

A critical note on the alleged occurrence in North Africa of certain Nymphaline butterflies - and the first published occurrence in Africa of *Inachis io* (Linnaeus, 1758) (Lepidoptera : Nymphalidae)

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Abstract. Published records of the occurrence of the Nymphaline butterflies *Nymphalis antiopa* (Linnaeus, 1758), *Aglais urticae* (Linnaeus, 1758) and *Polygonia egea* (Cramer, [1775]) in the Maghreb States of Morocco, Algeria and Tunisia, are critically examined. Details are given of the first African record of *Inachis io* (Linnaeus, 1758).

Samenvatting. Kritische bemerkingen bij het vermeende voorkomen in Noord-Afrika van enkele Nymphalidae en eerste vermelding van het voorkomen van *Inachis io* (Linnaeus, 1758) in Afrika (Lepidoptera : Nymphalidae)
Gepubliceerde vermeldingen van het voorkomen van *Nymphalis antiopa* (Linnaeus, 1758), *Aglais urticae* (Linnaeus, 1758) en *Polygonia egea* (Cramer, [1775]) in de Maghreb landen Marokko, Algerije en Tunesië worden kritisch onderzocht. Voor het eerst wordt *Inachis io* (Linnaeus, 1758) uit Afrika vermeld.

Résumé. Remarques critiques sur l'occurrence supposée de certaines espèces de Nymphalidae en Afrique du nord avec première citation d'*Inachis io* (Linnaeus, 1758) pour l'Afrique (Lepidoptera : Nymphalidae)
Les citations de la présence des Rhopalocères Nymphales *Nymphalis antiopa* (Linnaeus, 1758), *Aglais urticae* (Linnaeus, 1758) and *Polygonia egea* (Cramer, [1775]) dans les états maghrébins du Maroc, d'Algérie et de Tunisie sont recensées et discutées. Des renseignements sont aussi fournis sur la première observation en Afrique du nord d'*Inachis io* (Linnaeus, 1758).

Key words : *Nymphalis antiopa* - *Inachis io* - *Aglais urticae* - *Polygonia egea* - distribution - Morocco - Algeria - Tunisia.

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Introduction

Nymphalis antiopa (Linnaeus, 1758), *Aglais urticae* (Linnaeus, 1758) and *Polygonia egea* (Cramer, [1775]) have been reported from North Africa on a number of occasions in the entomological press, often by respected and reliable authors including Seitz, Oberthür and Rothschild. The Oberthür and Rothschild collections are now incorporated in the British Museum (Natural History) collections in London and in considering the authenticity of published records, these and other collections have been thoroughly examined. A specimen of *Inachis io* (Linnaeus, 1758), a butterfly previously unrecorded from North Africa, was found in the comprehensive private collection of Algerian material made by Monsieur Guy Barragué, who kindly authorised its inclusion in this paper.

Nymphalis antiopa (Linnaeus, 1758)

Records: The first North African reference to *antiopa* the author has been able to find is that of Vallantin (1894: 16) who said "I mention with some reservation that I saw [a specimen of] *Vanessa antiopa* fly over the [wall] of the Kasba [(?) at Bone [Skikda]] in April 1889" but that this was "probably an error on my part". Some years later, Seitz (1907: 205) said of *antiopa* "It is distributed from western Europe and North Africa..."; and later still, Bodemeyer, in a long account of his entomological travels in Tunisia in 1913, claimed to have taken *antiopa* in the Gafsa area (Bodemeyer 1929: 25). Although Chnéour (1936: 481) cast doubt on Bodemeyer's Gafsa record, he himself stated that it was a "typical butterfly of the forest zone" of Tunisia. Fison (1932: 58) stated that she had seen the Camberwell Beauty "only occasionally in the forests of Yakouren [the Kabylie region of northern Algeria]".

