Skippers and butterflies on the Greek island of Símí in early June 2012, and a list of all the skippers and butterflies that have hitherto been recorded from the island (Lepidoptera: Hesperioidea, Papilionoidea)

John G. Coutsis & Nikos Ghavalas

Abstract. Early June skipper and butterfly records are provided for the Greek island of Símí, based on captures rather than just sightings, and a species new to the island is added. A list of the island's totality of its hitherto known skipper and butterfly species is also being given together with species whose presence on the island needs confirmation and others whose presence there appears to the authors as being most improbable.

Samenvatting. Dagvlinders van het Griekse eiland Símí begin juni 2012, en een lijst van alle dagvlinders die tot nu toe van het eiland zijn vermeld (Lepidoptera: Hesperioidea, Papilionoidea)
Dagvlindergegevens van begin juni 2012 van het Griekse eiland Símí worden meegedeeld, gebaseerd op vangsten, en niet alleen op waarnemingen in de vlucht. Een nieuwe soort wordt aan de fauna toegevoegd. De volledige lijst dagvlinders die ooit werden vermeld uit Símí wordt gegeven samen met een lijstje soorten waarvan het voorkomen op het eiland moet bevestigd worden en van soorten waarvan het voorkomen op Símí erg twijfelachtig is.

Résumé. Papillons de l'île grecque de Símí, début juin 2012, avec une liste de toutes les espèces de papillons rapportées de cette île jusqu'à ce jour (Lepidoptera: Hesperioidea, Papilionoidea)
Les papillons observés début juin 2012 sur l'île de Símí sont commentés, en se basant sur des captures et non sur des observations d'exemplaires volants. Une espèce nouvelle est rapportée pour cette île. Une liste complète des espèces mentionnées pour cette île est donnée, accompagnée d'une liste des observations qui demandent une confirmation et d'une liste d'espèces probablement fautivement mentionnées pour la faune de Símí.

Key words: Lepidoptera – Hesperioidea – Papilionoidea – *Pontia edusa* – *Aricia agestis* – *Hyponephele lupina* – *Kirinia roxelana* – *Polygonia egea* – Greece – Aegean – Dodecanese Islands – Símí Island – Faunistics

Coutsis, J. G.: 4 Glykonos Street, GR-10675 Athens, Greece. kouts@otenet.gr

Ghavalas, N.: 30 Karaoli-Dimitriou Street, GR-12461 Athens (Haidári), Greece. vale98@otenet.gr

Forword

Skipper and butterfly records new to the Dodecanese islands, or provided in the past by previous authors, are being collectively presented, and critically discussed in Cuvelier *et al.* (2012). The paper also covers the island of Símí, which was visited by the authors on June 13 & 14, 2011. Our own visit to the island was carried out on June 2 & 3, 2012, and with the exception of just one of our own records, which is new to the island, all the rest are repetitions of previous ones, some of which, however, were based on mere sightings, inadvertently occasionally resulting in misinformation. The authors themselves of the aforementioned paper state at one point that "For future updates collecting of voucher specimens concerning species considered to be new records for islands is needed, ..." This is exactly what we have now done, basing our finds on captures rather than just sightings, and providing justification for publishing them rather than ignoring them because of their redundancy.

Localities visited

Pirgália: the Island's highest grounds (520–about 600 m), located immediately SSE of Símí town, which in turn is located on the N side of the island.

Pédi: a seaside north-facing locality immediately E of Símí town.

Xísos: located at an altitude of about 390 m about halfway along road between Símí town and Pirgália.

Vígli: located at an altitude of about 200 m immediately SSW of Símí town.

