

CONTRIBUTION TO THE KNOWLEDGE OF THE GEOMETRIDAE (LEPIDOPTERA) FAUNA OF THE KOTOR VAROŠ AREA

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Abstract

Biodiversity in Bosnia and Herzegovina is highly diverse and abundant, but it has been barely explored in the past century or even longer. The investigation of Geometridae in the Kotor Varoš area has been going on for more than ten years. This study provides a list of species from the aforementioned moth family along with their systematic affiliation. For the purposes of collecting, a 120W Hg (mercury vapor) lamp was used, along with a 3 x 2 m sheet, photographic equipment for macrophotography and a binocular microscope for the analysis of genitalia. In total 135 species have been confirmed, which have been further divided into four subfamilies: Sterrhinae (35), Larentiinae (43), Ennominae (48) and Geometrinae (9). Within those subfamilies, the species have been further divided according to tribes. The largest number of resident moth species has been recorded at the Baština site, where night surveying equipment was used. Some species have been discovered during the day not only at the same locality, but also at the other localities in the Kotor Varoš area. Long-term observations provided insights into seasonal activity and variation in species occurrence and abundance. *Idaea* Treitschke, 1825, *Scopula* Schrank, 1802 and *Cyclophora* Hübner, 1822 have the most common genera. *Trichopteryx polycommata* (Denis & Schiffermüller, 1775) represents the first record for the fauna of Bosnia and Herzegovina.

Keywords: Geometridae, moths, biodiversity, Baština

INTRODUCTION

Geometridae (Lepidoptera) family inhabit nearly all terrestrial ecosystems, ranging from tropical rainforests to temperate and colder regions, with the highest diversity recorded in tropical areas (Holloway, 1997). Due to their pronounced sensitivity to changes in habitat and climatic conditions, they are frequently used as bioindicators in ecological research (Hausmann, 2001). The family name derives from the characteristic mode of locomotion of the larvae, which, due to a reduced number of abdominal prolegs, move in a looping manner resembling the measurement of the substrate (Hausmann, 2001). The larvae, commonly known as “inchworms,” possess only two pairs of abdominal prolegs, clearly distinguishing them from most other caterpillars. Their bodies are elongated and often resemble twigs, representing a form of mimicry and an important adaptation for predator avoidance (Holloway, 1997). Adult

moths are generally of medium size, with a wingspan most commonly ranging between 20 and 50 mm. The wings are broad, relatively thin, and are often held flat at rest. Their coloration is usually subdued, with transverse lines and patterns that provide excellent camouflage against tree bark, leaves, or lichens (Leraut, 2009). The body is slender, while the antennae are often sexually dimorphic (Scoble, 1999). It is known that Geometridae species can damage low vegetation, forest trees, and cultivated plants (Koyuncu and Kütük, 2020). Some species may have a significant economic impact as forest defoliators (Scoble, 1999). Most species are nocturnal and active at dusk or during the night, and adults are often attracted to light sources, making them suitable for studies using light traps (Hausmann, 2001). The first studies of moths in the territory of Bosnia and Herzegovina began at the start of the 20th century. The foundations of this research were laid by Rebel (Rebel, 1904), while additional contributions were made by Schawerda and Stauder, as cited in the revision of Rebel's list (Lelo, 2004). In the second half of the 20th century, studies on Tortricidae in Bosnia and Herzegovina can be highlighted (Batinica, 1967). A major contribution to the synthesis of all previous research is presented in the seminal work "Revision of Rebel's list of Lepidoptera of Bosnia and Herzegovina" (Lelo, 2004). The works of Koren and Kulijer provide significant faunistic additions to the study of both diurnal and nocturnal Lepidoptera of Bosnia and Herzegovina (Koren and Kulijer, 2016, 2020, 2023). The family Geometridae comprises more than 23,000 species worldwide (Scoble and Hausmann, 2007), with 988 species recorded in Europe (Hausmann *et al.*, 2007) and 687 species in Turkey (Koçak and Kemal, 2018). In neighboring countries, estimates range from 300 to 500 species. According to the revision of Rebel's list, 283 species have been recorded in Bosnia and Herzegovina (Lelo, 2004), although this number should be supplemented with more recent findings (Trajković *et al.*, 2019).

The area of Kotor Varoš represents a biodiversity-poorly explored region, particularly in terms of faunistic and general biodiversity research. Previous studies have mostly focused on specific groups of organisms and limited localities. Among the more significant contributions are studies on the flora and vegetation of Mt. Uzlomac (Brujić, 2004), investigations of the butterfly fauna of the Bosnian uplands (Sijarić, 1996), as well as research on the butterflies of Mt. Uzlomac and Mt. Čemernica (Filipović, 2021a, b). In addition to entomological studies, important contributions to the understanding of biodiversity in this area include research on the macrozoobenthos of the Cvrčka River (Dmitrović, 2017), studies of the ichthyofauna of the tributaries of the Vrbanja River (Dekić, 2010), and investigations of endemic leeches at the Vilenska vrela locality (Grosser *et al.*, 2014).

MATERIALS AND METHODS

Research on moths in the Kotor Varoš and Baština area has been conducted continuously from 2012 to 2026. The study was primarily carried out at a fixed site in Baština, where equipment for nocturnal observation was installed (in the courtyard of a family house). Some species were also recorded during daytime field surveys, while a smaller number were observed in other parts of the municipality. Sampling was conducted throughout the entire period of seasonal activity, although the intensity of sampling varied among years. For the study, a white sheet measuring 3 × 2 m was used, as well as previously a white wall of the

house and a white roller shutter on the garage window. Clothespins were used for fastening, and a rope served as support. Photographic equipment was used for recording and documentation. Light sources varied over the years, ranging from standard bulbs of different wattages to mercury vapor (Hg UV) lamps of 120 W, 160 W, and 250 W. For imaging, Canon cameras (R6, 6D, 2000D, and 1100D) were used, equipped with a 100 mm f/2.8 macro lens, close-up filters, and a ring flash. The following settings were commonly applied: aperture f/14, ISO 200, and exposure time 1/80 s. Some specimens requiring more detailed analysis were collected and preserved for further examination and identification. A stereomicroscope was occasionally used, along with the necessary materials and equipment for genitalia preparation. Data on species composition, population abundance, altitude, weather conditions, and GPS coordinates (Google Earth) were recorded. Identification was based on appropriate taxonomic keys, primarily The Geometrid Moths of Europe (Hausmann, 2001, 2004), supplemented by online resources including Biologer (Trajković *et al.*, 2019), Lepiforum, UKMoths, Alciphron (Hric, 2014–2022), and Moths and Butterflies of Europe and North Africa (Mazzei *et al.*, n.d.). The taxonomy and systematic arrangement of the recorded species follow the checklist of European Lepidoptera (Karsholt and Razowski, 1996).

