

The second record of *Lasiommata petropolitana* (Fabricius, 1787) in Croatia

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Abstract. After the first confirmed record of *L. petropolitana* in Croatia on Mt Snježnik, another specimen of this species was caught on the nearby Obruč Mt in May 2010. This record expands its known area of occurrence in Croatia to the northwest and suggests that *L. petropolitana* could in the future be found on other mountains of Gorski Kotar and in their surrounding areas.

Keywords: *Lasiommata petropolitana*, Obruč, Croatia, distribution

Izveček. DRUGA NAJDBA METULJA LASIOMMATA PETROPOLITANA (FABRICIUS, 1787) NA HRVAŠKEM – Po prvi potrjeni najdbi vrste *Lasiommata petropolitana* na Snježniku (Hrvaška) je bil maja leta 2010 blizu Obruča ulovljen nov primerek te vrste. Najdba povečuje poznano razširjenost vrste na Hrvaškem proti severozahodu in nakazuje potencialno prisotnost vrste tudi na ostalih vrhovih Gorskega Kotarja in v njihovi okolici.

Ključne besede: *Lasiommata petropolitana*, Obruč, Hrvaška, razširjenost

Lasiommata petropolitana has a scattered distribution in Europe. According to Tolman & Lewington (2008), its range of occurrence spreads from the Pyrenees to Fennoscandia, North Turkey, North Siberia and Amur. In Europe, it is a local species present in the higher mountain ranges of South Europe, from the Pyrenees through the Central Alps, Balkan Mountains and Northern Greece (Tolman & Lewington 2008). The northern populations of *L. petropolitana* in Europe are found in low altitude forests (Higgins & Hargreaves 1983), while southern populations only occur at altitudes above 500 m in the higher mountain ranges (Gotthard 1998). The butterflies fly in one or two generations from April to September. The larvae feed on various grasses of the genera *Festuca*, *Poa* and *Dactylis* (Higgins & Hargreaves 1983, Benz *et al.* 1987).

In the »Distribution maps of the butterflies of Yugoslavia« (Jakšić 1988), *L. petropolitana* was recorded in the neighbouring states of Slovenia and Bosnia and Herzegovina, while no data was presented for Croatia. Nevertheless, during the last 100 years, *L. petropolitana* has been recorded in Croatia on five different locations: above Samobor (Vukotinović 1879, Grund 1916), near Vinkovci (Koča 1901), in Dalmatia (Stauder 1922), at Beli on the island of Cres (Micevski & Micevski 2006), and on Mt Snježnik (Mihoci & Šašić 2009). However, according to Mihoci & Šašić (2009), the finding of *L. petropolitana* on Mt Snježnik is the first reliable record of this species in Croatia. All other findings are probably misidentifications, as there is no suitable habitat present at these sites, or the description of the locality is too vague.

In June 2009, a short visit to Mt Snježnik resulted in the find of another specimen of *L. petropolitana*, which confirmed the true existence of a resident population of this particular species in Croatia. But even so the question remained whether *L. petropolitana* had an isolated population on Snježnik Mt or it was present on other mountains of Gorski Kotar as well. While a part of Gorski Kotar, Grobničke Alpe above the city of Rijeka, was researched in May 2010, a specimen of *L. petropolitana* was found on a trail leading from the Trstenik valley to the peak of Obruč Mt at approximately 1230 m a.s.l. The specimen was flying along a stony edge of a macadam road and was observed while resting on a stone. After a long hunt, the specimen was caught, identified as *L. petropolitana* and placed in private butterfly collection (Koren, Pazin). The determination is based on Tolman & Lewington (2008) and comparison made with the specimen previously found on Mt Snježnik and with the one recorded by Mihoci & Šašić (2009). Both sites of *L. petropolitana* in Croatia are shown in Fig. 1. The finding of the Northern Wall Brown on Mt Obruč expands the known area of its occurrence in Croatia by approximately 20 kilometres to the northwest and suggests that *L. petropolitana* could be found on other mountains of Gorski Kotar as well.

During this short field trip, the following butterfly species were also recorded: *Erynnis tages* (Linnaeus, 1758), *Ochlodes sylvanus* (Esper, 1777), *Iphiclides podalirius* (Linnaeus, 1758), *Papilio machaon* Linnaeus, 1758, *Pieris rapae* (Linnaeus, 1758), *Pieris napi* (Linnaeus, 1758), *Aricia agestis* (Denis & Schiffermüller, 1775), *Polyommatus icarus* (Rottemburg, 1775), *Vanessa atalanta* (Linnaeus, 1758), *Melitaea athalia* (Rottemburg, 1775), *Pararge aegeria* (Linnaeus, 1758), *Lasiommata megera* (Linnaeus, 1767), and *Coenonympha pamphilus* (Linnaeus, 1758).

