Note on the flower scarab Oxycetonia versicolor (Fabricius, 1775) (Coleoptera: Scarabaeidae: Cetoniinae) in the Seychelles

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Introduction

The beetles known popularly as flower scarabs or flower chafers are sometimes treated as a family in its own right, the Cetoniidae (e.g. Krikken, 1984), but most authorities still treat them as a subfamily, the Cetoniinae, within the family Scarabaeidae (e.g. CSIRO 1991). The distribution of the four species known to occur in the Seychelles is summarised in Table 1. They are oval, rather flattened beetles measuring 9mm or more in length and 4.5mm or more in width, with a metallic sheen and/or striking colour patterns. They are usually found on vegetation, feeding on the nectar of flowers or the juice of ripe fruit, or resting on foliage. A detailed report on the Cetoniinae of the Seychelles is in preparation. This note (1) provides an identification key to the species; (2) reports on the fact that recent research has revealed a wider range for Oxycetonia versicolor in the Seychelles than was hitherto known; (3) draws attention to the presence of a new colour form; and (4) suggests that during the period November 1999 - May 2000, O. versicolor suddenly became unusually "noticeable" if not actually more abundant on the island of Mahé.

Identification key to the flower scarabs of the Seychelles:

- Not shiny; white on pronotum restricted to a narrow lateral border on each side; a
 white dot on tip of scutellum Oxycetonia versicolor
- 1b. Shiny; relatively large white patches on pronotum, not limited to narrow lateral border on each side; no white dot on tip of scutellum 2.
- 2a. A large irregular patch on each side of the pronotum, each enclosing a small black spot Protaetia aurichalcea
- 2b. Six white patches on pronotum
- 3a. 11mm or more in length; fifth abdominal segment with a rounded tooth on each side below Mausoleopsis aldabrensis
- 3b. Less than 11mm long; no teeth on fifth abdominal segment

Oxythyrea aldabrensis

New records

Oxycetonia versicolor (Fabricius, 1775) was first reported from the Seychelles (as "Glycyphana versicolor") by Fairmaire (1893), who gave no locality data for the specimen (or specimens?) he examined. Brauer collected it on a farm at Mamelles on Mahé in 1895 (Kolbe 1910). In 1917 Dupont found it on Mahé "attacking rose bushes in the daytime" (data with specimen in Drawer G25 in the Natural History Museum, London).

The Seychelles locality data in Table 1 are based mainly on Scott (1912) reporting on specimens collected by the Percy Sladen Trust Expeditions of 1905 and 1908-1909 to the Indian Ocean. However, Mahé is the only locality in the granitic Seychelles mentioned by Scott. To this we must now add Silhouette and Praslin.

On July 24th 1990 (late morning - exact time not recorded), during the Oxford University Expedition to Silhouette, I observed a small "ball" of this species fall from an unidentified tree near the Grande Case at La Passe. It consisted of at least five specimens of O. versicolor holding onto one another, possibly a case of several males attracted to a female. Unfortunately, the beetles scattered and most of them flew away before they could be examined more closely. On subsequent trips to Silhouette, this species was observed at La Passe resting between the terminal leaves of a shoot of an unidentified citrus (Citrus sp.), alighting briefly on a leaf of a breadfruit tree (Artocarpus altilis) and feeding on the flowers of "vyey fiy" (Lantana camara). On 6th August 1996, during the Oxford University Wetlands Expedition to Silhouette, I found a dead specimen on the beach at Grand Barbe.

Until 1999, I never encountered *O. versicolor* on Mahé, although it had been found there by various collectors, as indicated above. It must have been rare or "secretive" in its habits. In 1999 the species was recorded for the first time on Praslin. It was subsequently observed on several occasions on Mahé, and at the same time it was realised that a new colour form had made its appearance in the Seychelles.

Arrow (1910) treated as "phases" or "varieties" of O. versicolor what previous authors had described as separate species. His "var. b" is characterised by being opaque with "red" (actually reddish brown) on the prothorax (except for a pair of large black discoidal spots) and the middle part of each elytron, with white markings. According to him, this colour form is to be found in India, Sri Lanka and Mauritius, while Scott (1912) refers to a specimen that was collected in the Chagos islands. Arrow's "var. d" is characterised by being entirely black and opaque, with white markings, and is mentioned as being found in Sri Lanka and Mauritius.

