE)
IN A HEAVILY DISTURBED AREA IN SOUTHEASTERN BRAZIL

Additional key words: Atlantic Forest, conservation, Eudaminae, Red List of Brazilian Fauna, skipper

The genus *Drephalys* E. Watson, 1893 (Hesperiidae: Eudaminae) includes currently 18 species distributed from Mexico to Southern Brazil (Warren et al. 2009, Warren et al. 2016). All known species are diurnal and apparently have very specific life traits, keeping potential collectors apart, making them remarkably rare in collections (Mielke 1968; Burns 1999; Burns & Janzen 1999). Two out of the 13 Brazilian species of *Drephalys* (Casagrande & Duarte 2017) are in the Red List of Brazilian Fauna (Freitas & Marini-Filho 2011, MMA 2014), including *Drephalys mourei* Mielke, 1968, apparently a rare and poorly known butterfly. This species has been recorded in two sites in the Atlantic Forest at nearly 200 m of altitude. Males are apparently territorial, flying fast at one meter from the ground level displaying hilltopping behavior in clearings from 0830 h to 0900 h (Mielke 1968; Mielke & Casagrande 2008). Records of *D. mourei* includes the type locality in Joinville, Santa Catarina state (Mielke 1968), the small hill Morro do Cavalão, Niterói, Rio de Janeiro state (Mielke & Casagrande 2008) and an unconfirmed and dubious record from north of Espírito Santo state between the municipalities of Linhares e Pedro Canário (Brown Jr. 1991; Freitas et al. 2016). Based on the

known distribution, Casagrande & Mielke 1992 suggest that *D. mourei* could be present in the state of Paraná. On 3 December 2016, at 1020 h, a single male individual of *D. mourei* has been observed and photographed by Marcos Cesar Campis (“Marquinhos Aventureiro”, nature photographer) at Morro Agudo municipality, São Paulo state (20°48'S 48°00'W, 580 m a.s.l.). The male was observed flying fast and landing on flowers of *Coussarea* sp. (Rubiaceae) feeding on nectar (Fig. 1) on the edge of a small forest fragment (14.7 ha) surrounded by agricultural lands (sugar cane and soybean crop rotation). This record is important for four reasons: 1) this is the third confirmed locality for *D. mourei*; 2) this record extends the occurrence of this species to 300 km through the interior; 3) the site presents vegetation (semideciduous forest) and climate (seasonal with a marked dry season) distinct from the other two sites (both covered by ombrophilic forest without a marked dry season); and 4) the high degree of disturbance suggests that the species could occur in a wide variety of habitats, and its rarity could be an artifact of low detectability instead of biological attributes of the species (as suggested by the riordinid *Joiceya praeclarus*, see Greve et al. 2013). In addition,

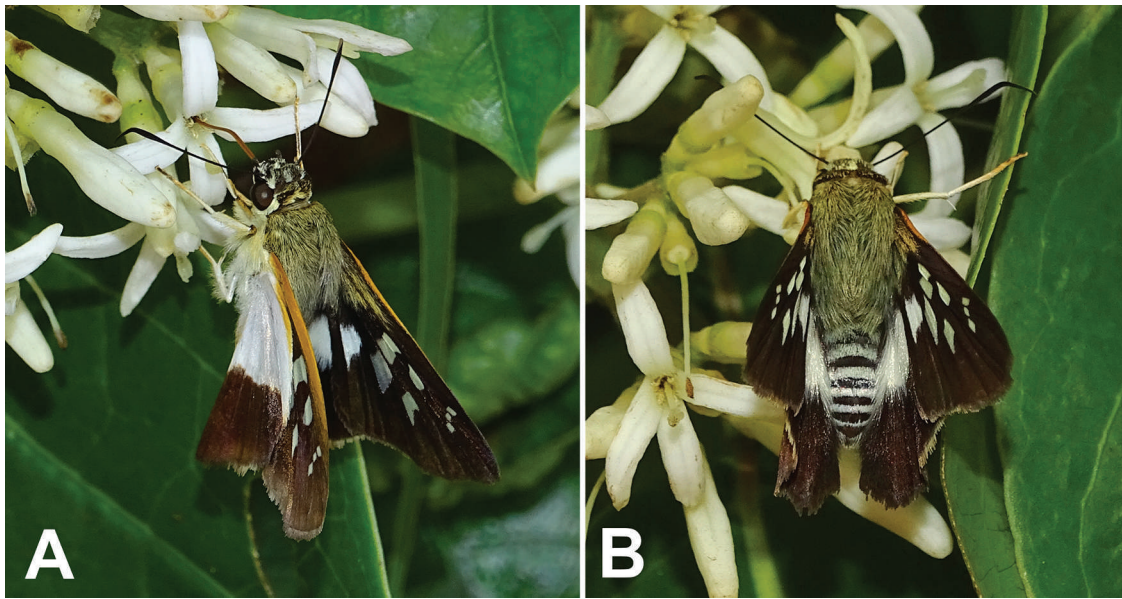


FIG. 1. Two views of *Drephalys mourei* feeding on nectar on *Coussarea* sp. (Rubiaceae), **A**, lateral view showing the ventral wing pattern, **B**, dorsal view.

the present record emphasizes the importance of citizen science in providing valuable data for biological conservation. As recently shown for other threatened butterfly species (*Rhetus belphegor* (Westwood, 1851), Kaminski et al. 2015), both scientists and amateurs can effectively contribute to the science by revealing new unknown populations of rare or threatened species of animals and plants (Theobald et al. 2015).

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