Recorded species during present visit to island

1. ***Syrichtus proto*** (Ochsenheimer, 1808). Common and very fresh at Pirgália, occasional and worn both at Xísos and Pédi.
2. ***Carcharodus stauderi*** Reverdin, 1913. A few very fresh males collected at Xísos, and some worn males and females at Pédi. All males confirmed as such by genitalia, that differ from those of the superficially similar *Carcharodus orientalis* Reverdin, 1913 primarily by their wider cuiller, differently shaped stylifer, and by the fact that the post-zonal part of the aedeagus bears fairly prominent dorsal and dorso-lateral spines along distal half of its length, whereas in *C. orientalis* there is a concentration of minute spines only on dorsum of the distal extremity of the aedeagus (fig. 1). (Drawings given in order to facilitate future identifications of the two very similar taxa).
3. ***Thymelicus sylvestris*** (Poda, 1761). Fairly common both at Pédi and Xísos. All individuals worn.
4. ***Thymelicus hyrax*** (Lederer, 1861). A few males and three females, all very worn, collected at Pédi nectaring on thyme.
5. ***Thymelicus acteon*** (Rottemburg, 1775). Three fresh males collected at Xísos and two worn females at Pédi.
6. ***Iphiclides podalirius*** (Linnaeus, 1758). A few recorded at Pédi and Xísos.
7. ***Pieris brassicae*** (Linnaeus, 1758). Fairly common in all localities visited.

8. ***Pontia edusa*** (Fabricius, 1777). Two males collected, one at Pédi, the other at Xísos. Previous records based on sightings (Pamperis 2009; Cuvelier *et al.* 2012).

9. ***Colias croceus*** (Geoffroy in Fourcroy, 1785). A few males collected in all localities visited.

10. ***Satyrium ilicis*** (Esper, 1779). A small number of males and females, mostly worn, collected at Pédi, Xísos and Vígli.

11. ***Aricia agestis*** (Denis & Schiffermüller, 1775). New to Símí. A single male collected at Xísos (fig. 2).

12. ***Ypthima asterope*** (Klug, 1832). A good number of males and a single female collected at Pédi, where it was found to be common and fresh on rocky slopes at about 10–20 m above sea level.

13. ***Hyponephele lupina*** (Costa, 1836). A single male collected at Xísos. Previous records based on sightings (Pamperis 2009; Gascoigne-Pees pers. com. with Cuvelier).

14. ***Maniola telmessia*** (Zeller, 1847). Both males and females found to be fairly common in all localities visited, but all quite worn.

15. ***Lasiommata maera*** (Linnaeus, 1758). Two fresh females collected, one at Xísos and the other at Pédi.

16. ***Kirinia roxelana*** (Cramer, 1777). A single worn male collected at Pédi.

17. ***Vanessa cardui*** (Linnaeus, 1758). A single minute, fresh male collected at Xísos.

18. ***Polygonia egea*** (Cramer, 1775). A single specimen collected at Vígli. Previous records based on sightings (Pamperis 2009).

