

Acta entomologica serbica, 2014, 19(1/2): 79-82

UDC 595.782(497.16)

Short communication

ZYGAENA BRIZAE (ESPER, 1800), A NEW SPECIES FOR MONTENEGRO (LEPIDOPTERA: ZYGAENIDAE)

ANA NAHIRNIĆ¹ and GERHARD M. TARMANN²

¹ University of Belgrade, Faculty of Biology, Studentski trg 16, 11000 Belgrade, Serbia

E-mail: ananahirnic@gmail.com

² Tiroler Landesmuseen, Ferdinandeum, Naturwissenschaftliche Abteilung, Feldstrasse 11a, A-6020 Innsbruck, Austria

E-mail: g.tarmann@tiroler-landesmuseen.at

Zygaena brizae (Esper, 1800) is a small species of the genus *Zygaena* Fabricius, 1775. Its body is black and densely haired. The ground colour of the forewings is translucent black with three red streaks. The hindwings are red with a black border. *Z. brizae* has one generation per year and is on the wing from May to July depending on region and altitude. It inhabits grassy habitats and woodland clearings. The larval foodplants belong to the family Asteraceae (NAUMANN *et al.*, 1999).

Zygaena brizae is a ponto-mediterranean species that occurs in France, Italy, Austria, Poland, Czech Republic, Hungary, the Balkan Peninsula, Turkey, Syria, Lebanon, Israel, Russia, Ukraine, Georgia, Armenia and Azerbaijan (NAUMANN *et al.*, 1999). It has not been recorded for Montenegro so far. Distribution maps in NAUMANN *et al.* (1984), NAUMANN *et al.* (1999) and FREINA & WITT (2001) show that *Z. brizae* is distributed throughout the Balkan Peninsula but there is no text to support its presence in Montenegro. In neighboring countries it is present, but rare, in Croatia (DUPONCHEL, 1844-1846; CARRARA, 1846; MANN, 1869; STAUDER, 1921), Bosnia and Herzegovina (REBEL, 1904; SCHAWERDA, 1916; HOLIK, 1937; RAUCH, 1977; LELO, 2004), Serbia (JAKŠIĆ & RISTIĆ, 1999; NAHIRNIĆ *et al.*, 2012) and Albania (DABROWSKI, 1996; HOFMANN & TREMEWAN, 1996; FREINA & WITT, 2001). There are about 30 publications which contain data about Zygaenidae of Montenegro (e.g. BRETHERTON, 1973; CARNELUTTI & MICHIELI, 1958; JAKŠIĆ, 1990; REBEL, 1913; VASIĆ *et al.*, 1990, NAHIRNIĆ *et al.*, 2011b). In most of these papers special attention was given to Mt. Durmitor, Tara Canyon and the coastal region.

During the last week of June 2013 the Danish Lepidoptera Society conducted research on Lepidoptera in the Durmitor National Park. This excursion was accompanied by the first author of this paper. As unfavorable weather conditions on Durmitor lasted two days, we went southward in order to find suitable conditions for the collecting of day-flying Lepidoptera. We visited several localities between Mt. Durmitor and the town of

Nikšić. There are no data available about Zygaenidae of this region of Montenegro.

One male specimen of *Zygena brizae* (Fig. 1) was found on a meadow near the village Pod-Dažnik in the foothill of Đurkovo brdo located in central Montenegro, 10 km NE of Nikšić (N 42°49'42", E 19°03'57", 1340 m a.s.l.) (Fig. 2) on 27 June 2013 (leg. Nahirić A.). The meadow is situated near a beech forest; it is regularly mowed and with no signs of succession. The collected specimen can be referred to the subspecies *Zygena brizae dvarica* Rauch, 1977. This subspecies is characterized by a very broad hindwing border which is broadest at the apex. Streaks on the forewing are dark red and narrow. This specimen is stored in the special collection of Zygaenidae in the Tiroler Landesmuseen, Ferdinandeum, Innsbruck, Austria.