Mt Obruč has never been a target of any butterfly survey, and no published records exist about its fauna to our knowledge, so further research of this area is required.

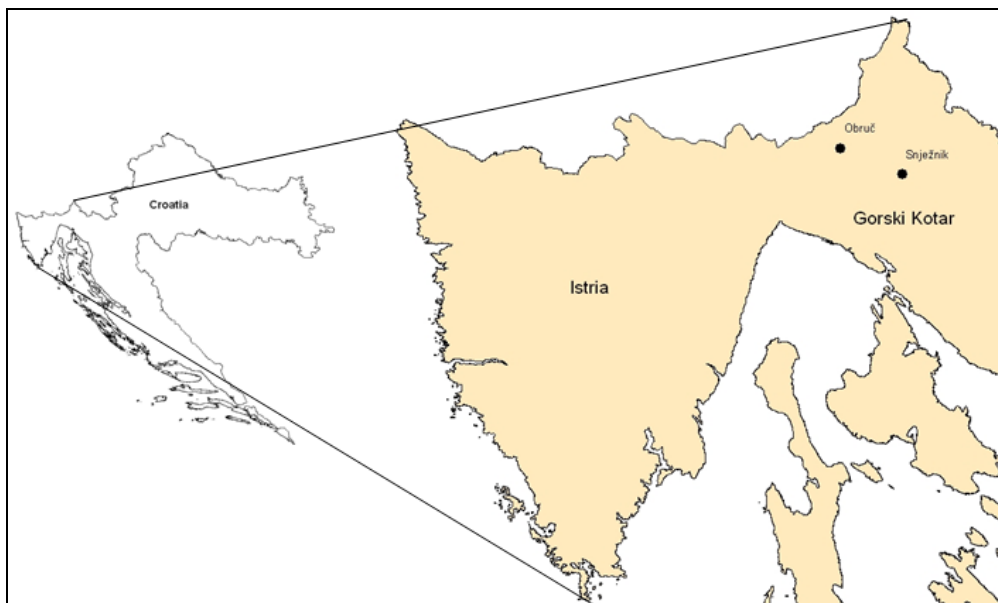


Figure 1. Map of Croatia with the confirmed sites of *L. petropolitana* (black dots).
Slika 1. Zemljevid Hrvaške s potrjenimi nahajališči *L. Petropolitana* (črne pike).

References

- Benz E., Bryner R., Buser H., Etmüller W., Geiger W., Joos R., Jost B., Jutzeler D., Pleisch E., Reser L., Schiess-Bühler H., Schmid J., Sonderegger P., Stierli E., Wymann H.P., Ziegler H. (1987): Tagfalter und Ihre Lebensräume. Schweizerischer Bund für Naturschutz, Basel.
- Gotthard K. (1998): Life history plasticity in the satyrine butterfly *Lasiommata petropolitana*: investigating an adaptive reaction norm. *Journal of Evolutionary Biology* 11: 21–39.
- Grund A. (1916): Beiträge zur kroatischen Lepidopteren-Fauna. *Glasnik Hrvatskog prirodoslovnog društva* 28 (1–2): 95–105; (3–4): 114–168.
- Higgins L.G., Hargreaves B. (1983): *The Butterflies of Britain and Europe*. William Collins Sons, London, England, 256 pp.
- Jakšić P. (1988): Privremene karte rasprostranjenosti dnevnih leptira Jugoslavije (Lepidoptera, Rhopalocera). *Jugoslavensko entomološko društvo. Posebna izdanja* 1, 70 pp.
- Koča G. (1901): Prilog fauni leptira (Lepidoptera) Hrvatske i Slavonije. *Glasnik Hrvatskog naravoslovnog društva* 13: 1–67.
- Micevski N., Micevski B. (2006): Contribution to the knowledge of the fauna of butterflies of Cres island (Republic of Croatia). *Biologia Macedonica* 57/58: 99–105.

Mihoci I., Šašić M. (2009): Occurrence of the satyrine butterfly *Lasiommata petropolitana* (Fabricius, 1787) confirmed in Croatia. *Nat. Croat.* 18(1): 175–180.

Stauder H. (1922): Die Schmetterlingsfauna der illyro-adriatischen Festland- und Inselzone (Faunula Illyro-Adriatica). *Zeitschrift für wissenschaftliche Insektenbiologie* 17(9/12): 165-176.

Tolman T., Lewington R. (2008): *Butterflies of Britain & Europe*. Harper Collins Publishers, London, 384 pp.