Study area

Baština (283 m a.s.l.; 44°38'08" N, 17°22'59" E) is a suburban settlement in the municipality of Kotor Varoš, located in the central part of Bosnia and Herzegovina, within the Republic of Srpska (Figure 1). It is situated in the valley of the Vrbanja River, approximately 30 km from Banja Luka. The settlement is surrounded by mesophilous and hygrophilous meadows, agricultural land, and fragmented forests composed primarily of oak, hornbeam, and alder. A small stream flows through the area, and wetlands and marshy habitats are also present. The terrain is predominantly flat, gradually rising and transitioning into hilly landscapes towards the slopes of Mt. Uzlomac.



Figure 1. Municipality of Kotor Varoš, Baština

RESULTS AND DISSCUSION

This study of moths in the Kotor Varoš area represents a significant contribution to the knowledge of the entomofaunal biodiversity of Bosnia and Herzegovina, particularly concerning this poorly studied and insufficiently investigated group of Lepidoptera. All recorded species represent the first records for the municipality of Kotor Varoš. The research showed that some species exhibit consistent annual occurrence, with high numbers of individuals and one or more generations per year. Other species were recorded only occasionally and rarely attracted to light sources. The majority of recorded species belong to the Palearctic distribution type, while other distribution types are less represented. For each species, data on localities and observation dates are provided, while sex ratios were recorded occasionally.

Within the investigated geometrid fauna (Lepidoptera: Geometridae), a total of 135 species were recorded, classified into 4 subfamilies (Figure 2) and 34 tribes. In comparison with the checklist of nocturnal moths of Bosnia and Herzegovina, this number accounts for nearly 50% of the geometrid biodiversity (Lelo, 2004). Comparatively, moth diversity studies in Croatia revealed 181 geometrid species in Risnjak National Park (Koren, 2024) and 446 moth species in the Donji Kamenjak and Medulin Archipelago area (Koren, 2022). In a ten-year study conducted in the Užice region of Western Serbia, a total of 231 geometrid species was recorded (Dodok, 2006).

Differences in species richness and composition compared to other regional studies are driven by variations in habitat types and geographical features. The most species-rich subfamily is Ennominae, with 48 species (35.6%) distributed across 12 tribes, among which the tribe Boarmiini dominates with 17 species, followed by Epionini (7) and Ennomini (6). The subfamily Larentiinae comprises 43 species (31.9%) arranged in 13 tribes, with Eupitheciini (9 species), Xanthorhoini (6 species), and Epirrhoini (5 species) being the most species-rich. The subfamily Sterrhinae consists of 35 species (25.9%) classified into 5 tribes, where the tribe Sterrhini exhibits marked dominance with 15 species, followed by Cosymbiini (9) and Scopulini (8). The least represented subfamily is Geometrinae, with a total of 9 species (6.7%) distributed across 4 tribes, the most species-rich of which is Hemitheini with 5 species.

The obtained results demonstrate high consistency with the structure of geometrid fauna in the broader regional context (Serbia, Croatia, and other investigated localities in Bosnia and Herzegovina), where the subfamilies Ennominae and Larentiinae consistently constitute the dominant proportion of the total diversity within this family. The genera with the highest number of recorded species were *Idaea* (15 species), *Cyclophora* (9 species), *Scopula* (8 species), and *Eupithecia* Curtis, 1825 (6 species). The identification of *Chlorissa cloraria* (Hübner, 1813) and *Chlorissa viridata* (Linnaeus, 1758) was not fully confirmed due to the lack of genetic analyses; however, based on certain morphological characteristics, it is assumed that both species are present in the study area. *Trichopteryx polycommata* (Denis & Schiffermüller, 1775) represents the first record for the fauna of Bosnia and Herzegovina, as it has not been previously documented in national checklists or database repositories (e.g., Lelo, 2004; Trajković *et al.*, 2019).

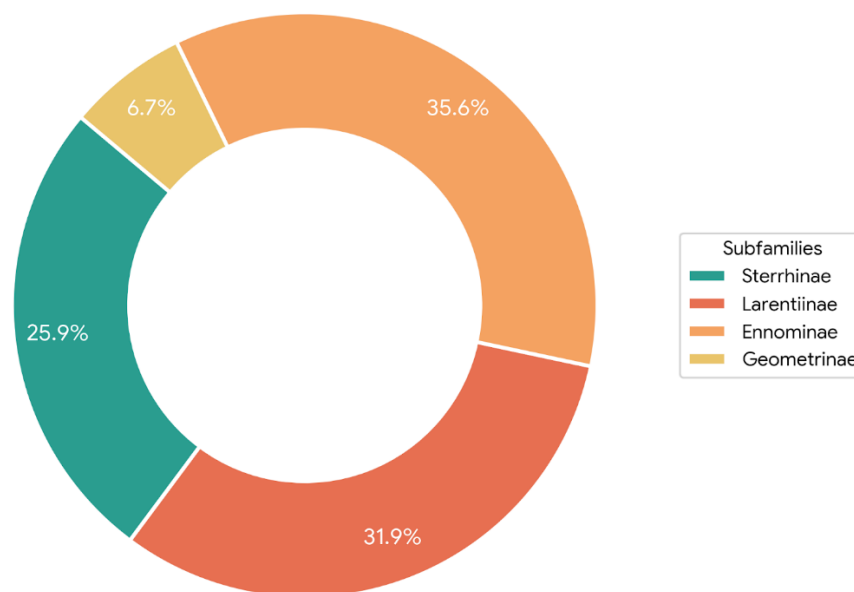


Figure 2. Species representation by subfamilies of Geometridae

Sterrhinae

Timandriini

Timandra comae (Schmidt, 1931):

Baština, 11.7., 16.8., 21.8.2013., 19.8.2014., 9.7., 16.8.2015., 4.7., 22.7., 25.8.2017. 2♂, 10.5.2018., 22.6. 1♂, 3.7. 1♂, 14.7. 1♂, 31.7. 1♂, 24.8.2019. 3♂, 6.9.2020. 1♀, 19.6.2022. 1♂, 5.7.2022. 2♂, 11.7. ♂, 6.8.2023. 2♂, 9.7.2024. 1♂,

Scopulini

Scopula immutata (Linnaeus, 1758):

Baština, 16.8.2013., 6.8.2015., 6.6., 23.7., 1.8.2017., 8.6., 12.6. numerous, 1.7. numerous, 31.7. 1♀, 5.8. numerous, 19.8.2019. 1♀, 23.5.2020. 1♀, 6.6.2020., 6.7.2020. 1♀, 11.8.2020. 3♀, 12.6.2021., 1♀, 15.6.2021. 1♀, 17.6.2021. 1♀, 21.6.2021. 5♀, 29.7.2022. 1♀ 13.8.2024. 2♀,

