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***GONEPTERYX CLEOPATRA* (LINNAEUS 1767), A NEW SPECIES OF THE BUTTERFLY FAUNA IN MACEDONIA (LEPIDOPTERA: PIERIDAE)**

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Abstract - The authors report on a new species of the rhopaloceran fauna in the Republic of Macedonia, which with this addition numbers 200 species. The species *Gonepteryx cleopatra* (Linnaeus 1767) had been discovered in the butterfly collection of Dr. Jakonov, donated to the museum in 1993.

Izveček - *GONEPTERYX CLEOPATRA* (LINNAEUS 1767), NOVA VRSTA V FAVNI METULJEV MAKEDONIJE (LEPIDOPTERA: PIERIDAE)

Avtorja poročata o novi vrsti v favni dnevnih metuljev Republike Makedonije, ki s tem šteje 200 vrst. Vrsta *Gonepteryx cleopatra* (Linnaeus 1767) je bila odkrita v zbirki metuljev dr. Jakonova, ki so jo leta 1993 darovali muzeju.

For many years the physician Dr. Slavoljub Jakonov collected and investigated butterflies in Macedonia. He searched for them in all parts of Macedonia and neighbouring regions, which resulted in a large collection of 5353 specimens and 144 species of diurnal butterflies. After his death his family donated the collection to the Macedonian Museum of Natural History in Skopje.

The genus *Gonepteryx* Leach 1815 had been known to be represented in Macedonia by two species, *G. rhamnii* L. and *G. farinosa* Zeller (Thurner 1964, Scheider and Jakšić 1989). Thurner (1964) supposed that the third species, *G. cleopatra* L., could be found in Gevgelija. While studying Dr. Jakonov's collection of Rhopalocera in the museum, we determined that this species is actually present in

Macedonia but in a different locality. There are 54 specimens in the collection that by morphological studies prove to be *G. cleopatra* L. In five male individuals the genital preparations had been made. The males, numbering 36 specimens, can also be identified by the orange colour of the dorsal side of the front wings. The females of all three *Gonepteryx* species are very similar, but with careful study we identified 18 females of this species. We used works by Higgins (1975), Nekrutenko (1968), Kuderna (1986) and Reissinger (1986) as reference guides in the determination. With this addition, the number of known diurnal butterfly species in Macedonia rises to 200.

Dr. Jakonov collected *G. cleopatra* from the 17th to 23rd April 1983 in the larger vicinity of Gorica near Ohrid Lake, at the foot of the Galičica mountain, 700 to 750 m above sea level (UTM: DL4: DL83, DL94).

Gonepteryx cleopatra overwinters in an adult stage and has a long lifespan for a butterfly - almost a year. Specimens caught in April belong to the overwintered generation. The species is strictly Mediterranean, predominantly bound to the coastal zone. Its presence in the Ohrid basin, even at a relatively high altitude - 700 m - is surprising. Only in the Iberian and rarely the Apennine peninsula isolated populations of this species are found in the interior. It is present only in the coastal zone in the eastern Mediterranean. But it is very mobile, an occasional migrator. As such it probably wandered into the Ohrid basin, but obviously did not survive there, as it was not observed in later years, not even by its founder, Dr. Jakonov. Some of its nourishing plants (*Rhamnus* sp.), however, are found in the area, but their presence in the vicinity of Gorica should be investigated. To confirm the successful colonization of the area by *G. cleopatra*, the new generation of adults should be found in June or later, and larval stages should be present.

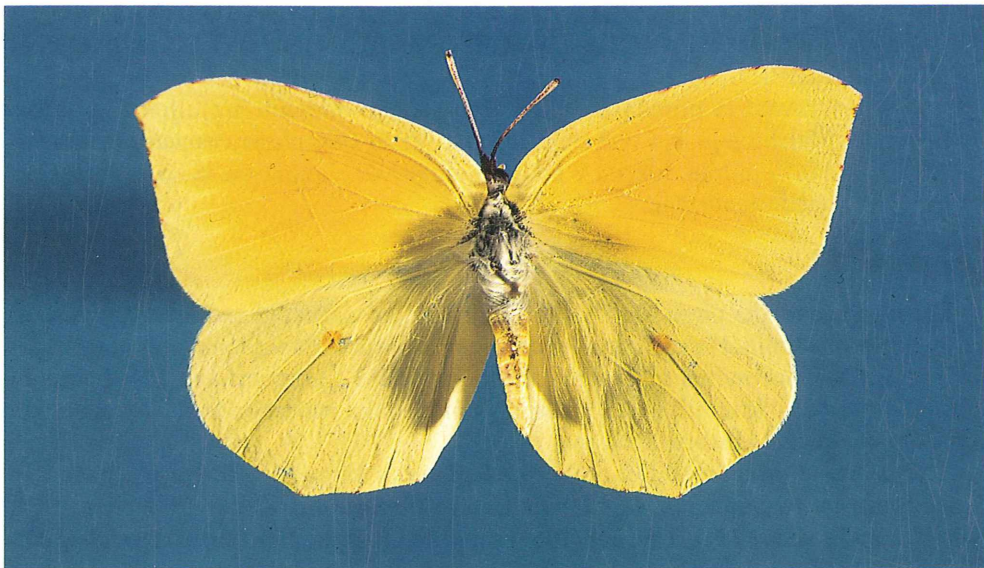


Fig. 1: *Gonepteryx cleopatra* L., male.