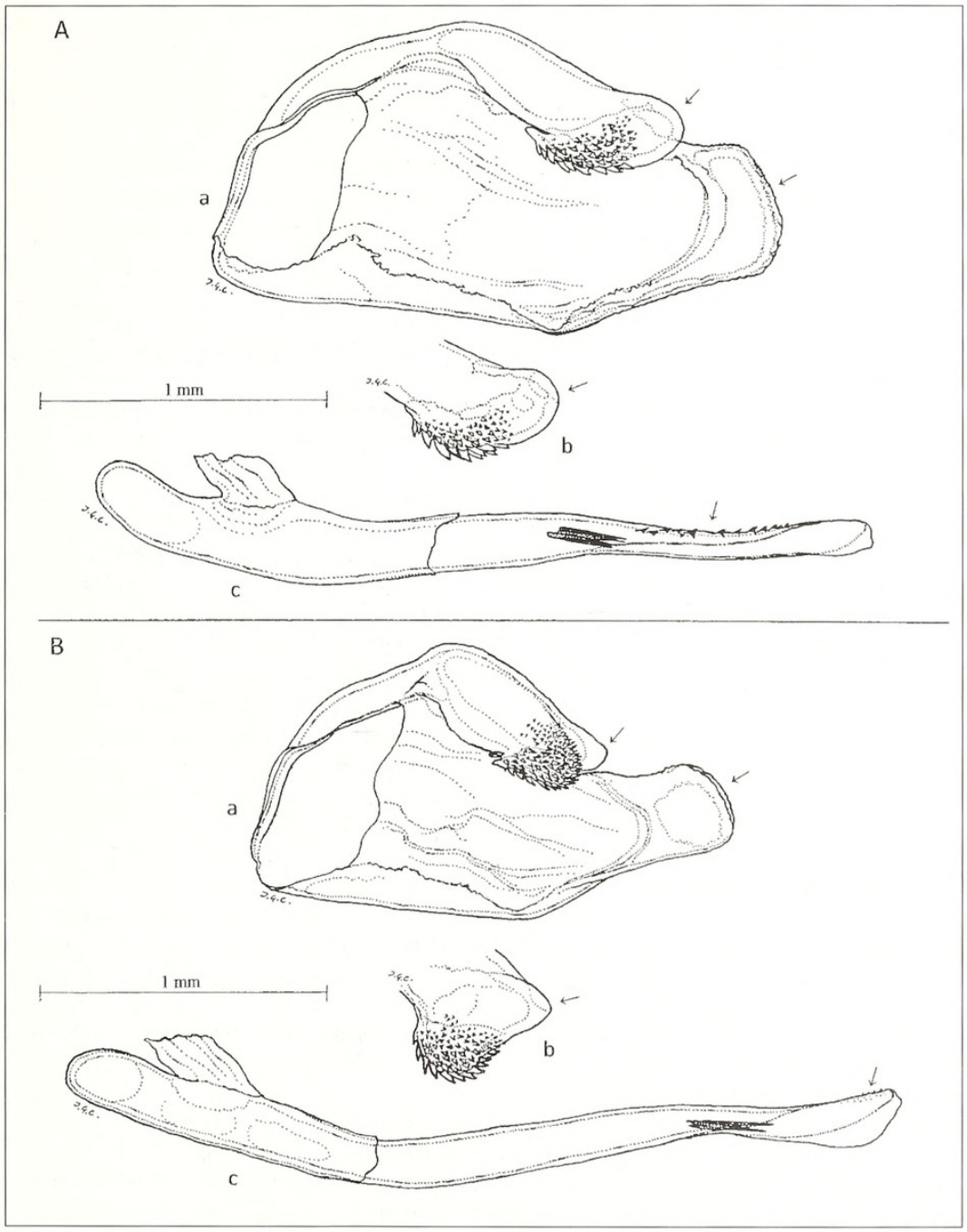

Fig. 1. Selected male genitalia components

A. *Carcharodus stauderi*.

B. *Carcharodus orientalis*

A & B. Jordan, Shunat Nimrin dam, 200 m, 20.iv.1997.

a. Lateral aspect of inner face of right valva.

b. Dorsal aspect of stylifer.

c. Lateral aspect of left side of aedeagus.

Fig. 2. *Aricia agestis* ♂. Greece, Dodekánisa, Símí Island, Xísos, 390 m, 2.vi.2012. Left. Upper side. Right. Underside. Scale bar = 1 cm. (Black spots appearing on FW underside in or near cell are caused by holes made by pins during setting).

Full list of hitherto accepted species records for Símí

1. ***Syrichtus tessellum*** (Hübner, 1803). Recorded in Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

2. ***Syrichtus proto***. Recorded in Thomson (1985), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

3. ***Spialia orbifer*** (Hübner, [1823]). Recorded in Thomson (1985), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Cuvelier *et al.* (2012).

4. ***Carcharodus stauderi***. Recorded in Tolman (1997), Denis et al. (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

5. ***Thymelicus sylvestris***. Recorded in Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

6. ***Thymelicus hyrax***. Recorded in Cuvelier *et al.* (2012), present paper.

7. ***Thymelicus acteon***. Recorded in Denis *et al.* (2000), Pamperis (2009), Cuvelier *et al.* (2012), present paper.

8. ***Gegenes pumilio*** (Hoffmansegg, 1804). Recorded in Pamperis (2009) (as sightings), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

9. ***Papilio machaon*** Linnaeus, 1758. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

10. ***Iphiclides podalirius***. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

11. ***Allancastria cerisy*** (Godart, 1824). Recorded in Koutsaftikis (1974), Ondrias *et al.* (1979), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

12. ***Pieris brassicae***. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

13. ***Pieris rapae*** (Linnaeus, 1758). Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Cuvelier *et al.* (2012).