Comment: Seitz's inclusion of North Africa in the distribution of this species is puzzling since, as far as the author is aware, there are no prior reports from that area. Bodemeyer's record may be disregarded; he recorded other butterflies which certainly do not occur in North Africa (*Pontia callidice* (Hübner, [1805]), *Gonepteryx farinosa* (Zeller, 1847), *Aphantopus hyperantus* (Linnaeus, 1758), etc.). Chnéour corrected his own errors (1939: 15; 1942: 44; 1963: 104).

It is tempting to consider all alleged sightings of *antiopa* as probable misidentifications of *Charaxes jasius* (Linnaeus, 1766), a butterfly which is not uncommon in coastal regions of the Maghreb and to which *antiopa* bears a superficial resemblance in flight. However, Miss Fison, a missionary who lived for several years in northern Algeria and collected butterflies as a hobby (Tennent 1993: 110), also recorded seeing *jasius* on more than one occasion (1931: 167) and could presumably tell the difference between the two species.

The butterfly does not occur in North Africa.

Inachis io (Linnaeus, 1758)

Records: As far as the author is aware, there is no published record of the occurrence of *io* on the African continent. However, when visiting Monsieur Guy Barragué in Cannes in March 1993, a single specimen, taken at "Domaine St. Charles, Birkaden, environs d'Alger" on 7 March 1961, was seen in his collection. Monsieur Barragué confirmed that this was the only specimen seen in 17 years living in Algeria and kindly authorised its first publication in this paper.

In October 1992, a specimen of *io* bearing a Sfax [Tunisia] label but no

other data was seen in the Institut National Agronomique de Tunisie (INAT) in Tunis. There were, however, a number of butterflies of European and South American origin in the collection, in boxes said to contain only Tunisian material.

Comment: The INAT specimen was apparently prepared by Monsieur Hédi Smiri, an amateur lepidopterist working at the Institut National de la Recherche Agronomique de Tunisie (INRAT) in Sfax. In March 1993 the author met Monsieur Smiri, who was unable to recall taking *io* in Sfax but claimed that the INAT specimen had been taken by him at Tozeur (an arid region in the south west of Tunisia); it was apparent that much of his material was obtained through exchanges with lepidopterists in Europe and it is considered likely that this is where the INAT specimen originated.

The butterfly is a renowned migrant and there is no reason why it should not occasionally turn up on the Mediterranean coast of North Africa. The host plant of this and the following species, *Urtica* sp. (Urticaceae), appears scarce in North Africa. Monsieur Barragué's specimen is the first report of the species from Africa and the only reliable record to date.

Aglais urticae (Linnaeus, 1758)

Records: There are only three published records of *urticae* in North West Africa, the first of which was by Oberthür (1915: 82) who reported Harold Powell seeing (but not capturing), a fresh example which he believed was *urticae*, similar in colour to *ichnusa*, near Philippeville [Skikda], Algeria, on 10 May 1913. The other two records are by Barragué (1961: 39) who found a specimen (not *ichnusa*) at Algiers on 1 February 1961 and by de Worms (1969: 290) who records seeing it "near Meknes", Morocco on 15 May 1969.

In October 1992, the author visited the Institut National Agronomique de Tunisie (INAT) in Tunis, where a single *urticae* specimen bearing the data Sfax [Tunisia], was observed in a display case in the foyer of the zoology department.

Comment: There is no reason to doubt Powell's finding; he was a reliable observer who knew the area and its butterflies well. The same may be said of Monsieur Guy Barragué; the specimen he captured in 1961 is extant in his collection and is the only one he saw in his many years living in Algeria (G. Barragué, pers. comm.). The record from de Worms is highly suspect. There are no specimens of *urticae* in the de Worms collection now housed in the Royal Museum of Scotland in Edinburgh, although there is a single *Nymphalis polychloros* (Linnaeus, 1758), bearing the data "Ifraan-Azrou, Morocco, 20-31 May '69, C de Worms" (M R Shaw, pers. comm.). If de Worms had appreciated the significance of finding *urticae* in North Africa, he would

surely have given more detail than the bald statement provided; *polychloros* was not included in his list of species seen on that visit (de Worms 1969).