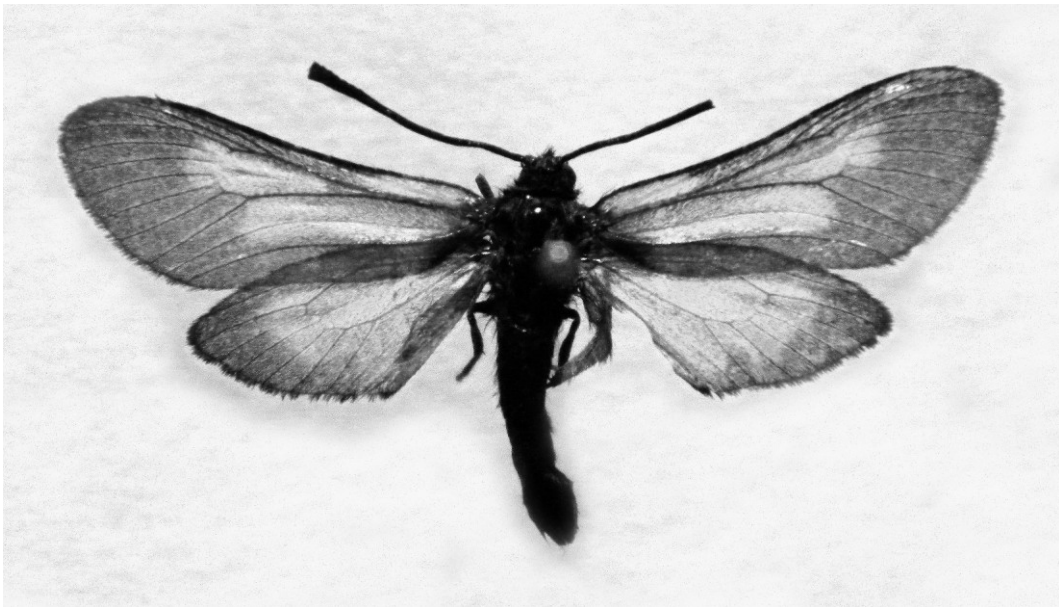


Figure 1. *Zygena brizae* (Esper, 1800) ♂ from Pod-Dažnik.

As a result of the project Zygaenidae of the Balkan Peninsula, a few Zygaenid species were newly discovered for Montenegro in the last few years (NAHIRIĆ *et al.*, 2011a; NAHIRIĆ *et al.*, 2013). The present discovery of another new species in the central part of Montenegro underlines the lack of knowledge of the fauna of Montenegro. More undiscovered species can be expected in this country. Therefore more regions should be explored. Despite intensive research on Zygaenidae during the project Zygaenidae of the Balkan Peninsula *Z. brizae* remains very rare on the Balkan Peninsula. More attention should be paid to its habitats and population size.

Acknowledgements. We thank Arne Lykke Viborg, Torben Friis-Larsen and Ketil Mathiasen Viborg (all Lepidopterological Society, Denmark) for help during the field work in Montenegro. Hannes Kührtreiber we thank for compiling the map. The fieldwork was also supported by the scientific society Biodat Alpin (Innsbruck, Austria).