Scopula immorata (Linnaeus, 1758):

Baština, 13.5., 17.6., 24.7.2013., 13.5., 30.7.2014. recorded in grassland, 21.7., 4.8.2015., 5.8.2016., 12.6., 9.7., 23.7.2017., 12.7. 1♂, 27.7. 1♀, 8.8.2019.1♀, 13.5.2020., 23.5.2020. 1♂, 21.7.2020., 11.6., 14.7. 1♀, 18.8.2022. 1♀, 15.7. 1♂, 13.8. ♀, 24.8.2023. ♀, 9.7. ♀, 28.7.2024. ♀, Rastik, Recorded during the daytime in the garden, 21.7.2020.,

Scopula virgulata (Denis & Schiffermüller, 1775):

Baština, 16.6.2013., 12.6., 23.6., 1.8.2017., 10.6. 1♀, 17.7. 1♀, 19.8. 4♀, 26.8.2019. 1♀, 15.5.2020. 1♀, 6.6.2020., 25.8.2020. 1♀, 18.6.2021. 1♀, 16.6. 1♀, 23.6. 1♀, 18.8.2022. 1♀, 20.6. ♀, 14.8.2023. ♀, 28.7. ♀, 2.8. 3♀, 20.8.2024. ♀,

Scopula nigropunctata (Hufnagel, 1767):

Rastik, Recorded during daytime in an orchard, 1.6.2020., 2 adult, Baština, 18.7.2014., 9.7., 16.8.2017., 8.8., 14.8., 26.8.2019. 1♂, 30.6.2020. 1♀, 25.8.2020. 1♀, 4.6.2021. ♀, 20.6.2021. 1♀, 21.6.2021., 21.6.2022. 1♀, 27.8.2023. ♂, 31.7.2024., Stisle, recorded in the Vrbanja river canyon, on vegetation 23.6.2017.,

***Scopula caricaria* (Reutti, 1853):**

Baština, 26.8.2019. 1♀, 23.5.2020. 1♀, 16.6.2020. 1♀, 7.8.2020. 1♀, 4.7. 1♀, 1.8.2022. 3♀, 16.8.2023. ♂,

***Scopula ornata* (Scopoli, 1763):**

Baština, 13.5.2013., 11.5.2014., 26.6., 4.9.2017., 10.5.2018., 26.8.2019. 1♀, 23.5.2020., 22.7.2020., 25.8.2020. 1♀, 14.7. 1♀, 18.8. 2♀, 1.10.2022. 1♀, 15.8. 2♀, 26.8.2023., 9.7.2024. ♂, Rastik, recorded in the backyard, 21.7.2020.,

***Scopula rubiginata* (Hufnagel, 1767):**

Baština, 17.5., 18.6., 11.7.2013., 27.6.2014., 9.8.2016., 4.2017. 1♀, 12.5.2018., 5.6.2020. 1♀, 30.7.2022. 1♀, 25.5.2023. ♀, 1.8.2024. 2♀,

***Scopula subpunctaria* (Herrich-Schäffer, 1847):**

Baština, 14.8.2023. 1♂,

Sterrhini

***Idaea aversata* (Linnaeus, 1758):**

Baština, 9.7.2014., 26.6., 7.7., 6.9.2017., 3.7., 11.7.2019. 1♀, 7.7.2020. 1♀, 19.7.2020. 1♀, 7.8.2020. 1♀, 17.6.2021. 1♀, 18.6., 22.6.2022. numerous, 20.7.2022. 3♀, 22.6. 2♂, 8.7. 1♂, 15.7. 1♀, 3.8.2023. 1♀, 23.6. 1♀, 2.7. 1♀, 9.7.2024. 1♂,

***Idaea camparia* (Herrich-Schäffer, [1852]):**

Baština, 14.5.2021.

***Idaea muricata* (Hufnagel, 1767):**

Baština, 20.7.2015., 23.6., 1.8.2017. 1♀, 1.7.2019. 1♀, 2.8., 26.8.2019., 30.6.2020. 1♀, 7.8.2020. 1♂, 21.6.2021. 1♀, 29.6.2022. 1♀, 12.8.2023. 1♀,

***Idaea politaria* (Hübner, [1799]):**

Baština, 5.7., 24.7.2013., 14.7.2014., 20.7.2019., 7.7.2020. 1♀, 30.6.2022. 1♀, 15.7. 1♀, 20.7.2023. 1♀, 9.7.2024. 1♀,

***Idaea biselata* (Hufnagel, 1767):**

Baština, 11.7.2020. 1♀, 20.7.2020. 2♀,

***Idaea ochrata* (Scopoli, 1763):**

Rastik, recorded in the backyard, 28.7.2020. 1♀, Baština, 1.8., 24.8.2013., 12.8.2020. 1♂, 19.7.2022. 1♀,

***Idaea fuscovenosa* (Goeze, 1781):**

Baština, 11.7.2019. 1♀, 28.7.2020. 1♀, 6.7.2023. 1♀,

***Idaea subsericeata* (Haworth, 1809):**

Baština, 30.7.2020. 1♀,

***Idaea degeneraria* (Hübner, [1799]):**

Baština, 9.5.2013., 10.5.2018., 13.8.2020. 1♀, 31.7.2022. 1♀,

***Idaea humiliata* (Hufnagel, 1767):**

Baština, 27.6.2022. 1♀,

***Idaea serpentata* (Hufnagel, 1767):**

Baština, 22.8.2013., 25.8.2017., 18.8.2022. 1♀,

***Idaea seriata* (Schrank, 1802):**

Baština, 9.6.2014., 4.8.2017., 24.5.2023. 1♂,

***Idaea dimidiata* (Hufnagel, 1767):**

Baština, 16.6.2013., 4.7.2016., 6.6.2017., 26.8.2019.,

***Idaea laevigata* (Scopoli, 1763):**

Baština, 1.7.2019. 1♀,

***Idaea trigeminata* (Haworth, 1809):**

Baština, 5.7.2013., 22.6.2023. 1♀,

Cosymbiini

***Cyclophora albiocellaria* (Hübner, 1789):**

Baština, 31.7.2017., 18.8.2022. 1♀, 2.7., 11.7., 28.7. 1♀, 9.8.2024. 1♀,

***Cyclophora punctaria* (Linnaeus, 1758):**

Baština, 6.9.2013., 27.6.2017. 1♀, 10.5.2018., 9.8., 24.8.2019. 1♀, 11.4.2020, 1♂, 13.5.2020., 15.5.2020. 4♀, 11.7.2020. 1♀, 22.7.2020. 1♂, 7.8.2020., 15.5.2021., 1♀, 14.7. 1♂, 31.7.2022. 1♀, 12.7. 1♀, 24.8.2023. 1♂, 28.7. 1♀, 15.8., 27.8.2024. 1♀,

