

New data on the butterflies of the Greek island of Sími (Lepidoptera : Hesperioidea & Papilionoidea)

Alain Olivier

Samenvatting. Nieuwe gegevens over de dagvlinders van het Griekse eiland Sími (Lepidoptera : Hesperioidea & Papilionoidea)

Resultaten van een bezoek aan het Griekse eiland Sími van 1 tot 3 juni 1993 worden besproken. 16 dagvlindersoorten werden waargenomen, waarvan er 5 hier voor het eerst van Sími worden vermeld. Dit brengt het aantal van dit eiland gekende soorten op 25. Veruit de meest algemene soort in juni 1993 was *Carcharodus stauderi ambiguus* (Verity, 1925). Ook *Muschampia proto aragonensis* de Sagarra, 1924 en *Maniola telmessia* (Zeller, 1847) waren algemeen. De hele dagvlinderfauna van het eiland Sími is, zonder uitzondering, vertegenwoordigd op het nabije Turkse vasteland en voor 84% eveneens op het Griekse vasteland : er zijn geen endemen. Zij is, naar alle waarschijnlijkheid, volledig afgeleid van deze van het nabije Turkse vasteland en de kolonisatie van het eiland is recent, alsook de genueitwisseling met populaties van het nabije vasteland.

Résumé. Nouvelles données concernant les papillons diurnes de l'île grecque de Sími (Lépidoptères : Hesperioidea & Papilionoidea)

Les résultats d'une visite à l'île grecque de Sími du 1er au 3 juin 1993 sont discutés. 16 espèces de papillons diurnes furent observées, dont 5 sont mentionnées pour la première fois de Sími. Cela porte le nombre d'espèces connues de cette île à 25. L'espèce de loin la plus commune en juin 1993 était *Carcharodus stauderi ambiguus* (Verity, 1925). *Muschampia proto aragonensis* de Sagarra, 1924 et *Maniola telmessia* (Zeller, 1847) étaient également communs. La faune entière des lépidoptères diurnes de l'île de Sími est représentée, sans exception, dans la partie adjacente de la Turquie et, à 84%, également en Grèce continentale : il n'y a pas d'endémiques. Elle est, selon toute probabilité, dérivée de celle de la Turquie toute proche et la colonisation de l'île est récente, tout comme l'échange génique avec les populations continentales adjacentes.

Key words : butterflies - Sími - *Carcharodus stauderi ambiguus*

Olivier, A. : Luitenant Lippenslaan 43 B 14, B-2140 Antwerpen.

Introduction

The butterfly fauna of the Greek island of Sími, a small offshore island nearby the Aegean coast of SW. Turkey, has received attention on several occasions, especially in recent times (Turati 1929; Bernardi 1961, 1971; Koutsafikis 1974; Ondrias, Koutsafikis & Douma-Petridou 1979; Thomson 1985; Olivier 1991, 1993a). It was predicted, however, that while about 90% or more of the butterfly faunae of the more important Eastern Aegean islands - as well as Kríti and Kápathos - is known, values for Sími and Kastellórizo could be a little less, perhaps about 80 % (Olivier 1993a : 195).

In May-June 1993 I revisited several islands of the Dodekánissa, with the special purpose of collecting data on variation in *Maniola telmessia* (Zeller, 1847). The results of these investigations have been published elsewhere

(Olivier & Coutsis 1993). During that journey, I stayed on the island of Sími for three days, from the 1st to the 3rd of June, during which time I observed 16 butterfly species, 5 of which are recorded here for the first time from this island. Assuming that three or four additional species may turn up here in the future, one may consider that about 85-90% of the butterfly fauna of Sími is now known, and that the previous assumption was at least for about 10% too optimistic.

Systematic Part

All records were carried out on the hills just out of Sími town, at an altitude of about 50m above sea level, including the collecting spots inspected on my previous visit in April 1990. The five newly recorded species are indicated by an asterisk *, the other observed species in June 1993 by two asterisks **. The remaining taxa known from this island from the previous literature are also listed in order to get a complete checklist of its actual butterfly fauna.

A hazardous motorbike trip was undertaken on the main road across the island on 2nd June, between Sími in the north and Panormítis in the south. Except for one single *Maniola telmessia* and one or two specimens of *Carcharodus stauderi ambiguus* and *Muschampia proto aragonensis*, no sign of butterfly life was observed on this trip at all.

- ** *Thymelicus sylvestris* (Poda, 1761)
- * *Thymelicus acteon acteon* (Rottemburg, 1775)
- * *Carcharodus alceae alceae* (Esper, [1780])
- * *Carcharodus stauderi ambiguus* (Verity, 1925)
- ** *Spialia (sertorius) orbifer orbifer* (Hübner, [1823])
- ** *Muschampia proto aragonensis* de Sagarra, 1924
- Muschampia tessellum tessellum* (Hübner, [1803])
- Zerynthia cerisy* (Godart, [1824])
- Papilio machaon syriacus* Eller, 1936
- Iphiclides podalirius podalirius* (Linnaeus, 1758)
- Colias crocea crocea* (Fourcroy, 1785)
- ** *Pieris brassicae brassicae* (Linnaeus, 1758)
- ** *Pieris rapae rapae* (Linnaeus, 1758)
- ** *Satyrium ilicis ilicis* (Esper, [1779])
- ** *Lycaena phlaeas phlaeas* (Linnaeus, 1761)
- Leptotes pirithous* (Linnaeus, 1767)
- ** *Vanessa atalanta atalanta* (Linnaeus, 1758)
- Vanessa cardui* (Linnaeus, 1758)
- * *Polygonia egea* (Cramer, [1775])
- Hipparchia fatua fatua* (Freyer, [1845])
- ** *Maniola telmessia* (Zeller, 1847)

