

Spring butterflies and moths from the Greek island of Kárpáthos (Greece) (Lepidoptera)

Alain OLIVIER & Alex RIEMIS

Samenvatting. Vlinders van het Griekse eiland Kárpáthos in april (Lepidoptera). Beide auteurs gingen korte tijd na elkaar naar het Griekse eiland Kárpáthos in april 1986. Het hoofddoel van de reis was het nagaan van de eventuele aanwezigheid van *Zerynthia cerisyi* (GODART, 1822), aangezien de soort zowel op Ródos als op Kreta voorkomt. Dit bleef echter zonder succes. Toch slaagden zij erin 18 soorten dagvlinders en 3 soorten nachtvlinders te vangen. Twee dagvlindersoorten zijn nieuw voor het eiland: *Euchloe simplonia* (FREYER, 1829) en *Callophrys rubi* (LINNAEUS, 1758). Een lijst van de waarnemingen en een bibliografie besluiten het artikel.

Résumé. Papillons de l'île de Kárpáthos en avril (Lepidoptera). A une courte intervalle, les deux présents auteurs se sont rendus à l'île grèque de Kárpáthos en avril 1986. Le but principal du voyage était de s'informer sur la présence éventuelle de *Zerynthia cerisyi* (GODART, 1822) en cette île, vu que l'espèce se trouve aussi bien à l'île de Rhodes qu'en Crète. Aucun résultat n'a été obtenu sur ce point. Néanmoins les deux auteurs ont réussi ensemble à collectionner 18 espèces de papillons diurnes ainsi que 3 nocturnes. Deux espèces de diurnes sont nouvelles pour l'île: *Euchloe simplonia* (FREYER, 1829) et *Callophrys rubi* (LINNÉ, 1758). Une liste des observations et une bibliographie terminent l'article.

Olivier, A.: Oosterveldlaan 5, B-2020 Antwerpen.

Riemis, A.: Rerum-Novarumlaan 41, B-2300 Turnhout.

With the exception of the islands of Ródos and Kriti (Crete) the Aegean islands are still hardly explored by lepidopterists, in particular the isolated island of Kárpáthos, lying half way between Ródos and Kriti. Only a few records are known (TURATI, 1929; REBEL, 1936, 1938; THOMSON, 1985). The description of the endemic *Hipparchia christenseni* by KUDRNA in 1977 again stimulated some interest for its fauna and a very recent publication including the first description of the female of *H. christenseni* by RIEMIS (1986) added some new records. Until now the butterfly fauna of Kárpáthos has never been investigated in spring and both present authors decided to go to this island at a short interval of time in April 1986. Alain OLIVIER visited the island on 8 and 9-IV, Alex RIEMIS on 19, 20 and 21-IV.

The main purpose of our visit was to investigate the possible presence of *Zerynthia cerisyi* (GODART, 1822) on Kárpáthos, as the species is present on the islands of Ródos and Kriti in two well differentiated subspecies⁽¹⁾. Only the southern part of the island was explored, including the following localities: Kárpáthos, Apéri, Voláda, Óthos, Stés, Pilés and Arkása. The southern slopes of the Kalí Limni were also explored, up to approximately 1000 m high.

We did not find *Z. cerisyi*, nor did we find any *Aristolochia* species, the foodplant. This strongly suggests that the species could be absent on Kárpáthos. Nevertheless there remains a possibility that the species is present

⁽¹⁾ Ródos: *Zerynthia cerisyi martini* (FRUHSTORFER, 1906). This subspecies is perhaps better considered as a synonym of the nominotypical *cerisyi*. Kriti (Crete): *Z. c. cretica* (REBEL, 1904).

at some localities on the northern side of the Kalí Límni (Mesohóri, Spóa, Ápella) where the climate is said to be more humid (BAEHR, 1985, p. 91 : «Allerdings fängt das hohe Lastos-Massiv an seiner Nordseite Regen ab, der Nordteil von Karpathos ist daher etwas niederschlagsreicher und allgemein feuchter (...). Der Nordteil von Karpathos, insbesondere der Nordhang des Lastos-Bergstockes, ist dagegen reich an Bächen und ist grossflächig mit Kiefernwald (*Pinus brutia*) bedeckt.»).