***Cyclophora annularia* (Fabricius, 1775):**

Baština, 9.8.2013., 9.5.2015., 23.7., 3.8.2017., 10.4., 8.6., 12.5.2018., 27.7.2019. 1♀, 11.4.2020., 1♂, 12.8.2020. 1♀, 16.6.2021. 1♀, 16.6.2022. 1♀, 19.7.2022. 1♂, 30.7.2022., 16.8.2024. 1♀,

***Cyclophora linearia* (Hübner, [1799]):**

Baština, 8.6.2019. 1♀, 12.8.2020. 2♀, 19.8.2020. 2♀, 4.6.2021., 17.6.2022. 1♀, 5.7.2022. 2♂, 9.7.2024.,

***Cyclophora ruficiliaria* (Herrich-Schäffer, [1855]):**

Baština, 28.8.2019., 18.4.2021. 1♀, 18.8.2022. 2♀, 14.8.2023. 1♂, 9.7. 1♀, 22.7. 1♀, 3.8.2024. 1♀,

***Cyclophora quercimontaria* (Bastelberger, 1897):**

Baština, 6.7., 16.8.2017., 8.8.2019., 22.8.2020. 1♂, 10.7.2022. 1♂,

***Cyclophora albipunctata* (Hufnagel, 1767):**

Baština, 1.8.2017.,

***Cyclophora porata* (Linnaeus, 1767):**

Baština, 2.8.2019. 1♂,

***Cyclophora pendularia* (Clerck, 1759):**

Baština, 19.8.2019. 1♀,

Rhodometrini

***Rhometra sacraria* (Linnaeus, 1767):**

Baština, 26.8.2014., 21.6., 14.7.2017., 10.5.2018., 8.8.2019., 23.5.2020. 1♀, 2.7.2022. 1♀, 28.7.2022. 1♀, 25.8.2023. 1♀, 9.7. 1♂, 22.7. 1♀, 10.8.2024. 1♀,

***Lythria purpuraria* (Linnaeus, 1758):**

Baština, 8.8.2019. 1♂,

Larentiinae

Perizomini

***Perizoma alchemillata* (Linnaeus, 1758):**

Baština, 30.7., 3.8.2017., 8.8.2019., 7.8.2020., 17.8.2020. 2♀, 10.7. 1♀, 31.7. 1♀, 9.8.2022. 3♀, 24.8.2023.,

***Perizoma flavofasciata* (Thunberg, 1792):**

Baština, 20.6.2017., 12.6.2019., 16.6.2022. 1♀, 2.7.2022.

***Perizoma lugdunaria* (Herrich-Schäffer, [1855]):**

Baština, 23.7.2024.,

Scotopterygini

***Scotopteryx luridata* (Hufnagel, 1767):**

Baština, 6.9.2013., 4.6.2014., 4.8., 24.8.2017., 12.5.2018., 14.8.2019., 5.6.2021. 1♀, 21.6. 1♀, 12.8. 1♀, 18.8.2022. 1♂,

***Scotopteryx mucronata* (Scopoli, 1763):**

Baština, 3.6., 22.8.2013. recorded in grassland vegetation, 12.6.2017., 22.8.2020.,

Asthenini

***Asthenes albulata* (Hufnagel, 1767):**

Baština, 23.7., 3.8.2017., 17.5.2020. 1♀, 22.7.2020., 1♂, 7.8.2020. 1♀, 8.6.2021. 1♀, 8.7. 1♀, 14.7. 1♀, 9.8.2022. 1♂ 1♀, 2.8.2023. 1♂, 22.7.2023. 2♀,

***Euchoeca nebulata* (Scopoli, 1763):**

Baština, 3.8.2024. 1♂,

Cidariini

***Cosmorhoe ocellata* (Linnaeus, 1758):**

Baština, 11.6., 20.8.2013., 21.6.2017., 26.8.2019. 1♀., 15.8.2020. 1♀, 12.5.2021., 8.6.2021. 1♀, 5.6.2022. 1♀, 4.7.2022. 1♀, 5.8. ♀, 20.8.2023. 1♀,

***Colostygia pectinataria* (Knoch, 1781):**

Baština, 21.5., 26.8.2014., 12.6.2017., 12.5.2018., 14.6., 26.8.2019., 13.5.2020., 15.5.2020., 5.6.2022. 1♀,

***Ecliptopera silaceata* (Denis & Schiffermüller, 1775):**

Baština, 6.8.2019. 1♀,

Epirrhoini

***Catarhoe cuculata* (Hufnagel, 1767):**

Baština, 18.7.2013., 10.5.2014., 9.7.2015., 12.6., 23.7.2017., 14.5.2018., 19.7. 1♀, 27.7. 1♀, 19.8.2019. 1♀, 16.6.2020. 3♀, 21.6.2021. 1♀, 5.6.2022. 1♀. 23.6.2022. 3♀, 5.7.2022. 1♀, 14.7.2022. 1♀, 27.5. 1♂, 21.6. 1♂, 4.8.2023. 1♂, 18.6. 1♂, 1.7., 11.7.2024. 1♀,

***Catarhoe rubidata* (Denis & Schiffermüller, 1775):**

Baština, 22.6.2017., 8.8.2019.,

***Epirrhoe rivata* (Hübner, [1813]):**

Baština, 12.6.2017., 11.6. 1♀, 19.8.2019. 1♀, 20.7.2020. 2♀, 8.6.2021. 1♀, 18.6. 2♀, 1.8.2022. 1♂,

***Epirrhoe alternata* (Müller, 1764):**

Baština, 8.5.2015., 10.7.2016., 12.6., 9.7., 24.8.2017., 14.5.2018., 3.7. 1♀, 27.7. 1♀, 20.8. 1♀, 26.8.2019. 1♀ 1♂, 6.9.2020. 1♀, 4.5.2021., 14.5.2021., 17.6.2021. 1♀, 2.7. 1♀, 4.7. 1♀, 11.8.2022. 1♀, 23.4., 30.6., 24.8.2023.,

***Epirrhoe galiata* (Denis & Schiffermüller, 1775):**

Baština, 2.8.2013., 9.7., 24.8.2017., 20.8.2020. 1♀,

Melanthiini

***Melanthia procellata* (Denis & Schiffermüller, 1775):**

Baština, 10.5.2018., 14.5.2020.,

***Horisme vitalbata* (Denis & Schiffermüller, 1775):**

Baština, 1.8.2017., 24.5.2022.,

***Horisme tersata* (Denis & Schiffermüller, 1775):**

Baština, 10.5.2018., 14.7.2022. 1♀, 5.8.2023. 1♀, 28.7.2024. 1♀,

***Horisme corticata* (Treitschke, 1835):**

Baština, 10.5.2013.,

Eupitheciini

***Eupithecia centaureata* (Denis & Schiffermüller, 1775):**

Baština, 16.5.2018., 14.5.2020.,

***Eupithecia haworthiata* (Doubleday, 1856):**

Baština, 7.6.2020. 1♀, 5.6., 20.6.2022. 2♀, 23.6.2024. 1♀,

***Eupithecia distinctaria* (Herrich-Schäffer, 1848):**

Baština, 4.8.2017.