Comments already made relating to the probable origin of the specimen of *Inachis io* in the INAT collection in Tunis apply equally to the specimen of *urticae*; it is almost certainly from Europe.

Although occasional vagrant specimens may reach the shores of North Africa, it is not resident there.

Polygonia egea (Cramer, [1775])

Records: Oberthür (1909: 202) was the first to mention a specimen of *egea* from North Africa, which he said had been taken in the outskirts of Algiers by Captain Eugene Holl, in "July", and later mentioned (1915: 88), a female specimen taken at Ain Draham, Tunisia, by Victor Faroult.

Rothschild (1917: 96) said of *egea* "This insect must be extraordinarily scarce in Mauretania, for I have heard of no others except Mr Oberthür's single [Ain Draham] specimen and my own two ... one from ... Algiers [taken by] Captain Holl [and the other from] Fenson, Morocco [in] April 1903 [by] W Rigggenbach. Captain Holl sold the Hussein Dey [Algiers] specimen to me as *c-album*, and it was only when I was writing this article that I found out it was an *egea*".

The Holl/Algiers specimen was mentioned again (Rothschild 1925: 202) and the following year (1926a: 131) Rothschild listed a female *egea* taken at Ain-Leuh (M) on 16 May 1924 and two males from Azrou (M) taken on 10 and 21 May 1924. He also said "It is most strange that whilst Harold Powell and most of the other collectors found *P. c-album* widespread and fairly common in Morocco and no-one has recorded *egea* from there, Dr. Hartert failed to find *c-album* and captured 3 *egea*".

Fison (1932: 58) noted *egea* from "Azazga, Michelet, Valley of Oued, Djemaa, Mekla" in the Kabylie region of Algeria and noted that she had seen *c-album* in the same localities. Later (1932 : 90) she noted worn specimens of *egea* on 15 April 1931 at Ait Ailem and made the general comment (1932: 92) that the species "occurs locally" in Kabylie. The last published record for the Maghreb is that of Barragué (1954: 184) who recorded a single capture in "May" at Algiers.

Comment: Charles Blachier described *Polygonia c-album* ab. *imperfecta* (1908: 214) from a single example captured by Monsieur Henri Vaucher at Tangier, noting that the upperside colouration was pale brown and that the white "C" mark on the underside of the hindwing, which gives the species its

name, was shaped more like a "J" than an "L"! It is a fact that the mark is variable and often "imperfect" and that the pale upperside with often reduced black markings could, in some individuals, allow confusion with *egea*.

The collections of Oberthür and Rothschild, now in the British Museum (Natural History), have been examined. There are no *egea* in the Oberthür collection and only one specimen which could be that species in the Rothschild collection. This is the specimen mentioned by Rothschild as having been taken by Captain Holl "in July" at Algiers; it is in rather poor condition and appears to be either *egea* or a very lightly marked specimen of *c-album imperfecta*. However, there are a number of other examples bearing data labels which identify them as the North African "*egea*" of both Oberthür and Rothschild (i.e. Ain Draham/Faroult/1909; Ain Leuh and Azrou/Hartert & Young/May 1924 etc.). Without exception, these specimens are typical *c-album imperfecta*.

The specimen reported by Barragué was a mis-identification of *c-album* (G. Barragué, pers. comm.).

It is clear that *Polygonia egea* does not occur in North Africa and that all records to date are the result of confusion with its congener.

Acknowledgements

Mr Philip Ackery of the British Museum (Natural History), London, allowed access to the Museum Collections; Monsieur Guy Barragué of Cannes kindly allowed the author to look through his superb collection of Algerian butterflies and authorised publication of data where appropriate; Dr Abderrahman Jerraya, of INAT in Tunis, allowed access to collections held by the Institute; Dr Mark Shaw of the National Museum of Scotland provided helpful information on the collection of the late Baron de Worms; Monsieur Michel Tarrier, of Malaga, kindly translated the résumé.

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