

SHORT COMMUNICATION

The Desert Beauty *Calopieris eulimene*: a butterfly new to Egypt (Insecta: Lepidoptera)

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The butterfly genus *Calopieris* Aurivillius, 1898 has only one species: the Desert Beauty *Calopieris eulimene* (Klug, 1829) (Ackery, Smith, & Vane-Wright, 1985), which is a rare Afrotropical species considered to be one of the most xerophilic butterflies in Africa (T. Larsen, pers. comm.; Williams, 2015). It is endemic to the Somali sub-region (Nazari et al., 2011), having been recorded only from Sudan, Yemen, western Saudi Arabia (20 km south of Mecca), Chad, Eritrea, and Ethiopia (T. Larsen, pers. comm.; Ackery et al., 1985; Gabriel, 1949; Larsen, 1982; Williams, 2015). The type specimens come from Ambukol, Dongola district, Sudan (Longstaff, 1913). The distribution is shown in Figure 1. Most of the available records are from between 1828 and 1980, with only one relatively recent record in 2007 from South of Jebel Aulla, Sudan (Williams, 2015). It is a poorly known butterfly with relatively few records and hardly any information on its biology and ecology (T. Larsen, pers. comm.; but see Waterfield, 1925). The larvae turn up on the leafless bushes of the Desert Caper *Capparis decidua* (Capparaceae), and adults are mostly associated with it (Ackery et al., 1985; Longstaff, 1913); it does not seem to visit the flowers of other plants (Waterfield, 1925).

Many (20–30) individuals of *C. eulimene* were recorded on 29 May 2011 and 29 November 2012 in a small wadi named ‘Srob Kwan’ in the Meisah area of the Gebel Elba Protected Area (22.319°N, 35.603°E; 451 m a.s.l.) in southeastern Egypt (Figure 2). The adults were found hovering over the Desert Caper (*Capparis decidua*; local name: Tundob), confirming previous observations (e.g. Ackery et al., 1985). The surrounding wadis were roughly surveyed on the same days, but no other populations of *C. eulimene* were observed. Other recorded butterfly species included *Danaus chrysippus*, *Pontia glauconome*, *Colotis danae*, *C. chrysonome*, and *C. liagore*.

Based on the two most recent comprehensive studies on the Egyptian butterflies, there are 61 butterfly species recorded from Egypt (Gilbert & Zalut, 2007; Larsen, 1990). *C. eulimene* has not been reported from Egypt before, although Larsen (1990) expected its distribution to extend to the extreme south of Egypt.

The Desert Caper is widespread in Egypt, inhabiting desert wadis and sandy alluvial plains. It is found in various phytogeographical regions in Egypt, including the Nile region, oases, desert areas, the Red Sea coastal strip, Sinai, and Gebel Elba (Boulos, 1999). In Gebel Elba Protected Area, it has been recorded from many locations (for details: Al-Gohary, 2009). It has also been recorded from other locations in southern

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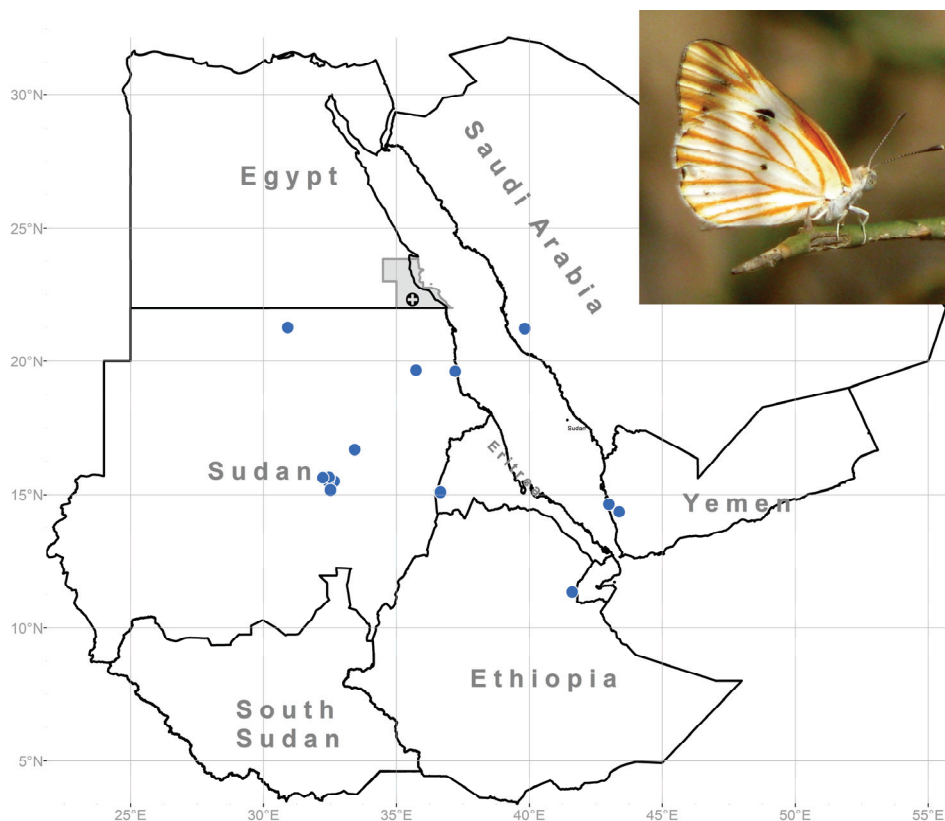


Figure 1. Distribution of the Desert Beauty (*Calopieris eulimene*). Blue dots show its known distribution from Sudan, Yemen, Ethiopia, Eritrea, and western Saudi Arabia. The area shaded with gray in southeastern Egypt shows the location of the Gebel Elba Protected Area, where *C. eulimene* were observed.

Egypt, including Wadi El Gemal and Wadi El Allaqi Protected Areas (Mahmoud & Gairola, 2013; Springuel, Sheded, & Murphy, 1997). The presence of the Desert Caper at different locations in southern Egypt may support the existence of *C. eulimene* populations at other places in southern Egypt, especially since such places are often remote areas that receive very low sampling effort: sampling is commonly biased towards areas close to main cities or roads. Given that *C. eulimene* has been recorded so far only from a very small region in Egypt, it gives the Gebel Elba Protected Area high responsibility to conserve this species and its habitat, and other nearby Protected Areas (Wadi El Allaqi, Wadi El Gemal) should be thoroughly explored to show more accurately its distribution within Egypt.

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Figure 2. Panoramic view of Wadi Srob Kwan, where the specimens of *Calopieris eulimene* were recorded. Wadi Srob Kwan is characterized by bushes of the Desert Caper *Capparis decidua*, the food plant of the larvae of *Calopieris eulimene*.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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