

## NOTES ON THE BUTTERFLIES OF THE CAPE VERDE ISLANDS

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The butterflies of the Cape Verde Islands are rather disappointing; no species has yet been reported from the islands as peculiar to them and not known elsewhere.

The Azores, Madeira and Canaries all have some endemic elements all of which have been derived very clearly from the palearctic region, except for the single small blue butterfly *Cylyrius webbianus* which is confined to the Canary Islands, and is an undoubted African element. All the Cape Verde species except the two species of *Pontia*, are definitely of African origin, and most of them extend far through Asia as well. *Pontia daplidice* does not extend south of the Sahara and is the only truly palearctic element in the fauna, with the possible exception of *Pontia glauconome*, the reported occurrence of which in the Cape Verde Islands certainly needs confirmation.

Prevailing winds and ocean currents would seem to favour colonization from the north and north-east, and to be unfavourable to movement from the south-east, yet it is from that direction that the fauna has been almost entirely derived. Conditions in the islands would seem to be unsuitable for palearctic elements.

### BUTTERFLIES OF THE CAPE VERDE ISLANDS

(PLATE II)

Family Papilionidae—Swallow-tail Butterflies

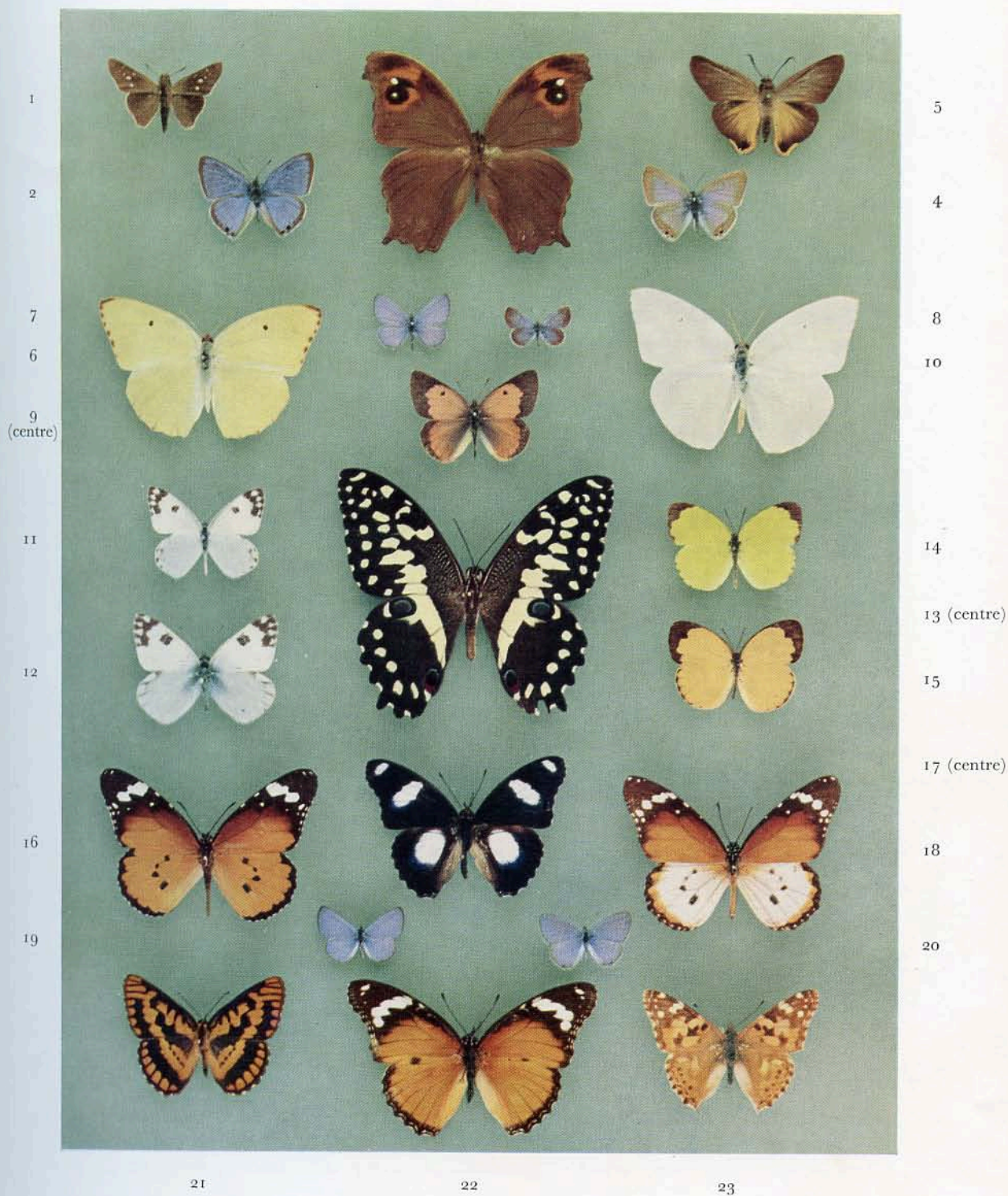
Fig. 13: *Papilio demodocus* Esper 1785. **Citrus Swallowtail**