14. ***Pontia edusa***. Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings), present paper.)

15. ***Colias croceus***. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

16. ***Satyrium ilicis***. Recorded in Thomson (1985), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

17. ***Lycaena phlaeas*** (Linnaeus, 1761). Recorded in Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* 2012.

18. ***Leptotes pirithous*** (Linnaeus, 1767). Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

19. ***Aricia agestis***. Recorded in present paper.

20. ***Ypthima asterope***. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

21. ***Hyponephele lupina***. Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings), present paper.

22. ***Maniola telmessia***. Recorded in Turati (1929), Koutsaftikis (1974), Thomson (1985), Olivier (1991 & 1993), Tolman (1997), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

23. ***Lasiommata megera*** (Linnaeus, 1767). Recorded in Thomson (1985), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

24. ***Lasiommata maera***. Recorded in Thomson (1985), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

ISSN 0771-5277

25. ***Kirinia roxelana***. Recorded in Denis *et al.* (2000) (probably through pers. com.), Cuvelier *et al.* (2012), present paper.

26. ***Hipparchia fatua*** (Freyer, 1844). Recorded in Turati (1929), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* 2012.

27. ***Vanessa atalanta*** (Linnaeus, 1758). Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Cuvelier *et al.* (2012), Coutsis *et al.* (2011).

28. ***Vanessa cardui***. Recorded in Koutsaftikis (1974), Olivier (1991 & 1993), Denis *et al.* (2000), Pamperis (2009), Coutsis *et al.* (2011), Cuvelier *et al.* (2012), present paper.

29. ***Nymphalis polychloros*** (Linnaeus, 1758). Recorded in Coutsis *et al.* (2011), Cuvelier *et al.* (2012).

30. ***Polygonia egea***. Recorded in Denis *et al.* (2000) (probably through pers. com.), Pamperis (2009), Cuvelier *et al.* (2012), present paper.

List of recorded species for Símí requiring confirmation through captures

1. ***Carcharodus alceae*** (Esper, 1780). Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings).

2. ***Gonepteryx farinosa*** (Zeller, 1847). Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings). So far this species has never yet been collected on the island. The type of habitat and apparent lack of larval host plant would prohibit its being able to breed there, but the butterfly's tendency for dispersal could very well result in its reaching Símí as an occasional visitor.

3. ***Lampides boeticus*** (Linnaeus, 1767). Recorded in Pamperis 2009, Cuvelier *et al.* 2012 (in both instances as sightings). An almost certain migrant and probable breeder in Símí.

4. ***Pseudophilotes vicrama*** (Moore, 1865). Recorded in Cuvelier *et al.* (2012) (probably based on sightings delivered through pers. com.).

5. ***Polyommatus icarus*** (Rottemburg, 1775). Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings).

6. ***Melitaea trivia*** (Denis & Schiffermüller, 1775). Recorded in Pamperis (2009), Cuvelier *et al.* (2012) (in both instances as sightings). Probably occasionally reaches Símí through dispersal from Asia Minor.

List of species records from Símí the validity of which is not accepted by present authors

1. ***Anthocharis cardamines*** (Linnaeus, 1758). Recorded in Pamperis (2009) (on the basis of sightings made known to him by Koutsaftikis through pers. com.), and Cuvelier *et al.* (2012) (the latter with serious doubts about the record). The apparent lack, or scarcity of suitable Cruciferae on the island accounts for the probable absence from it of *Euchloe ausonia* (Hübner, [1804]). It is therefore difficult to believe that another butterfly with Cruciferae feeding larvae, such as is *A. cardamines*, should have been present on Símí and have escaped the notice of all lepidopterists that have so far visited the island.

2. ***Meleageria daphnis*** (Denis & Schiffermüller, 1775). Recorded in Tolman (1997) (probably based on sightings by others), Pamperis 2009; Cuvelier *et al.* (2012) (with serious doubts about the record). The island's habitat and its low altitudes (highest point about 600 m), clearly suggest that there is no chance whatsoever of its ever being found on Símí.

