

## On two previously undescribed subspecies of Lycaenidae (Lepidoptera) from Greece

by

J. BROWN

### ABSTRACT

Two new subspecies of *Plebejus pylaon* Fischer and *Agrodiaetus ripartii* Freyer are described from Greece. Their occurrence in Greece is described as far as possible.

The following presents the descriptions of two poorly known subspecies of Lycaenids which fly in Greece. The distribution of both subspecies seems to follow well established zoogeographical patterns: for example, the distribution of *Plebejus pylaon brethertoni* which is given below closely resembles the known distribution of *Colias aurorina heldreichi* Staudinger.

*Plebejus pylaon brethertoni* ssp. nov.

### DESCRIPTION

**Male.** Upperside with a deep violet blue ground colour; marginal black borders narrow (about 0.5 mm wide) and extend 2—3 mm basad along veins. Usually, 2—3 black antemarginal spots at anal angle of hindwing. Length of forewing 15.5—17.5 mm. Underside with a pale grey ground colour, almost steely grey. Submarginal markings as in *P. pylaon trappi* Verity and usually, a well marked white shade between the postdiscal spots and orange lunules, especially on the hindwing.

**Female.** Upperside ground colour dark brown; marginal black borders linear or vestigial. Hindwing with 3—6 orange submarginal lunules, each with a black antemarginal spot. 50% of females show 2—4 submarginal orange lunules on their forewing. Length of forewing 15—18 mm. Underside ground colour pale coffee brown, although sometimes darker. Orange submarginal lunules well developed on both wings. Otherwise as in male.

**Material examined.** Holotype ♂ (forewing length 16.5 mm), Mt. Chelmos (Aroáni Óros in Times Atlas), Greece, 1800 m, 1.VII.1975. J. Brown leg. et coll. Allotype ♀, (forewing length 17 mm), same data as holotype. Paratypes 20 ♂ (forewing lengths 15.5—17.5 mm), same data as holotype but 26.VI.1975-4.VII.1975. 15 ♀ (forewing lengths 15—18 mm), data as for male paratypes.

This subspecies is named with pleasure after Mr. R. F. Bretherton, who was the first to remark on the peculiarity of this species from Mt. Chelmos.

### DISCUSSION

*Brethertoni* is local but often frequent from 1100-2300 m in late May, June and early July. The author has examined *brethertoni* from Mt. Chelmos, Mt. Parnassos, and Mt. Tymphristos, and (as a single specimen) from Mt. Taygetos. *Brethertoni* has not been reported from elsewhere and its populations seem to be separated by about 200 km from those of *P. p. sephirus* Frivaldszky, which fly in Macedonia. *Brethertoni* is larger than *sephirus*, also being more prominently marked and having a distinct white shade proximal to the orange lunules of the underside. *Brethertoni* is also larger and more strongly marked than *P. p. trappi* Verity. Moreover, the larval food plant of *brethertoni* on Mt. Chelmos is *Astragalus parnassi cylleneus* Hayek, whereas that of *trappi* is *Astragalus excapus* Linnaeus.

*Agrodiaetus ripartii pelopi* ssp. nov.

## DESCRIPTION

Male. Upperside similar to *A. r. ripartii* Freyer but forewing slightly more pointed and more square cut, and hindwing broader. Fringes of forewing dark brown and of hindwing brown, although whitish on inner margin. Underside of a browner ground colour than the grey seen in *r. ripartii*. Marginal markings often distinct, allowing for confusion of some specimens with *A. admetus* Esper. Postdiscal spots bold and hindwing shows slight green basal dusting and a distinct white streak.

Female. Upperside ground colour darker than in *r. ripartii*. Usually 1—3 obscure orange spots at anal angle of hindwing. Fringes of forewing pale brown, those of hindwing whitish. Underside as in *r. ripartii* except that ground colour is more brown and that the orange submarginal markings are often distinct, even if not large.

Material examined. Holotype ♂ (forewing length 17 mm), Troupa, Mt. Chelmos, Greece, 1300 m, 3.VII.1975. J. Brown leg. et coll. Allotype ♀ (forewing length 15 mm) data as for holotype. Paratypes 15 ♂ (forewing lengths 15—18 mm), data as for holotype except 29.VI.1974—4.VII.1975. 10 ♀ (forewing lengths 14—16.5 mm), data as for holotype except 1.VII.1975—4.VII.1975.

## DISCUSSION

Specimens of this insect from Mt. Chelmos, Mt. Taygetos and Mt. Tymphristos have been examined. *Pelopi* flies mainly in July and August at about 900—1400 m. *A. ripartii* has also been reported from several sites in N. Greece (e. g. Dacie et al., 1972). However, there seems to be an unrecognised *Agrodiaetus* sp. similar to and often sympatric with *ripartii* in Greece; (this species will be described separately). In view of this, these northern records of *ripartii* should be reconfirmed. In southern Greece, *pelopi* is sympatric and synchronic with *admetus* and with the unrecognised *Agrodiaetus* sp.

## REFERENCES

- Dacie, J. V., M. K. V. Dacie & P. Grammaticos, 1972. Butterflies in Northern and Central Greece, July 1971. *Entomologist's Rec. J. Var.* 84 : 257—266.  
 Seitz, A., 1909. *Die Gross-Schmetterlinge der Erde* 1. Stuttgart.  
 Verity, R., 1953. *Le Farfale Diurne d'Italia*. Firenze.  
 12, Browning Avenue, Sutton, Surrey, England.

MOECK, A. H., 1957 (fascimile herdruk 1975), GEOGRAPHIC VARIABILITY IN SPEYERIA. 48 pags, 7 kaarten, foto's.

Het genus *Speyeria*, de Noordamerikaanse pendant van de palearktische genera *Boloria* en *Clossiana*, behoort tot de moeilijkste van de nearktische dagvlinders. Oorzaak hiervan is de enorme geografische variabiliteit, waardoor de uitersten zo sterk kunnen verschillen, dat ze niet meer als leden van één soort te herkennen zijn. De auteur heeft ongeveer 30 jaar lang zijn zomervakanties besteed aan het verzamelen van materiaal uit een reusachtig gebied, dat zich hoefijzervormig uitstrekt van het westen van de V.S. over het zuiden van Canada naar de oostelijke staten.

De resultaten en conclusies heeft Moeck samengevat in deze publicatie, die hij in 1957 privé uitgaf. De Entomological Reprints Specialists (P.O. Box 77224, Dockweiler Station, Los Angeles, California 90007), heeft er nu een facsimile herdruk van uitgegeven, die te verkrijgen is bij E. W. Classey Ltd., Park Road, Faringdon, Oxon, SN7 7DR, England, voor £ 2.00 — Lpk.