***Eupithecia silenicolata* (Mabille, 1866):**

Baština, 20.7.2019. 1♀, 4.8.2023. 1♂,

***Eupithecia linariata* (Denis & Schiffermüller, 1775):**

Baština, 6.7.2023. 1♀,

***Eupithecia assimilata* (Doubleday, 1856):**

Baština, 15.8.2024. 1♀,

***Gymnoscelis rufifasciata* (Haworth, 1809):**

Baština, 25.7.2020. 1♀, 22.6.2022. 1♀,

***Pasiphila rectangulata* (Linnaeus, 1758):**

Baština, 21.6.2022. 1♀, 19.6.2024. 1♀,

***Chloroclystis v-ata* (Haworth, 1809):**

Baština, 22.6.2022. 1♀, 3.7.2022. 1♂,

Euphyiini

***Euphyia unangulata* (Haworth, 1809):**

Baština, 7.8.2015., 21.7., 27.7.2017., 10.6. 2♀, 9.8.2019. 1♀, 15.5.2020., 1♀, Grabovačka rijeka, recorded on the exterior wall of a mountain hut, 19.8.2017., 19.7. 1♀, 16.8.2023. 2♀, 22.7. 1♀, 10.8.2024. 1♀,

***Euphyia biangulata* (Haworth, 1809):**

Baština, 10.8.2013.,

Xanthorhoini

***Xanthorhoe ferrugata* (Clerck, 1759):**

Baština, 11.7., 4.8.2015., 24.6., 6.7. 2♂, 13.7., 24.8.2017., 6.4. 1♀, 13.7., 21.8.2019. 1♀ 1♂, 9.7.2020. 2♂, 16.7.2020. 1♂, 22.8.2020. 1♀, 14.8.2023. 1♂,

***Xanthorhoe fluctuata* (Linnaeus, 1758):**

Baština, 23.8., 3.9., 6.9.2013., 10.7.2014., 14.7.2022. 2♂,

***Orthonama obstipata* (Fabricius, 1794):**

Baština, 29.8.2017., 11.7., 18.7.2019. 1♂, 19.8.2023. 1♀,

***Ochyria quadrifasiata* (Clerck, 1759):**

Baština, 7.8.2017., 3.8.2023.

***Costaconvexa polygrammata* (Borkhausen, 1794):**

Baština, 9.7.2014., 6.6.2017., 21.7.2020. 1♂, 20.8.2020. 1♀,

***Camptogramma bilineata* (Linnaeus, 1758):**

Vrbanjci, recorded in the schoolyard, 16.5.2013., 29.5.2014., Večić, recorded on vegetation along the roadside, 25.5.2013., Rastik, on vegetation, Vilenska vrela, recorded on the bank of the Cvrcka Rive, 31.7.2013., Baština, 21.8.2013. 3♀, 28.8.2019. 1♂, 8.8.2022. 1♀, 27.8.2024. 2♀,

Larentiini

***Mesoleuca albicillata* (Linnaeus, 1758):**

Baština, 12.5., 1.8.2015., 14.7.2017., 26.7.2019. 1♀, 26.7.2020., 12.6.2021.

***Earophila badiata* ([Denis & Schiffermüller], 1775):**

Baština, 2.4.2019. 1♀, 11.4.2023. 1♂,

Trichopterygini

***Trichopteryx polycommata* (Denis & Schiffermüller, 1775):**

Baština, 18.3.2014.,

***Acasis viretata* (Hübner, [1799]):**

Baština, 28.7.2013., 7.8.2019. 1♀, 3.8.2023. 1♀,

***Lobophora halterata* (Hufnagel, 1767):**

Baština, 28.4.2023. 1♂,

Phileremini

***Philereme vetulata* (Denis & Schiffermüller, 1775):**

Baština, 19.6.2019. 1♀,

Chesiadini

***Lithostege farinata* (Hufnagel, 1767):**

Baština, 21.8.2019. 1♀,

Ennominae

Ennomini

***Ourapteryx sambucaria* (Linnaeus, 1758):**

Čepak, recorded inside a carpenter's workshop, 11.6.2016. photo by Zvezdan Kezija,

***Selenia dentaria* (Fabricius, 1775):**

Baština, 6.4.2020. 1♂, 18.6., 22.6.2022. 1♂,

***Selenia tetralunaria* (Hufnagel, 1767):**

Baština, 21.7., 14.8.2013., 7.7.2017. 1♀, 10.4.2019. 1♂, 20.8. 1♀, 22.8.2019. 1♀, 28.8.2020. 1♂, 30.4.2021. 23.6.2022. 1♀, 14.7.2022. 1♀, 21.3. 1♂, 18.8.2023. 1♂, 18.6.2024. 1♀,

***Selenia lunularia* (Hübner, 1788):**

Baština, 6.5.2023. 1♀,

***Ennomos erosaria* (Denis & Schiffermüller, 1775):**

Baština, 10.9.2020., 1.10.2022. 2♂,

***Ennomos quercinaria* (Hufnagel, 1767):**

Baština, 13.7.2013., 28.7.2022. 1♂, 23.6.2023. 1♂,

Boarmiini

***Apocheima hispidaria* (Denis & Schiffermüller, 1775):**

Baština, 21.3.2023. 1♂,

***Lycia hirtaria* (Clerck, 1759):**

Baština, 21.3.2014., 17.3.2019., 22.3.2023. 1♂,

***Agriopsis marginaria* (Fabricius, 1777):**

Baština, 11.2., 17.2., 1.3.2014., Zabrdje, recorded in the schoolyard, 7.3.2014.,

***Phigalia pilosaria* (Denis & Schiffermüller, 1775):**

Baština, 17.2.2014.

