

The butterflies of the Greek island of Léros (Lepidoptera: Hesperioidea & Papilionoidea)

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Samenvatting. De dagvlinders van het Griekse eiland Léros (Lepidoptera: Hesperioidea & Papilionoidea)

Na een korte inleiding over het eiland Léros en een korte bespreking van de beperkte bestaande literatuur, worden de 29 van het eiland bekende dagvlindersoorten behandeld. 15 hiervan worden in deze publikatie voor de eerste maal vermeld. Op één na zijn alle soorten, welke op Léros voorkomen, tevens op het nabijgelegen eiland Kós vertegenwoordigd. Het tussenliggende eiland Kálimnos telt 31 soorten, waarvan er 27 ook op Léros voorkomen. Léros heeft twee soorten welke niet bekend zijn van Kálimnos, hoewel ze op Kós en op het Bodrum schiereiland wel voorkomen. Mogelijk behoren deze tevens tot de fauna van Kálimnos en werden ze tot dusver niet op dit eiland waargenomen. Bij geen enkele soort is er enige taxonomische differentiatie vast te stellen in vergelijking met de omliggende eilanden en het nabije vasteland. Deze eilanden zijn dan ook minder dan 9000 jaar geleden van elkaar en van het Turkse vasteland geïsoleerd geraakt. Er wordt aangenomen dat nu ongeveer 90% van de dagvlinderfauna van Léros bekend is.

Résumé. Les papillons diurnes de l'île grecque de Léros (Lepidoptera: Hesperioidea & Papilionoidea) Après un bref aperçu des généralités de l'île de Léros et une mention de la littérature existante restreinte, les 29 espèces de papillons diurnes connues actuellement de l'île sont traitées. 15 d'entre elles y sont recensées pour la première fois dans la présente publication. A une exception près, toutes les espèces existant à Léros ont également été retrouvées à l'île proche de Kós. L'île située entre elles, Kálimnos, compte 31 espèces, dont 27 existent également à Léros. Léros a deux espèces qui sont inconnues de Kálimnos, bien qu'elles soient trouvées aussi bien à Kós que dans la péninsule de Bodrum. Il est possible que celles-ci fassent également partie de la faune de Kálimnos, mais qu'elles n'y aient pas encore été observées jusqu'à présent. Aucune espèce ne montre quelque différenciation taxinomique par rapport aux îles avoisinantes et au continent tout proche. Ces îles se sont trouvées isolées les unes des autres ainsi que de la terre ferme anatolienne depuis moins de 9000 ans. Il est admis qu'approximativement 90% de la faune des papillons diurnes de Léros est déjà connue à l'heure actuelle.

Key words: butterflies - Léros - Kálimnos - Kós - Greece.

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Introduction

The Greek island of Léros lies in the SE Aegean Sea, northwestwards of Kós and Kálimnos – from which latter island it is separated by a narrow strait of 2 km – and to the west of the Bodrum Peninsula (Prov. Muğla, Turkey). It has a length of 14.5 km, a width of 6.5 km and an area of 53 km². Léros has many bays: in two places the island is only 1 km wide. It consists mainly of limestone hills with its highest summit at 326 m, being much flatter than Kálimnos. The coastal plains are fertile, with many orchards and vineyards. Degraded maquis and garrigue make up most of the remainder of the island.

As far as I know, the Scottish lepidopterist George Thomson was the first who paid some attention to the local butterfly fauna, recording 10 species collected during a one-day trip to Léros on 14.VII.1990. These records were mentioned by Olivier (1993) and Hesselbarth, van Oorschot & Wagener (1995). Olivier (1994) added one species, while further data on one single species can be found in Olivier & Coutsis (1993, 1995). Finally, Olivier (1996) and Olivier & De Prins (1996) add three more species.

I paid two brief visits to this lovely island, 12–13.IV.1992 and 8, 11–12.IV.1995, observing all fourteen previously recorded species and supplementing the faunal list with fifteen new ones that will be reported here for the first time.

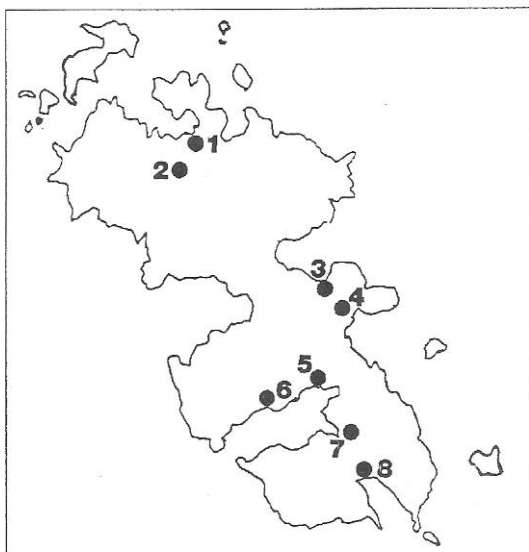


Fig. 1. Map of Léros, with localities listed in the Systematic Part.

