

First record of *Danaus chrysippus* from the Island of Sími (Symi), SE Aegean, Greece (Lepidoptera: Nymphalidae, Danainae)

Christos J. Galanos

Abstract. The presence of *Danaus chrysippus* (Linnaeus, 1758) is documented for the first time from the Greek Island of Sími. On account of this observation, the distribution of that species in Europe and the Mediterranean Basin, specifically in Greece and the Dodecanese Island Complex, as well as the total number of observed butterfly species of Sími Island are discussed.

Samenvatting. Het voorkomen van *Danaus chrysippus* (Linnaeus, 1758) op het Griekse eiland Sími wordt voor de eerste maal gedocumenteerd. De verspreiding van deze soort in Europa en het Middellandse Zeegebied, meer bepaald in Griekenland en de eilanden van de Dodekanesos, alsook het totaal aantal waargenomen vlindersoorten op Sími worden besproken.

Résumé. La présence de *Danaus chrysippus* (Linnaeus, 1758) est documentée pour la première fois de l'île grecque de Sími. La répartition de cette espèce en Europe et la région méditerranéenne, et plus précis en Grèce et les îles du Dodekanèse, ainsi que le nombre d'espèces de papillons sur l'île de Sími sont discutés.

Key words: Greece – Dodekanésia (= Dodecanese) Islands – Sími Island Lepidoptera – Danainae – Faunistics.

Galanos C. J.: Parodos Filerimou, GR-85101 Rodos (Ialiso), Greece. Email: galanosx@gmail.com

Introduction

Danaus chrysippus (Linnaeus, 1758) is a wide-ranging migrant species belonging to Danainae, a subfamily of Nymphalidae. It is a polyvoltine, polyphagous species, of which the larvae feed on plants containing cardenolides, especially Asclepiadaceae, Apocynaceae and Moraceae. The species prefers bushy, rocky and coastal places, usually near gardens and cultivated areas (Pisciotta *et al.* 2008). It is widespread in the North African coastal regions (western Morocco, northern Algeria and Tunisia) and from there it has colonised coastal areas of the Canary Islands, southern Spain (where the first European population was found in 1980), southern France, Corsica, Sardinia, Sicily, Italy, Malta, Serbia, Montenegro, Croatia, Albania, Turkey, Cyprus and Greece (Perković 2006, Baytas 2007, Pisciotta *et al.* 2008, Pamperis 2009). Concerning the distribution of *Danaus chrysippus* in Greece, it has been reported mainly from the western coastal country (Ionian Islands, Epirus, Sterea Hellas, Peloponnese Peninsula, Attiki), while concerning the Aegean Sea region, it has been reported from Hios, Samos, Iraklia and Kriti Islands (Pamperis 2009, Gavalas 2013). On the Islands of the Dodecanese Complex it has been reported so far from Astipalea, Kos, Nisiros, Tilos and Rodos (Pamperis 2009, Cuvelier & Mølgaard 2014, Galanos 2016).

According to the literature (Koutsaftikis 1974, Olivier 1991, 1994, Pamperis 2009, Coutsis & Anastassiú 2011, Coutsis & Ghalavalas 2013, Cuvelier & Mølgaard 2014, Galanos 2016) the presence of *Danaus chrysippus* (Linnaeus, 1758) on the island of Sími (fig. 1) has never been reported. This is the first ever known record from this particular island. This unmistakable species was identified during field observations of live material, and a voucher photograph of the butterfly from the locality where it was observed is provided. No specimens were collected.



Fig. 1. Geographical position of the Dodecanese Island of Sími in the SE Aegean Sea.

First record of *Danaus chrysippus* from Sími Island

During field research that was carried out by the author on 16 October 2016, two individuals of *Danaus chrysippus* were observed, and one of them (fig. 2) was photographed near the harbour, around the settlements of Gialós and Haráni at sea level. The butterflies were observed flying, feeding and resting on ornamental flowers, such as *Lantana camara* L., *Mirabilis jalapa* L., as well as on dry plants, such as *Heliotropium hirsutissimum* Grauer. During this particular visit the other butterfly species observed were: *Pieris brassicae* (Linnaeus, 1758), *P. rapae* (Linnaeus, 1758), *Cacyreus marshalli* Butler, 1898, *Colias croceus* (Fourcroy, 1785), *Maniola telmessia* (Zeller, 1847), *Muschampia proto* (Ochsenheimer, 1808), *Vanessa atalanta* (Linnaeus, 1758), *V. cardui* (Linnaeus, 1758) and *Ypthima asterope* (Klug, 1832).