3. ***Inachis io*** (Linnaeus, 1758). Recorded in Tolman (1997) (probably based on sightings by others); Cuvelier *et al.* (2012) (with serious doubts about the record). The species is totally unfit to survive in habitats such as are those in Símí, or for that matter Ródos, or the adjacent coastal areas of Asia Minor. In mainland Greece it barely reaches Pelopónnisos as a very rare vagrant, but is resident in north-central Greece all the way northwards towards the country's northern borders. It has also been reported from the north-eastern Greek island of Kérkira (= Corfu), which appears logical, as the island is both humid and has a lush vegetation as well.

Epilogue

On the basis of the available literature it can be seen that collecting on Símí has been carried out, a few days at a time, in April, May, June, July and August. This is a wide enough collecting time span for providing a good overview of the island's skipper and butterfly faunal composition. In our estimation there are very few species that could still be added to the list.

An important and as yet unpublished record for Símí

After having submitted our paper for publication, a Greek lepidopterist friend of ours, Andónis Mastorákis, had the kindness to inform us, and give us permission to publish the fact that on 20.iv.1998, during a short visit to Símí Island, he captured near Símí town, at about sea level, a single male *Euchloe ausonia* (Hübner, [1804]), this being a record new to Símí. As this butterfly was never before recorded from the island, despite rather intense collecting, it may be that this single individual may have reached Símí as a straggler from the nearby Turkish coast.

References

Coutsis J. C. & Anastassiu H. T. 2011. Skippers, Butterflies and a Harvester Moth recorded on the Greek island of Símí, late April 2010 (Lepidoptera: Hesperioidea, Papilionoidea, Zygaenidae). — *Phegea* **39**(2): 45–51.

Cuvelier S. & Mølgaard M. S. 2012. Butterflies and Skippers in the Dodecanese Islands (Greece): new data and an update on their distribution (Lepidoptera: Hesperioidea & Papilionoidea). — *Phegea* **40**(1): 65–80.
Denis L. H., Shreeve T. G., Olivier A. & Coutsis J. G. 2000. Contemporary geography dominates butterfly diversity within the Aegean archipelago (Lepidoptera: Papilionoidea, Hesperioidea). — *Journal of Biogeography* **27**: 1365–1383.
Higgins L. G. 1975. *The Classification of European Butterflies*. — Collins, London, 320 pp.
Koutsaftikis A. 1974. Die Lepidopterenfauna der ostägäischen Insel Simi (Griechenland) — *Annales Musei Goulandris* **2**: 93–98.
Olivier A. 1991. The butterflies of the Greek island of Símí (Lepidoptera: Hesperioidea & Papilionoidea). — *Phegea* **19**(2): 63–70.
Olivier A. 1993. *The Butterflies of the Greek island of Ródos: Taxonomy, Faunistics, Ecology and Phenology*. — Vlaamse Vereniging voor Entomologie, Antwerpen, Belgium, 250 pp.
Ondrias J., Koutsaftikis, A. & Douma-Petridou E. 1979. Étude relative aux parties génitales des Lépidoptères provenant de différentes régions de Grèce. – *Linneana Belgica* **VII**(10): 358–362.
Pamperis L. N. 2009. *The Butterflies of Greece*. — Pamperis, KOAN, Athens, Greece, 766 pp.
Thomson, G. 1985. Greek island butterflies: Dodecanes 1983. — *Entomologist's Record and Journal of Variation* **97**: 154–158.
Tolman T. 1997. *Butterflies of Britain & Europe*. — HarperCollins, London, 320 pp.
Turati E. 1929. Ricerche faunistiche nelle isole italiane dell' Egeo. Lepidotteri. — *Archivo zoologico italiano* **13**: 177–186.

Boekbespreking

Tshikolovets, V. V.: ***Butterflies of Europe & the Mediterranean area.***

16 × 23 cm, 544 p. volledig in kleur, Tshikolovets Publications, Pardubice, Czech Republic, te bestellen bij de auteur: tshikolovets@gmail.com of op het secretariaat: willy.deprins@gmail.com, paperback, 2011, EUR 85,00 excl. verzendkosten (ISBN 978-80-904900-0-0).