A common butterfly throughout Africa south of the Sahara, the caterpillar sometimes responsible for extensive damage to the foliage of citrus fruit trees. Reaches southern Arabia where it is abruptly replaced by the oriental *Papilio demoleus* Linnaeus, of which it is sometimes regarded as a subspecies.

Family Pieridae—Whites

Fig. 12: *Pontia daplidice* Linnaeus 1758. **Bath White**

Characteristic of the Mediterranean subregion of the palearctic region, only reaching the aethiopian fauna in Abyssinia, but extending far into Asia. A migratory species sometimes reaching the British Isles. The nearest known habitats are Morocco and the Canary Isles, whence the Cape Verde population probably came. The food-plant of the caterpillar is mignonette, again a palearctic species.



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- Fig. 11: *Pontia glauconome* Klug. **The Desert Bath White**  
Like *P. daplidice* a Mediterranean species, but more restricted in its distribution to truly desertic biotopes. Recorded by Nyström (1958, *Soc. Sci. Fennica. Comm. Biol.* 17 (7): 5) on the basis of two specimens taken in January 1954, but not otherwise known west of Libya. The record would seem to need confirmation.
- Figs. 10♂, 6♀: *Catopsilia florella* Fabricius 1775. **African Emigrant**  
An abundant species throughout Africa south of the Sahara, and extending eastwards far into the oriental region. Caterpillar feeds on *Cassia*. Only recently reported from the Canary Isles. A not very distant relative of the Brimstone butterfly of Britain and western Europe.
- Figs. 14, 15: *Eurema hecabe* Linnaeus 1758. **Common Grass Yellow**  
Very well named, as it is perhaps the commonest of all butterflies throughout Africa, south of the Sahara, and the Orient. Subject to great seasonal variation, the full extent of which has only been realised in the last fifty years. Two of these seasonal forms are illustrated, f. *brenda* in Fig. 15, f. *senegalensis* in Fig. 14. Both these may well be taken flying together in areas where seasonal climatic changes are not very marked. The caterpillars feed on a wide variety of plants, such as *Cassia* and various other Leguminosae, *Hypericum*, etc.
- Fig. 9: *Colias electo* Linnaeus 1763. **African Clouded Yellow**  
Though generally considered to be the same species as the familiar European Clouded Yellow (*Colias crocea* Fourcroy), recent research has shown fairly conclusively that this view is not tenable. *C. electo* does not occur north of the Sahara, but south of that barrier is common wherever the leguminous crops and native plants grow on which the caterpillar feeds. Like *C. crocea*, *C. electo* has a "White" form of the female beside the normal yellow one, but it is rather rare.

Family Danaidae—Danaids

- Figs. 16, 18: *Danaus chrysippus* Linnaeus 1758. **African Monarch**  
A very common butterfly throughout Africa except the north-west, yet present in the Canary Isles. It is protected against vertebrate predators by its extremely unpleasant smell and taste and, for this reason is the "model" for many other kinds of butterflies that "mimic" it. Two varieties are illustrated: Fig. 16 the typical form and Fig. 18 form *alcippus* with white hindwings. The caterpillar feeds mainly on *Asclepias*.

It is curious that the true Monarch butterfly of America, *Danaus plexippus*, which is a great migrant that has at times been taken even in England, and has spread right across the Pacific, is not reported from the Cape Verde Islands, though established in the Canaries and Azores.

## Family Satyridae—Browns

Fig. 3: *Melanitis leda* Linnaeus 1758. **Evening Brown**

Usually regarded as a woodland shade-loving butterfly, flying towards dusk and avoiding bright sun. The markings on the underside are cryptic and very variable, but some seasonal variation occurs in localities where the seasons are marked. Ranges eastwards across Africa and tropical Asia to Australia, with very little geographical variation. The caterpillar in Africa feeds principally on grasses such as Guinea Grass and *Setaria*. It seems surprising that no other Satyridae have so far been recorded from the Cape Verde Islands. The family is quite numerous in West Africa, and grasses, on which they all feed, are no doubt available. Palearctic Satyridae have reached Madeira, the Canaries and even the Azores.