All specimens collected in Seychelles up to 1999 are of the form described by Arrow (1910) as "var. d" (=Cetonia variegata Fabricius, 1775 =Cetonia luctuosa Gory & Percheron, 1833). On 31st October 1999 Justin Gerlach found a specimen of "var. b" in the swimming pool of the Berjaya Praslin Beach Resort at Anse Volbert on Praslin. This specimen (NPTS Hc1999.96) is now in the collection of the Nature Protection Trust of Seychelles. The following data are for Mahé:

15th November 1999: Rosemary Mathiot collected a specimen of "var. d" on *Moringa oleifera* foliage at La Rosière on Mahé.

9th January 2000: In the same locality I discovered a specimen of "var. b" that had just been

Table 1. Distribution of Cetoniinae in the Seychelles.

Species	Distribution in Seychelles	Distribution elsewhere
Protaetia aurichalcea	G: Mahé, Silhouette, Praslin, Marianne, Frégate	India, Mauritius, Réunion
(Fabricius, 1775)	C: Amirantes (Desroches, Rémire), Denis	
Oxycetonia versicolor	G: Mahé, Silhouette, Praslin,	Samoa, China, India, Sri
(Fabricius, 1775)	C: Amirantes (Desroches, Poivre), Coëtivy, Farq.	Lanka, Chagos, Madagascar Mascarenes, South Africa
Oxythyrea aldabrensis Linell, 1897	C: Aldabra (Picard), Cosmoledo	
Mausoleopsis aldabrensis Linell, 1897	C. Aldabra, Astove, Assomption, Cosmoledo, St Pierre, Providence*)	Wasin Island (Kenya) (Scott 1912)

^{*} if Microthyrea providenciae Linell, 1897 from Providence is a M. aldabrensis male (suggested by Scott 1912)

trapped in a web of the spider *Nephila inaurata*, close to an *Averrhoea carambola* tree on which I had previously found the other flower scarab of the granitic islands, *Protaetia aurichalcea*.

30th January 2000: I found another specimen of "var. b" in the same web!

1st March 2000: At 10 a.m. three scarabs were seen on a bunch of green pods on a flamboyant tree in the grounds of the Youth Centre at Mont Fleuri. Since they were quite high overhead, it was not possible to ascertain that they were O. versicolor.

3rd March 2000: At around 7.30 a.m., I observed a number of flower scarabs circling above the carambola tree mentioned above. A Seychelles bulbul Hypsipetes crassirostris was flying to and fro among them, catching them in its beak with a loud cracking sound. Again, it was not possible to establish if the beetles were O. versicolor or P. aurichalcea.

18th March 2000. At 3 p.m. I found a specimen of "var. b" and one of "var. d" resting on the foliage of two Nertum oleander bushes in front of the National Library in Victoria.

6th May 2000: I found a specimen of "var. d" resting on a compound leaf of a Leucaena leucocephala bush at Anse Nord-Est at 12.15 p.m.

The above observations raise the following questions:

- Is O. versicolor more numerous than it used to be or is its recent "obviousness" on Mahé due to some other factor?
- 2. Why does this apparent increase in numbers coincide with the appearance of a colour form that up to the end of 1999 had not been recorded from Seychelles?

References

Arrow, 1910. Fauna of British India: Lamellicornia, Part 1.

CSIRO (Commonwealth Scientific and Idustrial Research Organisation) - Division of Entomology, 1991. The Insects of Australia, vol. 2, 543-1137.

Fairmaire, L. 1893. Bull. Soc. Ent. Fr. (1893); 322-325.

Kolbe, H.J. 1910. Mitt. Zool. Mus. Berl. 5(1), 1-49.

Krikken, J. 1984. Zool. Verhand. 210; 1-75.

Scott, H. 1912. Trans. Linn. Soc. Lond. (Zool.) 15; 215-262

NOTES

The rediscovery of the Seychelles hummingbird hawkmoth Macroglossum alluaudi Joannis, 1893 (Lepidoptera: Sphingidae)

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Two species of hawkmoth have been described as endemic to Seychelles. One, the Seychelles bee hawkmoth, *Cephonodes tamsi* Griveaud, 1960, was rediscovered after 92 years (Gerlach 1998). This species remains known from the type secimen from Mahe and a small extant population on Silhouette. The second endemic species, the Seychelles hummingbird hawkmoth *Macroglossum alluaudi* was described from two female specimens from Mahe. The type specimen was collected by Charles Alluaud in 1892 and the second reared from a