1. Parthení (0–50 m)
2. 1 km S. Parthení (0–50 m)
3. Ágia Marína (0–100 m)
4. Plátanos (50–100 m)
5. Lakkí (50–100 m)
6. 2 km SW. Lakkí (0–50 m)
7. 1–2 km N. Xirókambos (0–50 m)
8. Xirókambos (0–50 m)

Systematic Part

Both literature records (L) as well as new original data (N) are listed, supplemented with those communicated by Thomson (T): altogether 8 localities are explored during April, June and July (Fig. 1). Nomenclature follows Olivier & De Prins (1996). Data on ecology and phenology can be found in Olivier (1993) and Hesselbarth, van Oorschot & Wagener (1995) and these will not be repeated here. The species new to the island are designated with an asterisk (*).

* *Gegenes pumilio pumilio* (Hoffmansegg, 1804)
N – 1–2 km N. Xirókambos (0–50 m), 12.IV.1995

* *Carcharodus alceae alceae* (Esper, [1780])
N – Lakkí (50–100 m), 12.VI.1992, 13.VI.1992
– Ágia Marína (0–100 m), 8.IV.1995
– 1–2 km N. Xirókambos (0–50 m), 12.IV.1995

Carcharodus stauderi ambiguus (Verity, 1925)
L – Olivier (1994: 87)
N – Lakkí (50–100 m), 13.VI.1992

* *Zerynthia cerisy cerisy* (Godart, [1824])
N – 1 km S. Parthení (0–50 m), 11.IV.1995, 12.IV.1995
– 2 km SW. Lakkí (0–50m), 11.IV.1995

Iphiclides podalirius podalirius (Linnaeus, 1758)
L – Olivier (1993: 198, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1110, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Lakki (50 m), 12.VI.1992
– 1 km S. Partheni (0–50 m), 12.IV.1995
– 1–2 km N. Xirókambos (0–50 m), 12.IV.1995

Papilio machaon syriacus Eller, 1936

- L – Olivier (1993: 198, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1110, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Plátanos (50–100 m), 12.VI.1992 (obs.)
– Lakki (50–100 m), 13.VI.1992
– 1 km S. Partheni (0–50 m), 12.IV.1995

* *Colias crocea* (Fourcroy, 1785)

- N – Ágia Marina (0–50 m), 12.VI.1992
– Ágia Marina (0–100 m), 8.IV.1995
– 1 km S. Partheni (0–50 m), 11.IV.1995
– 1–2 km N. Xirókambos (0–50 m), 12.IV.1995

* *Euchloe (ausonia) ausonia taurica* Röber, [1907]

- N – Ágia Marina (0–100 m), 8.IV.1995
– 2 km SW. Lakki (0–50 m), 11.IV.1995
– 1 km S. Partheni (0–50 m), 12.IV.1995
– 1–2 km N. Xirókambos (0–50 m), 12.IV.1995

Pieris brassicae brassicae (Linnaeus, 1758)

- L – Olivier (1993: 198, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1111, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Ágia Marina (0–100 m), 8.IV.1995
– 1 km S. Partheni (0–50 m), 12.IV.1995

Pieris rapae rapae (Linnaeus, 1758)

- L – Olivier (1993: 198, table 12), and Hesselbarth, van Oorschot & Wagener (1995: 1111, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Lakki (50 m), 12.VI.1992 (obs.)

Pontia (daplidice) edusa (Fabricius, 1777)

- L – Olivier (1993: 198, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1111, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Lakki (50–100 m), 13.VI.1992
– Ágia Marina (0–100 m), 8.IV.1995

Lycaena phlaeas phlaeas (Linnaeus, 1761)

- L – Olivier (1993: 198, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1111, table 27)