Men kan de noodzaak voor nóg maar eens een boek over de Europese dagvlinders in vraag stellen, maar als men kijkt naar welk areaal dit boek bestrijkt, dan merkt men al gauw dat er veel meer informatie ligt opgeslagen dan op het eerste zicht lijkt. Europa strekt zich uit tot aan de Oeral en de vlinders die in Europees Rusland voorkomen, worden meestal doodgezwegen. Rusland beslaat echter 40% van de totale oppervlakte en er komen dan ook een heleboel soorten dagvlinders voor die men in de rest van Europa nooit ziet. Verder worden in dit boek ook de soorten uit Noord-Afrika en het Nabije-Oosten (Israel, Libanon, Syrië en Turkije) opgenomen zodat het hele Middellandse Zeegebied mee behandeld wordt, en daarmee de hele West-Palaearctische dagvlinderfauna opgenomen.

Een checklist van alle opgenomen soorten en ondersoorten toont meteen de grote omvang van dit werk aan. Ongeveer 700 soorten worden op dezelfde manier behandeld: volledige naam, verwijzing naar de originele beschrijving, type-lokaliteit, habitat, vliegtijd, voedselplant van de rups, verspreiding en synoniemen. De erkende ondersoorten worden op dezelfde manier behandeld. Door het grote aantal behandelde soorten werd de tekst erg kort gehouden. Die bevat b.v. geen beschrijving van het uiterlijk van de dieren zelf. Dit wordt gecompenseerd door de talrijke kleurenfoto's. Altijd worden mannetje en vrouwtje afgebeeld met daarbij telkens boven- en onderkant. In vele gevallen worden zelfs type-exemplaren afgebeeld. Dit wordt met de letter HT (holotype), PT (paratype) enz. aangegeven. Door een handige kleurenstip bij de foto's ziet men op het verspreidingskaartje waar de bepaalde soort of ondersoort verspreid is. In het totaal staan in dit boek meer dan 10.000 foto's van vlinders, de meeste van museumexemplaren, maar ook van dieren in de natuur. Uiteraard heeft de auteur dit niet alleen gedaan, maar heeft hij de hulp gekregen van ca. 100 medewerkers.

De meeste soorten worden zo op één pagina behandeld, b.v. *Pyrgus serratulae*, *Colias caucasica*, *Erebia montana*. Andere, vooral die met een groot verspreidingsgebied en de vorming van ondersoorten, kregen een grote ruimte toegewezen, b.v. *Polyommatus eros*, *Coenonympha tullia*, *Boloria pales*. En ten slotte moeten heel wat soorten het met een halve pagina stellen. Dat zijn dan die soorten die ofwel een erg beperkt verspreidingsgebied hebben, ofwel weinig variabel zijn zodat er geen ondersoorten hoeven besproken te worden. Voorbeelden hiervan zijn: *Muschampia cribrellum*, *Leptidea morsei* en *Polyommatus andronicus*.

Naast de foto's van vlinders komen er ook heel wat foto's van biotopen voor. Ook deze foto's zijn van verschillende fotografen afkomstig. Dit is op elke foto met het teken © aangegeven. Het is wel jammer dat deze foto's sterk verkleind werden, maar men krijgt toch telkens een idee van de habitat waarin de verschillende soorten leven. De foto's van enkele adulte Hesperiidae en Lycaenidae zijn op ware grootte, maar de meeste foto's van de andere soorten zijn eveneens verkleind. Dat is langs de ene kant jammer, maar langs de andere kant was het op deze manier mogelijk om op de beperkte oppervlakte zoveel mogelijk exemplaren te kunnen afbeelden.

Achteraan bevinden zich nog een lijst mét foto's van alle medewerkers, een uitgebreide literatuurlijst en een alfabetische index van alle wetenschappelijke namen. Het boek is verzorgd uitgegeven en, hoewel het een paperback is, stevig ingebonden. Het zal lange tijd kunnen meegaan, ook in het veld. Iedereen die in Europese dagvlinders geïnteresseerd is, vindt er een rijke schat aan beknopte informatie.

Willy De Prins