## Family Nymphalidae—Nymphalids

Fig. 21: *Byblia ilithyia* Drury 1773. **Joker**

When in flight the Joker is reminiscent of some of the smaller European Fritillary butterflies and, like them, it affects rather open woodland country. It ranges throughout tropical Africa and even into Southern Arabia. The caterpillar in central Africa feeds on *Tragia*.

Figs. 17, 22: *Hypolimnas misippus* Linnaeus 1764. **Mimic**

Like most of the species of this tropical Old World genus, the males of *H. misippus* (Fig. 17) show little variation, but the females are polymorphic and mimic other butterflies, in this case *Danaus chrysippus* with which they fly. The normal brown females of *misippus* mimic (Fig. 22) the normal brown *chrysippus* (Fig. 16), but there is also a form of the female with white hindwings which resembles the *alcippus* form of *chrysippus*. These polymorphic female forms are now so firmly established genetically that they persist even in the absence of the models. *H. misippus* ranges throughout Africa and Asia to Australia. In Africa the caterpillar feeds on Apricot, *Portulaca*, etc.

Fig. 23: *Vanessa cardui* Linnaeus. **Painted Lady**

The most cosmopolitan of all butterflies and a great migrant, ranging from New Zealand to Iceland, but not occurring in South America. The caterpillar will feed on a great variety of plants, but principally thistles and related species.

## Family Lycaenidae—Blues

Fig. 7: *Azanus jesus* Guerin 1847. **Topaz Bush Blue**

A widely distributed species, ranging across tropical Africa at least to Burma, but with a predilection for rather dry country. The fact that one of its chief food plants is lucerne probably largely accounts for its great range.

Fig. 19: *Azanus mirza* Plötz 1880. **Bush Blue**

Not readily distinguished from *A. jesus* except by the pattern of

markings on the underside of the hindwing, and by the external genitalia. Probably imported with leguminous plants. Does not occur outside the African region.

Fig. 20: *Syntarucus telicanus* Lang 1789. **Zebra Blue**  
Like the other blues of the Cape Verde Islands this species almost certainly owes its presence there to the leguminous crops grown by man. The caterpillar enjoys some kind of symbiotic association with ants. The butterfly ranges throughout Africa much of Asia and reaches southern France and Portugal.

Fig. 8: *Zikzeeria knysna* Trimen 1862. **Sooty Blue**  
*Z. lysimon* auctorum  
An ubiquitous species in the Old World tropics, often abundant, just ranging into the southern limits of the palearctic region in places. In Africa it is reported to feed on *Oxalis*, *Medicago*, *Euphorbia* and various other plants. The species is better known as *Z. lysimon*, a name recently discovered not to be available for it.

Fig. 2: *Lampides baeticus* Linnaeus 1767. **Long-tailed Blue**  
This species almost rivals the Painted Lady in the extent of its cosmopolitan distribution. In warm climates it seems to have a continuous succession of broods. The food plants cover a wide range of peas, beans, lupins, etc., and the caterpillars prefer the young shoots and flowers and even the pods, within which they may often be found.

Fig. 4: *Euchrysope osiris* Hopffer 1855. **Osiris Blue**  
A common African butterfly in open grassy country south of the Sahara. Feeds on Leguminosae, like all the Cape Verde Blues, and its presence no doubt is due to the same cause. In Central Africa *Vigna* and *Rhynchosia* are given as common food plants.

#### Family Hesperiiidae—Skippers

Fig. 5: *Coeliades forestan* Cramer 1782. **Striped Policeman**  
This large African Skipper butterfly must also owe its presence in the Cape Verde Islands to accidental importation by man, since, to quote Pinhey, it "feeds on beans, *Combretum*, *Solanum*, *Geranium* and *Robinia*, rolling up the leaves". All these are crop or garden plants. The species does not occur outside the African continent, south of the Sahara, except in Madagascar, Mauritius, Reunion and the Seychelles.

Fig. 1: *Borbo borbonica* Boisduval 1833. **Olive-haired Swift**  
A member of a small group of Skipper butterflies the specific identification of which is seldom easy and often entails dissection. They are distributed through tropical Africa and Asia and extend into the more arid eastern lands of the Mediterranean subregion. All feed on rice and related plants and some are quite troublesome pests.