***Aethalura punctulata* (Denis & Schiffermüller, 1775):**

Baština, 26.7.2013., 4.7.2022. 1♀, 1.7.2024. 1♂,

***Biston betularia* (Linnaeus, 1758):**

Baština, 20.7.2020. 1♂, 4.7.2022. 1♂, 28.7.2022. 1♂,

***Biston strataria* (Hufnagel, 1767):**

Baština, 26.2.2014., 21.3.2023. 1♂,

***Peribatodes rhomboidaria* (Denis & Schiffermüller, 1775):**

Baština, 7.6., 11.6., 4.9.2013., 28.5., 26.7.2014., 14.7.2015., extremely abundant, 3.6.2016., 6.6., 15.6., 20.6., 7.7.2017., 10.5.2018. 5, 18.6. 2♂ i 1♀, 26.8.2019. 1♂, 6.6.2020., 11.6.2020. 1♂, 24.6.2020. 1♀, 8.6.2021. 1♀, 12.6.2021. 5♂, 25.5. numerous, 12.6., 25.8.2022., 1♂, 6.5. 1♀, 7.6. 1♀, 23.6.2023., 5.8. 1♀, 15.8.2024. 1♀,

***Ascotis selenaria* (Denis & Schiffermüller, 1775):**

Baština, 16.8.2013., 27.6., 24.7.2014., 4.8.2016., 6.6., 12.6., 12.7.2017. 1♂ 1♀, 21.6. 1♀, 19.7., 26.7.2019. 3♂, 13.5., 2.7.2020. 1♂, 9.6. 1♀, 15.6.2021. 1♀, 26.5. 1♀, 23.6. 1♀, 26.7.2022. 1♀, 20.5. 1♂, 18.7.2023. 1♂, 1.7. 1♀, 9.7.2024. 1♂,

***Hypomecis punctinalis* (Scopoli, 1763):**

Baština, 17.7.2013., 10.7., 9.8.2016., 7.7.2017. 2♂, 8.6. numerous, 25.6. 1♂ 1♀, 11.7., 13.7. numerous, 27.7.. 3♂, 8.8.2019., 14.5.2020., 9.7.2020. 1♀, 1♂, 16.7.2020. 1♂, 21.7.2020. 1♂, 7.8.2020. 1♂, 3.6.2021. 3♂ 9.6.2021. 1♂, 19.6.2022. 1♂, 30.6.2022. 1♂, 2.7.2022. numerous, 20.5. 1♂, 16.7.2023. 1♂, 23.6. 1♂, 2.7.2024. 1♂,

***Hypomecis roboraria* (Denis & Schiffermüller, 1775):**

Baština, 15.6., 1.8., 16.8.2017., 31.7.2019. 1♂, 30.6.2020., 16.7.2020. 2♂, 7.8.2020. 8♂, 23.8.2020. 1♂, 20.7.2022. 1♂, 2.8. 1♂, 16.8.2023. 1♂, 11.7. 1♂, 23.7. 1♂, 9.8.2024. 1♀, Grabovačka rijeka, recorded on the exterior wall of a mountain hut, 19.8.2017.

***Hypomecis atomaria* (Linnaeus, 1758):**

Rastik, Barinica, Recorded on the bank of the Cvrčka River, in riparian vegetation, 8.5.2020., Rastik grassland, backyard. 15.6.2019., Rastik, recorded in an orchard, among grass vegetation. 24.5.2020. Rastik, recorded in an orchard, among grass vegetation, 3.5.2021., recorded in an orchard, among grass vegetation, 25.6.2022. Baština, 19.4., 3.6., 7.7., 19.7., 14.8.2013., 8.5., 9.7., 21.7.2015., 21.6.2017., 1.7. 2♂, 12.7. 2♂, 26.7.2019. 10+♂, 11.7.2020. 1♂, 16.7.2020. 2♂, 21.7.2020. 1♂, 1.7.2022. 1♂, 21.5. 1♂, 4.8.2023. 1♂, 9.7. 1♂, 3.8.2024. 1♂, Grabovačka

Rijeka, recorded on the exterior wall of a mountain hut, 19.8.2017. Vrbanjci, Trifunovići, 10.7.2015.

***Ectropis crepuscularia* (Denis & Schiffermüller, 1775):**

Baština, 10.7.2015., 12.7.2019. 1♂, 11.4.2020. 1♂, 17.4.2020. 1♂, 14.5.2021. 26.5.2022. 1♀, 23.6.2022. 3♀, 30.6.2022. 1♀, 1♂, Rastik, Asenovača, recorded along the roadside, in edge vegetation 25.7.2013., 28.4. 1♂, 4.7. 1♂, 13.7 1♂, 4.8.2023. 1♂,

***Parectropis similaria* (Hufnagel, 1767):**

Baština, 12.6.2022. 1♀, 23.6.2022. 1♀,

***Paradarisa consonaria* (Hübner, [1799]):**

Baština, 6.4., 10.4.2019. 1♂,

***Erannis defoliaria* (Clerck, 1759):**

Baština, 24.11.2013.,

***Cleora cinctaria* (Denis & Schiffermüller, 1775):**

Baština, 25.5.2023. 1♀,

Macariini

***Macaria alternata* (Denis & Schiffermüller, 1775):**

Baština, 28.7., 15.8.2013., 26.7.2015., 12.7., 25.8.2017., 11.6. 5♀, 31.7.2019. 1♀, 17.5.2020., 25.7.2020. 2♀, 7.8.2020. 2♀, 21.8.2020. 1♀, 30.4.2021., 12.6.2021. 1♀, 21.6.2022. 1♂, 27.5. 1♂, 12.7., 3.8.2023. 1♀, 9.7., 13.8.2024. 1♀,

***Macaria notata* (Linnaeus, 1758):**

Baština, 3.8.2017., 6.7.2022. 1♀,

***Chiasmia clathrata* (Linnaeus, 1758):**

Topolje, recorded along the riparian zone of the Vrbanja River 29.7.2013., Baština, grassland, 13.5, 18.8.2013., 10.5.2014., 6.6., 9.7., 3.8., 24.8.2017., 13.5.2018., 30.6. 2♀, 19.7., 27.7. 2♀, 8.8. 1♀, 24.8.2019. 5♀, 11.4, 2020, 1♀, 13.5.2020., 7.7.2020. 2♀, 21.7.2020. 2♀, 20.8.2020. 1♀, 12.6.2021., 23.6.2021. 1♀, 2.7.2022. 1♀, Rastik, recorded in an orchard, among grass vegetation, numerous, 24.5.2020., 4.7. 1♀, 15.7. 1♀, 20.7., 2023., 9.7. 1♀, 3.8.2024. 1♀,