Fig. 2. *Danaus chrysippus*, Sími, Gialós, Harani settlement, sea level – 20 m, 16.x.2016 © C. J. Galanos.

Conclusions

On the basis of the above data the total number of species recorded so far from Sími Island amounts to 39. The number of species per island and its percentage to the total of 63 butterfly species present in the Dodecanese

Island Complex is given in detail by Galanos (2016). In the same paper the area in km² of each single island in that particular region is presented. It must be noted that further investigations are needed on the islands of the Dodecanese Complex in early spring and autumn as there are very few published records from these periods.

Acknowledgements

The author gratefully acknowledge the General Directorate for the Protection and Development of Forests and the Rural Environment, of Ministry of Reconstruction, Production, Environment and Energy, for obtaining permission with reference number: 133714/3689 for the year 2016, allowing the particular research, both of the flora and fauna, especially in protected areas of the European Network "Natura 2000", of the Dodecanese Island Complex. The author wishes to thank also the following persons: L. Pamperis for his critical comments and valuable advice, the Director of the Dodecanese Forestry Directorate, K. Balatsouka, for her support of the project, as well as two anonymous reviewers and W. De Prins for editing this endeavour.

References

- Baytas A. 2007. *A field guide to the butterflies of Turkey*. — NTV Yayinlari, Istanbul, 218 pp.
- Coutsis J. G. & Anastassiú H. T. 2011. Skippers, Butterflies and a Harvester Moth recorded on the Greek island of Sími, late April 2010 (Lepidoptera: Hesperioidea, Papilionoidea, Zygaenidae). — *Phegea* **39**: 45–51.
- Coutsis J. G. & Ghalvalas N. 2013. Skippers and butterflies on the Greek island of Sími in early June 2012, and a list of all skippers and butterflies that have hitherto been recorded from the island (Lepidoptera: Hesperioidea, Papilionoidea). — *Phegea* **41**(1): 12–16.
- Cuvelier S. & Mølgaard M. S. 2014. *Butterflies and Skippers in the Dodecanese Islands (Greece): new data and an update on their distribution (Lepidoptera: Hesperioidea & Papilionoidea) – Revision of 14.xii.2014*. — Online report available at www.phegea.org/Dagvlinders/Dodekanesos.htm.
- Galanos C. J. 2016. Butterflies and Skippers of the South East Aegean Island of Hálki, Dhodhekánisa (= Dodecanese) Island Complex, Greece, representing 16 first records for the island. First record of *Cacyreus marshalli* from the Greek Island of Sími. An update of the Butterfly and Skipper Fauna of the Greek Island of Rhodos (Lepidoptera: Papilionoidea & Hesperioidea). — *Phegea* **44**(3): 80–87.
- Gavalas, G. 2013. *Butterflies (Lepidoptera: Papilionoidea & Hesperioidea) of the Greek Central Aegean Island of Iraklia*. — Wild Greece Editions, 67 pp.
- Koutsaftikis A. 1974. Die Lepidopterenfauna der ostägäischen Insel Simi. — *Annales Musei Goulandris* **2**: 93–98.
- Olivier A. 1991. The butterflies of the Greek island of Sími (Lepidoptera: Hesperioidea & Papilionoidea). — *Phegea* **19**(2): 63–70.
- Olivier A. 1994. New data on the butterflies of the Greek island of Sími (Lepidoptera: Hesperioidea & Papilionoidea). — *Phegea* **22**(3): 85–88.
- Pamperis L. N. 2009. *The butterflies of Greece. Second Edition revised and enlarged*. — Editions Pamperis, Athens, 766 pp.
- Perković D. 2006. *Danaus chrysippus* (Linnaeus, 1758) (Lepidoptera, Nymphalidae, Danainae), a new species in the fauna of Croatia. — *Natura Croatica* **15**(1–2): 61–64.
- Pisciotta S., Zito P. & Sajevo M. 2008. *Danaus chrysippus* (Linnaeus, 1758) (Lepidoptera Nymphalidae) larvae feeding on *Caralluma europaea* (Guss.) N.E.Br. (Asclepiadaceae) in Lampedusa Island. — *Naturalista Siciliano* **32**: 241–251.