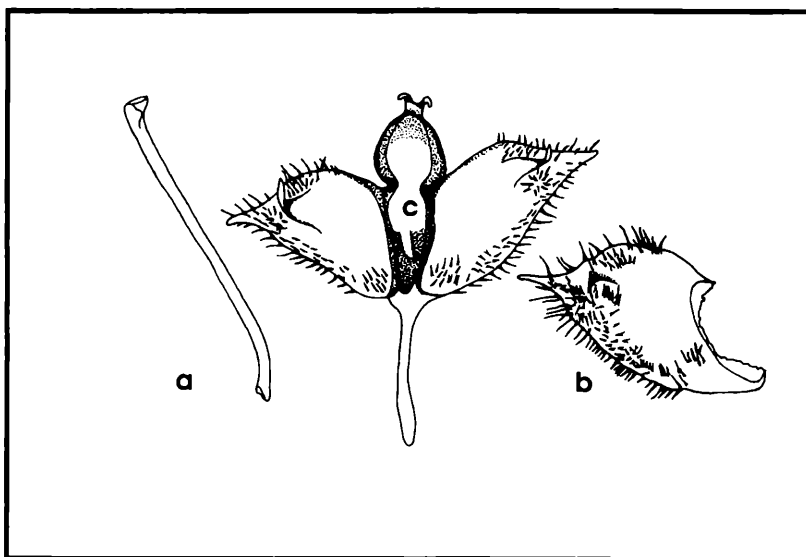


Fig. 2: Male genital preparation, a: penis, b: valve, c: uncus and tegumen.

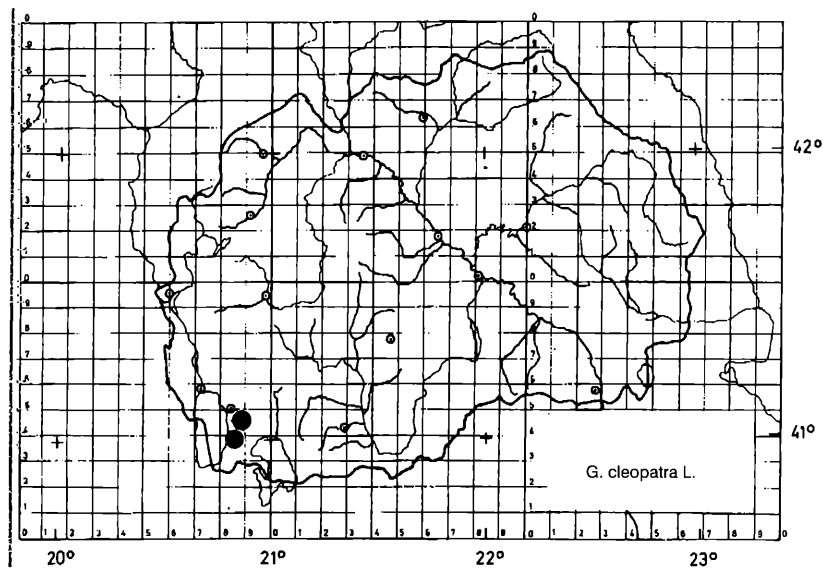


Fig. 3: The distribution of *G. cleopatra* L. in Macedonia.

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References

- Higgins L. G.**, 1975: The Classification of European Butterflies. Collins St. James's Place, London, 320 pp.
- Kuderna O.**, 1975: A revision of the genus *Gonepteryx* Leach (Lep. Pieridae). *Entomologist's Gaz.*, 26: 3-37.
- Nekrutenko Y. P.**, 1968: Phylogeny and geographical distribution of the genus *Gonepteryx* (Lepidoptera, Pieridae). Naukova Dumka, Kiev, 128 pp. + 20 pls.
- Reissinger E. J.**, 1989: Checkliste Pieridae Duponchel, 1835 (Lepidoptera) der Westpalaearktis. *Atalanta*, 20: 149-185.
- Scheider P., P. Jakšić**, 1989: Die Tagfalter von jugoslawisch Mazedonien, Diurna (Rhopalocera und Hesperidae). Ljubljana, 199 pp.
- Thurner J.**, 1964: Die Lepidopteroфаuna Mazedoniens I. (Rhopalocera - Grypocera und Noctuidae). Prirodnaučen muzej na Makedonija, Skopje. Posebno izdanje No. 1.

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