***Helimata glarearia* (Denis & Schiffermüller, 1775):**

Baština, 4.8.2014., 20.6., 29.7.2017. 1♀, 14.7.2019., 1♀, 29.7. 1♀, 26.8.2019. 1♀, 13.5.2020., 27.6.2021. 1♀, 28.6.2022. 1♀, 15.7. 1♀, 5.8.2023. 1♀, 9.7. ♀, 5.8.2024. 1♀,

Epionini

***Epione repandaria* (Hufnagel, 1767):**

Baština, 15.9.2015., 6.8.2016., 21.6.2017.,

***Therapis flavicaria* (Denis & Schiffermüller, 1775):**

Baština, 8.6., 1.8.2017., 11.6.2019. 1♂, 17.8.2020., 17.6.2021. 1♀, 15.8.2024. 1♂,

***Apeira syringaria* (Linnaeus, 1758):**

Baština, 9.8.2019. 1♀, 21.6.2021. 1♂

***Pseudopanthera macularia* (Linnaeus, 1758):**

Rastik, Asenovača, recorded in grassland habita, 1.5.2013., Rastik, Barinica, Along the riparian zone of the Cvrcka Rive, 8.7.2017. 1♀, Rastik, Krčevina, recorded in meadows, at the forest edge, and along the river bank, 15.6.2019., numerous, 8.5.2020. Rastik, recorded in an orchard, among grass vegetation, 1.6.2020. Baština, 2.5., 13.5., 17.6., 25.7., 2013., 1.5., 10.5., 24.5.,

30.6.2014. In grass vegetation and at the forest edge, 8.5.2015., Lazići, at the forest edge, 15.6.2025., 7.8.2020. 1♀,

***Plagodis dolabraria* (Linnaeus, 1767):**

Baština, 4.8.2013., 1.7.2019. 1♂, 30.6.2020., 15.8.2020. 1♀, 3.5.2021., 27.6.2022. 2♀, 2.7.2022. 1♂, 12.7.2022. 1♂, 20.7.2023. 1♂, 23.6. 1♂, 1.7.2024. 1♂,

***Plagodis pulveraria* (Linnaeus, 1758):**

Baština, 10.7.2013., 27.7.2019. 1♂, 12.7.2020. 1♂, 25.5.2022. 1♀ 1.7.2024. 1♂,

***Opisthograptis luteolata* (Linnaeus, 1758):**

Baština, 10.5.2018., 7.8.2019. 2♀, 20.8.2020., 9.9.2020., 2.5.2021., 11.5.2021. 1♀, 14.7. 1♀, 29.7., 18.8.2022., 14.8.2023. 1♀, 25.7.2024.,

Cassymini

***Lomasipilis marginata* (Linnaeus, 1758):**

Baština, 28.7.2013., 20.7.2015., 10.7.2016., 6.6., 12.6., 30.7.2017., 13.5.2018., 12.6.2019. 1♀, 19.7. 2♀, 7.8.2020. 2♀, 12.6., 17.6. 1♀, 21.6.2021. 2♀, 17.6.2022. 3♀, 6.7. 1♀, 20.7. 1♀, 2.8. 1♀, 14.8.2023., Topolje, recorded on vegetation along the riparian zone of the Vrbanja River, 29.7.2013., Baština, 23.6. 1♀, 25.7.2024. 1♀,

***Stegania cararia* (Hübner, 1790):**

Baština, 11.8.2020. 2♀, 30.7.2022. 1♀, 28.7.2024. 1♀,

Abraxini

***Abraxas sylvata* (Scopoli, 1763):**

Vlašić, Divič, near the small hydropower; forest road, edge vegetation, 15.6.2015. numerous.

***Ligdia adustata* (Denis & Schiffermüller, 1775):**

Baština, 30.5., 17.7., 14.8.2013., 31.8.2014., 28.7.2015., 3.8.2017., 12.5.2018., 27.6. 1♀, 14.8., 26.8.2019. 1♂, 18.4.2020, 1♂, 25.4.2020., 14.5.2020., 23.5.2020. 1♀, 3.6.2020., 12.6.2020, 2♀, 24.6.2020., 26.7.2020. 1♀, 7.8.2020., 12.6.2022. 1♀, 14.7.2022. 1♀, 28.4. 1♂, 2.8.2023., 18.6., 23.6., 3.8.2024.,

Gnophini

***Angerona prunaria* (Linnaeus, 1758):**

Baština, 2.7.2013., 29.6.2020. 1♂, 17.6. 1♂, 25.6. 1♂, 27.6.2019. 2♂, 11.7.2020. 2♂, 27.6.2021. 1♂, 19.6.2022. 1♂, 23.6.2022. 3♂, 30.6.2022. 1♀, 23.6. 1♂, 7.7.2023. 1♂,

***Siona lineata* (Scopoli, 1763):**

Rastik Asenovača, recorded in grassland habita, 4.7.2014., Rastik- Krčevina, recorded along a road at the forest edge, recorded on vegetation along the riparian zone of the Cvrcka River, 15.6.2019., Rastik, recorded in an orchard, among grass vegetation., 24.5.2020., Baština, grassland, 3.6.2013., 24.5., 31.5.2014., 14.5.2018., 12.6.2019. 1♀, 6.6.2020., 12.6.2021.

Caberini

***Cabera exanthemata* (Scopoli, 1763):**

Baština, 17.7. 1♀, 6.8.2019., 7.6.2020. 1♀, 21.8.2020. 1♀, 21.6.2022. 1♂, 5.8.2023. 2♀, 11.8. 1♀, 24.8.2024. 1♀,

***Cabera pusaria* (Linnaeus, 1758):**

recorded on vegetation along the riparian zone of the Vrbanja River, 29.7.2013., Baština, 27.5., 15.8.2013., 1.5.2014., 9.8.2019. 1♀, 20.6.2017., 30.6.2020., 12.8.2020. 2♀, 17.8.2020. 1♀, 23.6.2022. 1♀, 3.8.2023. 1♀, 28.7. 1♀, 13.8.2024. 1♀,

Baptini

Lomographa temerata (Denis & Schiffermüller, 1775):

Baština, 15.5.2015., 12.7., 23.7.2017., 27.7. 1♀, 8.8.2019., 16.6.2020. 1♀, 16.7.2020. 1♀, 21.7.2020. 1♂, 4.5.2021., 2.7.2022. 1♀, 15.7. 2♀, 10.8.2023. 1♂, 1.7. 1♀, 22.7.2024. 1♀,

Lomographa bimaculata (Fabricius, 1775):

Baština, 21.5.2018., 21.6.1♂, 27.7.2019. 1♀, 20.7.2020. 1♂, 25.7.2020. 2♀, 7.8.2020., 12.6.2022. 2♀, 14.7.2022. 1♀, 20.5. 2♀, 16.7.2023.