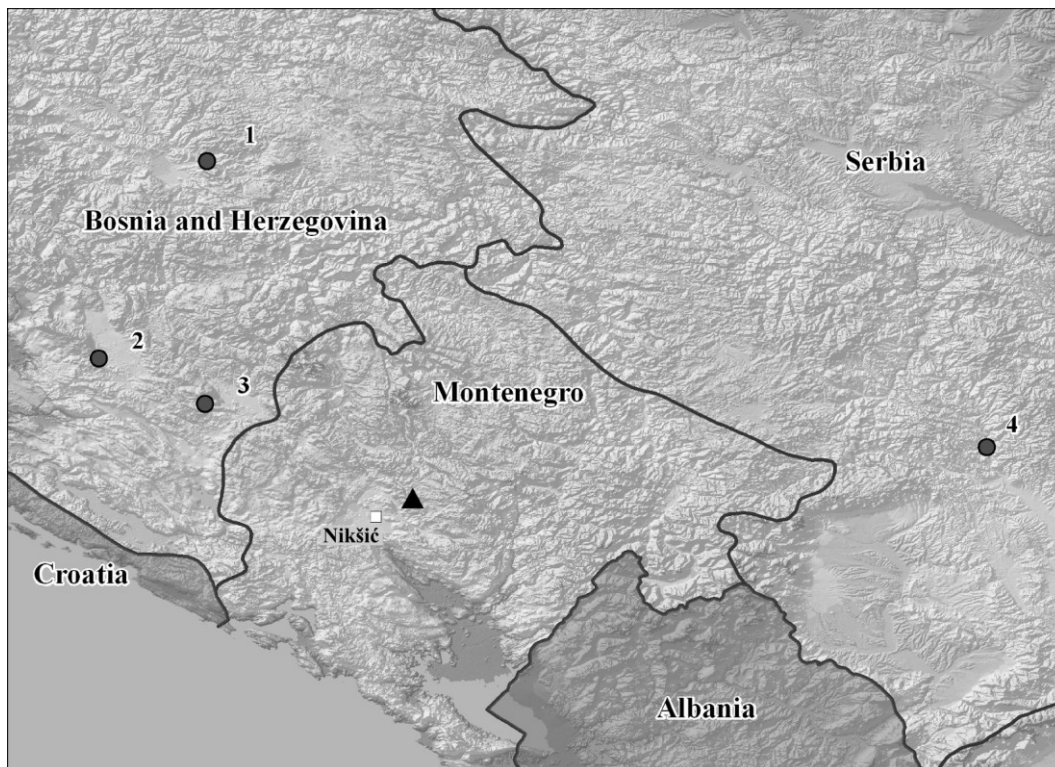


Figure 2. Distribution of *Zygaena brizae* (Esper, 1800) in Montenegro (triangle) adjacent areas (dots): 1) Sarajevo, 2) Nevesinje, 3) Vučija bara, 4) Košutovački potok (Ibar gorge). For Croatia and Albania no exact localities were published.

- References:** BRETHERTON, R.F., 1973. *Entomologist's Rec. J. Var.*, 85: 1-12; CARNELUTTI, J. & MICHELI, Š., 1958. *Fragm. Balc.*, II, 10(44): 67-81; CARRARA, F., 1846. *La Dalmazia descritta*. Fratelli Battara tipografi editori, Zara, 130 pp.; DABROWSKI, J., 1996. *Zygaenidae*. In: Karsholt, O. & Razowski, J. (eds.): *The Lepidoptera of Europe*, pp.: 123-125; DUPONCHEL, M.P.A.J., 1844-1846. *Catalogue méthodique des lépidoptères d'Europe distribués en familles, tribus et genres, avec l'exposé des caractères sur lesquels ces divisions sont fondées, et l'indication des lieux et de s époques où l'on trouve chaque espèce, pour servir de complément et de rectification à l'histoire naturelle des lépidoptères de France, devenue celle des lépidoptères d'Europe par les supplémens qu'on y a ajoutés*. Méquignon-Marvis, Paris, 523 pp.; DE FREINA, J. & WITT, T., 2001. In: de Freina, J. & Witt, T. (eds.): *Die Bombyces und Spingies der Westpalaearktis (Insecta, Lepidoptera)*, Band 3. Edition Forschung & Wissenschaft Verlag GmbH, München, 575 pp.; HOLIK, O., 1937. *Mitt. Münch. ent. Ges.* 27: 1-10; JAKŠIĆ, P., 1990. In: Nonveiller, G. (ed.): *The fauna of Durmitor, part 3. Special Editions of the Montenegrin Academy of Sciences and Arts*, 23/14: 203-232.; JAKŠIĆ, P. & RISTIĆ, G., 1999. *Acta ent. serbica*, 4(1/2): 63-74; LELO, S., 2004. *Revision of Rebel's List of Lepidoptera of Bosnia and Herzegovina*. Coron's, Sarajevo, 295 pp.; MANN, J., 1869. *Verh. K.K. Zool.-Bot. Ges. Wien*, XIX: 373-388; NAHIRNIĆ, A., JAKŠIĆ, P. & TARMANN, G.M., 2011. *Acta entomol. slov.*, 19(2): 145-154; NAHIRNIĆ, A., TARMANN, G.M. & JAKŠIĆ, P., 2011. In: Anonymous (ed.): *Proceedings of the conference Nature Protection in XXI century, 20-23 September 2011, Žabljak, Montenegro*. Zavod za zaštitu prirode Crne Gore i Ministarstvo održivog razvoja i turizma, Podgorica, 2: 451-455; NAHIRNIĆ, A., TARMANN, G.M. & JAKŠIĆ, P., 2012. *Bulletin of the Natural History Museum*, 5: 73-94; NAHIRNIĆ, A., TARMANN, G.M. & JAKŠIĆ, P., 2013. In: Anonymous (ed.): *Programme and Abstracts XVIII*