The presence of *Z. cerisyi* as a very differentiated taxon (possibly specifically distinct) on Kríti and its absence from the Peloponnese and Central Greece might indicate that it became established on this island already a long time ago, maybe during the Pleistocene or even earlier, coming from Turkey over Ródos and Kárpáthos at the time that these islands were all connected by a landbridge to Turkey, or at least that the width of the sea between these islands was far more reduced than it is today. If we consider this possibility and if *Z. cerisyi* is absent on Kárpáthos, the time of its disappearance could date as well from that period as from a quite recent past (a few hundred years ago?).

The impression of overall scarcity in butterflies noted by one of us on a former visit (RIEMIS, 1986) has been confirmed by both present authors. Nevertheless we observed together 18 butterfly species of which two, *Euchloe simplonia* (FREYER, 1829) and *Callophrys rubi* (LINNAEUS, 1758) are new for the island. Three moths were also collected and we think it is interesting to include these records in our list. We caught the following species :

Hesperiidae

Carcharodus alceae (ESPER, 1780)

Apéri (300 m), 8-IV-1986 : 1 ♂.

Pilés (500 m), 19-IV-1986 : 3 ♂.

Papilionidae

Papilio machaon LINNAEUS, 1758

Voláda (500 m), 9-IV-1986 : 1 ♂.

Apéri (300 m), 9-IV-1986 : 1 ♀.

Pilés (500 m), 21-IV-1986 : 2 ♂.

Pieridae

Colias crocea (FOURCROY, 1785)

4 km E. of Arkása (200 m), 8-IV-1986 : 1 ♂.

Pilés (500 m), 19-IV-1986 : 1 ♀ (f. *helice*).

Gonepteryx cleopatra (LINNAEUS, 1767)

Apéri (300 m), 8-IV-1986 : 1 ♂.

Óthos (500-600 m), 9-IV-1986 : 2 ♀.

All overwintered specimens, damaged. The females have the whole hindwing, as well as the costa and the margins of the forewings suffused with light yellow scales.

Pieris brassicae (LINNAEUS, 1758)

- Voláda (500 m), 8-IV-1986 : 1 ♂, 3 ♀.
Óthos (500 m), 8-IV-1986 : 3 ♂.
Óthos (500-600 m), 9-IV-1986 : 4 ♂.
Apéri (300 m), 8-IV-1986 : 1 ♀.
1 km S. of Apéri (200 m), 9-IV-1986 : 1 ♂.
Pilés (500 m), 19-IV-1986 : 2 ♀; 21-IV-1986 : 5 ♂.

Pieris rapae (LINNAEUS, 1758)

- Voláda (500 m), 8-IV-1986 : 1 ♂.
Pilés (500 m), 19-IV-1986 : 1 ♂; 21-IV-1986 : 1 ♀.
Kárpáthos (0-50 m), 20-IV-1986 : 2 ♂, 1 ♀.

Euchloe simplonia (FREYER, 1829)

- Apéri (300 m), 8-IV-1986 : 2 ♂, 2 ♀.
Óthos (500 m), 8-IV-1986 : 1 ♀.
Óthos (500-600 m), 9-IV-1986 : 2 ♂, 4 ♀.
Kali Limni (600-1000 m), 9-IV-1986 : one single specimen observed.
Pilés (500 m), 19-IV-1986 : 4 ♂; 21-IV-1986 : 2 ♂.
Kárpáthos (0-50 m), 20-IV-1986 : 1 ♂.
All specimens belong to the first brood.

Lycaenidae

Callophrys rubi (LINNAEUS, 1758)

- 4 km E. of Arkása (200 m), 8-IV-1986 : 1 ♂.
Óthos (500 m), 8-IV-1986 : 2 ♂.
Óthos (500-600 m), 9-IV-1986 : 5 ♂, 2 ♀.
Pilés (500 m), 19-IV-1986 : 2 ♂, 2 ♀; 21-IV-1986 : 8 ♂, 3 ♀.