Campaeini

Campaea margaritaria (Linnaeus, 1761):

Baština, 8.9.2013., 7.8., 24.8.2017., 26.8.2019. 1♂, 21.8.2020. 1♂, 1♀, 24.5., 1.8. 1♂, 25.8.2022. 4♀, 20.8.2023. 1♂,

Diptychini

Petrophora chlorosata (Scopoli, 1763):

Baština, 24.5.2014., 12.6.2017., 12.6.2019. 1♀, Prisoje, in grass vegetation, 9.6.2013.,

Prosopolophini

Colotois pennaria (Linnaeus, 1761):

Baština, 23.10.2013. 1, 29.10.2013. 10+,

Crocallis elinguaris (Linnaeus, 1758):

Baština, 20.8.2023. 1♀,

Geometrinae

Hemitheini

Hemistola chrysoprasaria (Esper, [1795]):

Baština, 17.6.2013., 22.6.2017., 22.6.2022. 1♀, 1♂, 22.6. 1♂, 6.7. 1♂, 13.7.2023. 1♂,

Thalera fimbrialis (Scopoli, 1763):

Baština, 1.8.2013., 1.8., 11.8.2015., 21.7.2017., 27.7. 2♀, 9.8.2022. 1♂, 13.8.2023. 1♂, 1.8.2024. 1♂,

Chlorissa cloraria / *C. viridata complex*

Baština, 22.7.2013., 24.7.2014., 15.7.2015., 5.8.2016., 12.6., 20.6., 6.7., 7.8.2017. 1♀, 6.6. 1♀, 6.7. 1♀, 16.7. 1♀, 20.7. 2♀, 7.8.2020. 1♀, 12.6.2021. 1♀, 10.7.2022. 1♀, 14.7. 1♀, 15.8.2023. 1♀, 23.6. 1♀, 29.7. 1♀, 1.8.2024.,

Hemithea aestivaria (Hübner, 1789):

Baština, 17.6.2021. 1♀, 5.6., 19.6.2022. 1♀, 27.7.2024. 1♂,

Jodis lactearia (Linnaeus, 1758):

Baština, 23.7.2015., 22.7.2017., 10.5.2018., 13.5.2020., 24.6.2021. 1♀, 27.5. 1♂, 10.8.2023. 1♂,

Pseudoterpnini

Aplasta ononaria (Fuessly, 1783):

Baština, 13.6., 26.6., 3.8.2017. 2♀, 7.8.2019. numerous, 24.6.2020. 1♀, 21.6.2021. 1♂, 21.6.2022. 1♀, 5.6.2022. numerous, 23.6. 1♀, 15.7. 1♀, 15.8.2023. 1♀, 23.7. 1♂, 29.7.2024. 1♂,

***Pseudoterpna pruinata* (Hufnagel, 1767):**

Baština, 30.7.2016., 23.7.2017., 21.8. 1♀, 1♂, 29.8.2019. 1♂, 13.8.2020. 1♀, 1♂, 27.5., 18.6.2022. 1♂, 2.7.2022. 1♂, 27.7.2022. 1♂, 20.8. 1♂, 26.8.2023. 1♂, 19.6. 1♂, 31.7. 1♂, 11.8.2024. 1♂,

Geometrini

***Geometra papilionaria* (Linnaeus, 1758):**

Baština, 25.6.2019. 1♂, 19.6.2022. 2♂, 27.6.2022. 1♂,

Comibaenini

***Thetidia smaragdaria* (Fabricius, 1787):**

Baština, 6.8.2013., 31.8.2014., 11.6.2019. 1♂, 9.8.2022. 1♀, 29.7.2024. 1♂,

CONCLUSION

To date, 135 species of Geometridae have been recorded in the Kotor Varoš and Baština area, belonging to four subfamilies: Larentiinae (43 species), Ennominae (48 species), Sterrhinae (35 species), and Geometrinae (9 species). This species richness represents approximately 50% of the total Geometridae fauna recorded in Bosnia and Herzegovina, highlighting the high ecological integrity and habitat heterogeneity of the study area. All species represent first records for the study area. *Trichopteryx polycommata* (Denis & Schiffermüller, 1775) represents the first record for the fauna of Bosnia and Herzegovina

The observed dominance of Larentiinae and Ennominae aligns with the faunistic patterns reported in similar hilly and mountainous regions across the Balkan Peninsula and neighboring countries such as Croatia and Serbia. The high representation of Larentiinae reflects the presence of preserved forest ecosystems and humid microhabitats, whereas Sterrhinae species are associated with open, thermophilous grassland habitats.

Compared to broader European and regional studies, where Geometridae represent one of the largest species-rich moth families, the findings from Kotor Varoš contribute significantly to the understanding of Geometrid diversity and zoogeography in the Western Balkans.

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PRILOG POZNAVANJU FAUNE NOĆNIH LEPTIRA PORODICE GEOMETRIDAE (LEPIDOPTERA) NA PODRUČJU KOTOR VAROŠA

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Sažetak

Biodiverzitet Bosne i Hercegovine veoma je raznovrstan i bogat, ali je tokom posljednjih stotinu godina, pa i duže, bio nedovoljno istražen. Istraživanja porodice Geometridae na području Kotor Varoša traju više od deset godina. U ovom radu dat je spisak vrsta navedene porodice noćnih leptira, zajedno sa njihovom sistematskom pripadnošću. Za potrebe sakupljanja korišćena je živina lampa snage 120 W, uz bijelo platno dimenzija 3 × 2 m, fotografska oprema za makrofotografiju i binokularni mikroskop za analizu genitalnih aparata. Pojedine vrste otkrivene su tokom dana, ne samo na istom lokalitetu, već i na drugim lokalitetima na području Kotor Varoša. Ukupno je potvrđeno 135 vrsta, koje su svrstane u četiri

potporodice: Sterrhinae (35), Larentiinae (43), Ennominae (48) i Geometrinae (9). U okviru potporodica vrste su dalje razvrstane prema pripadajućim tribusima. Najveći broj vrsta noćnih leptira zabilježen je na lokalitetu Baština, gdje je korišćena oprema za noćno istraživanje. Dugoročna posmatranja pružila su uvid u sezonsku aktivnost i varijacije u pojavljivanju i brojnosti vrsta. Najzastupljeniji rodovi bili su *Idaea* (Treitschke, 1825), *Scopula* (Schrank, 1802) i *Cyclophora* (Hübner, 1822). Vrsta *Trichopteryx polycommata* (Denis & Schiffermüller, 1775) predstavlja prvi nalaz za faunu Bosne i Hercegovine.

Ključne riječi: Geometridae, noćni leptiri, biodiverzitet, Baština

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