European Congress of Lepidopterology, 29 July - 4 August 2013, Blagoevgrad, Bulgaria. Pensoft, Sofia, p. 58; NAUMANN, C.M., FEIST, R., RICHTER, G. & WEBER, U., 1984. *Thes. Zool.*, 5: 1-45; NAUMANN, C.M., TARMANN, G.M. & TREMEWAN, W.G., 1999. *The Western Palearctic Zygaenidae*. Apollo Books, Stenstrup, 304 pp.; RAUCH, H., 1977. *Z. Arb. Gem. Öst. Ent.*, 28(1/2): 31-32; REBEL, H., 1904. *Ann. K. K. Naturhist. Hofmus.* XIX: 97-377; REBEL, H., 1913. *Ann. K.K. Naturhist. Hofmus.*, XXVII: 281-334; SCHAWERDA, K., 1916. *Verh. Zool.-Bot. Ges. Wien*, LXVI: 227-254; STAUDER, H., 1921. *Soc. Ent. Stuttgart*, 36(1): 1-4, (2): 6-7; VASIĆ, K., TOMIĆ, D., CARNELUTTI, J., ZEČEVIĆ, M. & KRANJČEV, R., 1990. *In: Nonveiller, G. (ed.): The fauna of Durmitor, part 3. Special Editions of the Montenegrin Academy of Sciences and Arts, vol. 23/14: 99-157.*

ZYGAENA BRIZAE (ESPER, 1800) НОВА ВРСТА ЗА ЦРНУ ГОРУ (LEPIDOPTERA: ZYGAENIDAE)

АНА НАХИРНИЋ и ГЕРХАРД М. ТАРМАН

Извод

Zygaena brizae (Esper, 1800) је релативно мала врста рода *Zygaena* Fabricius, 1775. Тело је црно и густо длакаво. Основна боја предњих крила је црна са три црвене пруге. Има једну генерацију годишње и лети од маја до јула зависно од подручја и надморске висине. Насељава травна станишта и шумске пропланке. Нутритивне биљке гусенице су из фамилије Asteraceae (NAUMANN *et al.*, 1999).

Zygaena brizae је понтско-медитеранска врста које се може наћи у Француској, Италији, Аустрији, Пољској, Чешкој, Мађарској, Балканском полуострву, Турској, Сирији, Либану, Израелу, Русији, Украјини, Грузији, Јерменији и Азербејџану (NAUMANN *et al.*, 1999). Није била забележена у Црној Гори до сада. У суседним земљама присутна је, али ретка, у Хрватској (DUPONCHEL, 1844-1846; CARRARA, 1846; MANN, 1869; STAUDER, 1921), Босни и Херцеговини (REBEL, 1904; SCHAWERDA, 1916; HOLIK, 1937; RAUCH, 1977; LELO, 2004), Србији (JAKŠIĆ & RISTIĆ, 1999; NAHIRNIĆ *et al.*, 2012) и Албанији (DABROWSKI, 1996; HOFMANN & TREMEWAN, 1996).

Један мужјак *Zygaena brizae* је пронађен на ливади близу села Под-Дажник у подножју Ђурковог брда које се налази у централном делу Црне Горе, 10 км североисточно од Никшића (N 42°49'42", E 19°03'57", 1340 m н.в.) 27. јуна 2013 године (лег. Нахирнић А.). Овај примерак припада подврсти *Zygaena brizae drvarica* Rauch, 1977.