

## A short note on the Striped Policeman Butterfly, *Coeliades forestan* (Lepidoptera: Hesperiidae) in Seychelles

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### Introduction

The Striped Policeman (*Coeliades forestan* (Stoll, 1784)) is the largest skipper (forewing length approximately 22mm) found in Seychelles. It is easily recognised by a very prominent white stripe across the ventral surface of the hindwing (Bowler 2006). It shows a great deal of ecological adaptability, and may be found from dense rain forests through to unnatural grasslands (Larsen, 1996; Lees, *et al.*, 2003). Although it may be numerous in a given locality, more often than not, single specimens can practically turn up anywhere (Larsen 2005).

In a recent revision of the subfamily Coeliadinae (Lepidoptera: Hesperiidae), Chiba (2009) recognised 9 genera, 78 species and 202 subspecies. The genus *Coeliades* consists of 13 species and 19 subspecies. Two subspecies of *C. forestan* are recognised, the nominate subspecies *C. forestan forestan* (Stoll, 1784), and the Madagascan subspecies *C. forestan arbogastes* (Guenée, 1862). *C. forestan arbogastes* differs from the nominate subspecies by having the basal area of the hindwing, and dorsal surface of the thorax, overlaid with blue-green rather than beige scaling. This gives *arbogastes* a very different characteristic appearance compared with the nominate subspecies (Fig 1a). All historical records of the Striped Policeman in Seychelles have been of the Madagascan subspecies *arbogastes*.

However, during a recent trip to the Natural History Museum (NHM), London (February/March 2010), various specimens of the nominate subspecies *C. forestan forestan* from the main granitic Seychelles island of Mahé were found. This is in contrast with the published literature, which only lists *arbogastes* from Seychelles. As a result, this short article aims to discuss: 1) the distribution of the two *C. forestan* subspecies; 2) all Seychelles historical published records of *C. forestan*, and; 3) which subspecies of *C. forestan* occur in Seychelles. Furthermore, there is very little information on the species from any Seychelles islands. It is hoped that this article will promote further interest in this species, and that further distributional records will be made.

### Distribution of *Coeliades forestan*

The nominate subspecies *C. forestan forestan* is widely distributed throughout Africa (Ackery *et al.* 1995), including the Indian Ocean islands of Mauritius (Davis & Barnes 1991), Comoros (Grand Comoro, Anjouan and Moheli) (Turlin 1995) and Réunion (Maitre & Rochet 2008).

The other subspecies, *C. forestan arbogastes* occurs on Madagascar (Viette, 1956), and has historically been recorded from Seychelles (Gerlach & Matyot, 2006). Turlin (1995) believes that *arbogastes* may occur on the island of Mayotte, Comoros.

The type locality of *arbogastes* was given, in error, as Réunion, which may have created some confusion about its actual distribution. As a result, *arbogastes* has, incorrectly, been recorded from Réunion by Legrand (1965) and Cogan (1984), and from Mauritius by A.E. Williams (2006) and J.R. Williams (2007).

### Historical records of *Coeliades forestan* in Seychelles

The first record of *C. forestan* from Seychelles was by de Joannis (1894), on Mahé (as *Ismeme arbogastes*). A single *C. forestan* specimen was collected on Mahé, Cascade Estate, 800' a.s.l., 2 November 1905 (as *Rhopalocampta arbogastes*) (Fletcher 1910). Fryer (1912) believed that the species was probably not resident in Seychelles and that the *arbogastes* specimens from Mahé probably represented stragglers. Legrand (1965) (as *Coeliades forestan arbogastes*) records a further three specimens from Coëtivy (1959), and a single specimen from La Digue (1960). The only Seychelles island that *C. forestan* has been regularly recorded from is Aride (1987-89; 1998-2005) (Bullock 1989; Carty & Carty 1996; Bowler & Hunter 1999, 2000; Gerlach & Matyot 2006). Clearly, all historical records of *C. forestan* in Seychelles indicate that the specimens belong to the Madagascan subspecies *arbogastes*.