- N – Plátanos, 14.VII.1990 (T)
– Lakki (50–100 m), 12.VI.1992, 13.VI.1992

- Lycaena thersamon* (Esper, [1784])
 L – Olivier (1996 : 155)
 N – Ágia Marína (0–100 m), 8.IV.1995
 – 1 km S. Parthení (0–50 m), 12.IV.1995
 – 1–2 km N. Xirókambos (0–50 m), 12.IV.1995
- * *Callophrys rubi* (Linnaeus, 1758)
 N – Ágia Marína (0–100 m), 8.IV.1995
 – 1 km S. Parthení (0–50 m), 11.IV.1995, 12.IV.1995
 – 2 km SW. Lakkí (0–50 m), 11.IV.1995
- * *Lampides boeticus* (Linnaeus, 1767)
 N – 1 km S. Parthení (0–50 m), 12.IV.1995
- Pseudophilotes vicrama schiffmuelleri* (Hemming, 1929)
 L – Olivier & De Prins (1996: 208)
 N – Ágia Marína (0–100 m), 8.IV.1995
 – 2 km SW. Lakkí (0–50 m), 11.IV.1995
- * *Glaucopsyche alexis alexis* (Poda, 1761)
 N – Ágia Marína (0–100 m), 8.IV.1995
 – 1 km S. Parthení (0–50 m), 11.IV.1995, 12.IV.1995
 – 2 km SW. Lakkí (0–50 m), 11.IV.1995
- * *Plebeius loewii loewii* (Zeller, 1847)
 N – Plátanos (50–100 m), 12.VI.1992
 – Parthení (0–50 m), 13.VI.1992
 – Lakkí (50–100 m), 13.VI.1992
- * *Polyommatus agestis* ([Denis & Schiffmüller], 1775)
 N – Lakkí (50–100 m), 13.VI.1992
- * *Polyommatus icarus* (Rottemburg, 1775)
 N – Parthení (0–50 m), 13.VI.1992
 – 2 km SW. Lakkí (0–50 m), 11.IV.1995
 – 1–2 km N. Xirókambos (0–50 m), 12.IV.1995
- * *Kirinia roxelana* (Cramer, [1777])
 N – Xirókambos (0–50 m), 13.VI.1992 (obs.)
- * *Lasiommata megera lyssa* (Geyer, [1828])
 N – Lakkí (50–100 m), 12.VI.1992, 13.VI.1992
 – 1 km S. Parthení (0–50 m), 12.IV.1995
- * *Lasiommata maera* (Linnaeus, 1758)
 N – Lakkí (50–100 m), 12.VI.1992, 13.VI.1992
 – Parthení (0–50 m), 13.VI.1992

Maniola telmessia (Zeller, 1847)

L – Olivier (1993: 199, table 12), Olivier & Coutsis (1993: 114, 115, fig. 1, 116, 123, table 1, 124, table 2, 126, table 3, 127, table 4; 1995: 10, fig. 2, 11, 12, table 2, 16, table 3, 18, 56), Hesselbarth, van Oorschot & Wagener (1995: 827, 1112, table 27)

N – Plátanos, 14.VII.1990 (T)

– Lakkí (50–100 m), 12.VI.1992, 13.VI.1992

Hipparchia senthes (Fruhstorfer, 1908)

L – Olivier (1996: 155)

N – Lakkí (50 m), 12.VI.1992

Hipparchia fatua fatua Freyer, [1844]

L – Olivier (1993: 136–137, 199, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1113, table 27)

N – Plátanos, 14.VII.1990 (T)

– Ágia Marina (0–50 m), 12.VI.1992

* *Vanessa atalanta atalanta* (Linnaeus, 1758)

N – Lakkí (50 m), 12.VI.1992

– Ágia Marina (0–100 m), 8.IV.1995

– 1 km S. Parthení (0–50 m), 12.IV.1995

Vanessa cardui (Linnaeus, 1758)

L – Olivier (1993: 199, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1113, table 27)

N – Plátanos, 14.VII.1990 (T)

– Lakkí (50 m), 12.VI.1992

– Ágia Marina (0–100 m), 8.IV.1995

Polygonia egea (Cramer, [1775])

L – Olivier (1993: 199, table 12), Hesselbarth, van Oorschot & Wagener (1995: 1113, table 27)

N – Plátanos, 14.VII.1990 (T)

– Lakkí (50–100 m), 13.VI.1992

– Ágia Marina (0–100 m), 8.IV.1995

Discussion

The butterfly fauna of Léros is an impoverished version of that from the relatively nearby larger island of Kós: all its known species but one — *Pseudophilotes vicrama schiffermuelleri* (Hemming, 1929) — have been found as well on the latter island, while seven species, i. e. about 24%, remain unrecorded from the Bodrum Peninsula at present: this certainly reflects the incomplete exploration of that area. As could be expected, the butterfly fauna of Léros is very similar to that of Kálimnos. *Lycaena thersamon* and *Hipparchia senthes* have not been recorded from last named island, while they are known from both Kós and the Bodrum Peninsula. Possibly they have been overlooked on Kálimnos so far. The remaining 27 species from Léros are shared with Kálimnos. Four species from Kálimnos, i. e. *Thymelicus sylvestris syriacus* (Tutt, [1905]), *Carcharodus orientalis* Reverdin, 1913, *Pseudochazara anthelea anthelea* (Hübner, [1824]) and *Melitaea trivia trivia* ([Denis & Schiffermüller], 1775), are not known from Léros. I expect that at least the latter one might turn up there. None of the populations of any species that occur on Léros has differentiated significantly, not even subspecifically, from

its representatives on Kós, Kálimnos and the adjacent Bodrum Peninsula. This points to a common history of these butterfly faunas up to a very recent past. Paleogeographic data support this, as the islands of Kós, Kálimnos and Léros became isolated from the Anatolian mainland and from each other less than 9000 B. P. (van Andel & Shackleton 1982). It is anticipated that about 90% of the butterfly fauna of Léros is known presently and it seems unlikely that any further discovery will alter the present conclusions much.

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