Lycaena phlaeas (LINNAEUS, 1761)

- Óthos (500-600 m), 9-IV-1986 : 1 ♂.
Kali Limni (600-1000 m), 9-IV-1986 : a few specimens observed.
Pilés (500 m), 19-IV-1986 : 1 ♂, 1 ♀.
Kárpáthos (0-50 m), 20-IV-1986 : 1 ♂.

Lampides boeticus (LINNAEUS, 1767)

- 1 km S. of Apéri (200 m), 9-IV-1986 : 1 ♀.
Pilés (500 m), 19-IV-1986 : 1 ♂.

Celastrina argiolus (LINNAEUS, 1758)

- 1 km S. of Apéri (200 m), 9-IV-1986 : 1 ♀.
Óthos (500-600 m), 9-IV-1986 : 1 ♀.

Pseudophilotes vicrama (MOORE, 1865)

- Óthos (500-600 m), 9-IV-1986 : 2 ♂.
Pilés (500 m), 19-IV-1986 : 3 ♂.

Polyommatus icarus (ROTTEMBURG, 1775)

- 4 km E. of Arkása (200 m), 8-IV-1986 : 2 ♂, 1 ♀.
Apéri (300 m), 8-IV-1986 : 2 ♀.
Pilés (500 m), 19-IV-1986 : 3 ♂, 1 ♀.

Nymphalidae

Vanessa atalanta (LINNAEUS, 1758)

Óthos (500-600 m), 9-IV-1986 : one or two specimens observed.

Cynthia cardui (LINNAEUS, 1758)

Óthos (500-600 m), 9-IV-1986 : some specimens observed.

Kalí Limni (600-1000 m), 9-IV-1986 : a few seen.

The species was also observed at other localities but no special attention was paid to it.

Maniola telmessia (ZELLER, 1847)

Kárpáthos (0-50 m), 20-IV-1986 : 1 ♂.

One single fresh male. The emergence of this species was just starting on the island of Kárpáthos, while on the island of Ródos both sexes were well out the week before.

Pararge aegeria (LINNAEUS, 1758)

Pilés (500 m), 19-IV-1986 : 6 ♂, 1 ♀; 21-IV-1986 : 4 ♂.

Lasiommata megera (LINNAEUS, 1767)

Apéri (300 m), 8-IV-1986 : 1 ♂.

Óthos (500-600 m), 9-IV-1986 : 1 ♂.

Pilés (500 m), 21-IV-1986 : 1 ♂.

Sphingidae

Hyles livornica (ESPER, 1799)

Kárpáthos (0-50 m) : one specimen sitting on a wall, in the evening of 7-IV-1986. We follow EITSCHBERGER & STEINIGER (1976) in considering *H. livornica* specifically distinct from *H. lineata* FABRICIUS.

Arctiidae

Arctia villica (LINNAEUS, 1758)

Kárpáthos (0-50 m), 20-IV-1986 : also a specimen sitting on a wall.

Noctuidae

Autographa gamma (LINNAEUS, 1758)

Kárpáthos (0-50 m), 20-IV-1986 : 1 ♂.

Bibliography

- Baehr, M., 1985. Die Laufkäfer des Karpáthos-Archipels in der Südostägäis. *Nachr.BI.bayer.Ent.* **34** : 90-97.
- Fitschberger, U. & Steiniger, H., 1976. Die Artverschiedenheit von *Hyles lineata lineata* (FABRICIUS, 1775) und *Hyles livornica livornica* (ESPER, 1779) (Lep. Sphingidae). *Atalanta, München* **7** : 71-73.
- Kudrna, O., 1977. A Revision of the Genus *Hipparchia* Fabricius. E.W. Classey, Faringdon.
- Rebel, H., 1936. Zoologische Ergebnisse einer Dodekanesreise von O. Wettstein 1935. *Sber. Akad. Wiss. Wien* **145** : 19-33.
- Rebel, H., 1938. Zur Lepidopterenfauna Kretas. *Di.ent.Z. Iris* **52** : 30-36.
- Riemis, A., 1986. The Butterflies of the Greek island Kárpáthos with notes on *Hipparchia christenseni* Kudrna. *Entomologist's Rec.J.Var.* **98** : 149-153.
- 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.