### Seychelles specimens of *Coeliades forestan* in the Natural History Museum, London

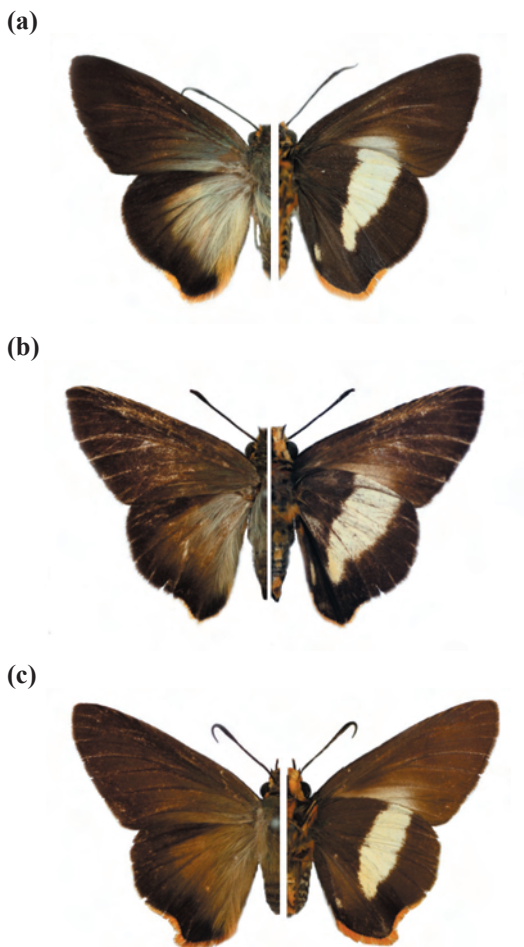
A total of seven *C. forestan* specimens collected from Seychelles were examined in NHM. These included two specimens from Cosmoledo (both collected by P.R. Dupont), and five specimens from Mahé (four collected by J.A. de Gaye in 1906 and 1907; and one collected T.B. Fletcher in 1905).

The two specimens from Cosmoledo were the Madagascan subspecies *C. forestan arbogastes* (Fig. 1b). Cosmoledo forms part of the Aldabra group of islands and lies 360 km NW of the northern tip of Madagascar, and 560 km SW of Mahé. The Aldabra Islands have been considered part of the Seychelles since 1881, except for a brief period between 1965 and 1976 when they formed part of the British Indian Ocean Territory (Lionnet, 1995).

All the Mahé specimens were the nominate subspecies *C. forestan forestan*. The Fletcher specimen examined in the NHM [BMNH(E)#895138] is clearly that of the nominate subspecies (Fig. 1c), and not *arbogastes* as listed in his 1910 paper. Mahé lies approximately 1140 km NE off the northern part of Madagascar and about 1600 km E off the African east coast (Tingay 1995). Furthermore, specimens collected on Mahé (2002) and Cousine Island (2009) (a new Seychelles locality record for this species) by the author were the nominate subspecies, and not *C. forestan arbogastes*.

### Discussion

Both subspecies of *C. forestan* have been recorded from Seychelles. The limited evidence suggests that the nominate subspecies *C. forestan forestan* does occur in the granitic islands, and the Madagascan subspecies, *C. forestan arbogastes*, has been recorded from the southern Aldabra island group. No evidence has, so far, been found to indicate that the Madagascan subspecies *arbogastes* occurs in the granitic Seychelles



**Fig. 1.** *Coeliades forestan* (dorsal surface on left; ventral surface on right): **(a)** *Coeliades forestan arbogastes* [MADAGASCAR]; **(b)** *Coeliades forestan arbogastes* (worn specimen) [COSMOLEDO, SEYCHELLES; P.R. Dupont; BMNH(E)#895136]; **(c)** *Coeliades forestan forestan* [MAHÉ, SEYCHELLES; T.B. Fletcher; BMNH(E)#895138]

islands. There may possibly be granitic Seychelles island *arbogastes* material in collections other than that of the NHM.

The occurrence of *C. forestan arbogastes* on Cosmoledo is understandable given its close proximity to Madagascar. It appears that *arbogastes* is confined to Madagascar and at least one of the adjacent islands (i.e. Cosmoledo), even though Cosmoledo falls under the political control of Seychelles. *Coeliades forestan arbogastes* appears to be quite widespread on Madagascar (Viette 1956). Furthermore, SE winds with easterly

jet streams between June and October are the predominant winds in the Aldabra region (Shah 1994), which may further assist dispersal from Madagascar. Although *C. forestan* does not migrate regularly, there is some evidence to indicate that it has some migratory capacity (Larsen, unpubl.), which may further account for the Cosmoledo records.

To summarise, both subspecies of *C. forestan* have been recorded from the Seychelles islands. To draw conclusions about the distribution of each subspecies in Seychelles is very difficult at present, given the scarcity of records. Additional records are required to determine the distribution and resident status of the two subspecies in Seychelles. The author would greatly appreciate any further information, records or specimens of *C. forestan* from any Seychelles islands, and may be contacted via the above address.

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