- Ypthima asterope asterope* (Klug, 1832)
- ** *Lasiommata megera megera* (Linnaeus, 1767)
- ** *Lasiommata maera maera* (Linnaeus, 1758)
- * *Kirinia roxelana* (Cramer, [1777])

Comments

It is remarkable that no less than 7 species of HesperIIDae are known from Sími, thus making up 28 % of its known butterfly fauna. In June 1993, *Carcharodus stauderi ambiguus* was by far the most common butterfly on the island, being quite abundant on the hills above Sími town, always flying near to patches of an unidentified Lamiaceae species, its probable larval host-plant, as I also saw females inspecting it with the greatest care. *C. stauderi ambiguus* appears to be extremely common on the smaller islands of the Dodekánissa, as such was also my experience on Níssiros, Kálimnos and Léros in late May-June 1992. The other two common butterfly species seen during my last stay on Sími were *M. proto aragonensis* and, of course, the omnipresent *M. telmessia*.

The entire butterfly fauna of Sími consists of species that are all, without exception, known from the nearby Turkish mainland. 22 (88 %) are known from at least 6 other Eastern Aegean islands, while 21 (84 %) do also occur in mainland Greece, all in the same subspecies : the remaining taxa that do not occur in the latter area are *C. stauderi ambiguus*, *Z. cerisy*, *M. telmessia* and *Y. asterope asterope*.

On Ródos and Tílos, one finds resp. 20 (80 %) and 13 (52 %) of the butterfly species known to live on Sími, while on Kríti this number also amounts to 13 (52 %). On Kárpathos, 12 (48 %) of the Sími butterflies have been recorded (all data from Olivier 1993a, b).

The lower overlap in con(sub)specific taxa with Tílos, Kárpathos and Kríti could be explained by the impoverishment of the butterfly fauna on these islands, but it is significant that well over 80 % of the Sími butterflies are represented by consubspecific populations both in mainland Greece and in SW. Turkey, as well as on the Eastern Aegean islands. Interesting is the total absence of any endemism among the butterflies of Sími, as well as the occurrence here of five species that are found for the most of them on other islands in the Dodekánissa, but that remain unrecorded from Ródos (*T. sylvestris*, *M. proto aragonensis*, *M. tessellum tessellum*, *S. ilicis ilicis* and *P. egea*).

It may be concluded, that the butterfly fauna of Sími originates probably entirely from that of the adjacent Turkish mainland and consists of widespread taxa that occur for the greatest part in mainland Greece as well. Hence

colonization events and/or gene exchange with nearby Turkish populations are either quite recent or have been at least maintained up to quite recently or even occasionally to the present day.

References

- Bernardi, G., 1961. Biogéographie et spéciation des Lépidoptères Rhopalocères des îles méditerranéennes. - *Colloques int. Cent. natn. Rech. scient.* **94** : 181-215.
- Bernardi, G., 1971. Biogéographie des Lépidoptères Rhopalocères des îles égéennes. - *C. r. somm. Séanc. Soc. Biogéogr.* **1971** : 21-32.
- Koutsaftikis, A., 1974. Die Lepidopterenfauna der östägäischen Insel Simi. - *Annls. Mus. Goulandris* **2** : 93-98.
- Olivier, A., 1991. The butterflies of the Greek island of Simi (Lepidoptera : Hesperioidea & Papilionoidea). - *Phegea* **19** : 63-70.
- Olivier, A., 1993a. The butterflies of the Greek island of Ródos : taxonomy, faunistics, ecology and phenology with a tentative synthesis on the biogeography of the butterflies of Kriti (Crete), Kápathos, Ródos, the Eastern Aegean islands and Kípros (Cyprus) (Lepidoptera: Hesperioidea & Papilionoidea). - Vlaamse Vereniging voor Entomologie, Antwerpen.
- Olivier, A., 1993b. The butterflies of the Greek island of Tilos (Lepidoptera : Hesperioidea & Papilionoidea). - *Phegea* **21** : 17-23.
- Olivier, A. & Coutsis, J.G., 1993. Notes on *Maniola telmessia* (Zeller, 1847) from the Eastern Aegean islands, with new insights about its populations on the Greek islands of Kápathos and Kásson (Lepidoptera : Nymphalidae Satyrinae). - *Phegea* **21** : 113-130.
- Ondrias, J., Koutsaftikis, A. & Douma-Petridou, E., 1979. Etude relative aux parties génitales des Lépidoptères provenant de différentes régions de Grèce. - *Linn. belg.* **7** : 358-362.
- Thomson, G., 1985. Greek island butterflies : Dodecanes 1983. - *Entomologist's Rec. J. Var.* **97** : 154-158.
- Turati, E., 1929. Lepidotteri. In : Ricerche faunistiche nelle isole italiane dell'Egeo. - *Archo zool. ital.* **13** : 177-186.