

---

## Taxonomy and genetics

---

### Craniometric characters of European badger (*Meles meles*) from the west Pannonian mountain

Krapinec, Krešimir<sup>1\*</sup>; Mijić, Marija<sup>2</sup>; Vucelja, Marko<sup>1</sup>; Tomljanović, Kristijan<sup>1</sup>; Konjević, Dean<sup>3</sup>; Bujanić, Miljenko<sup>3</sup>; Bjedov, Linda<sup>1</sup>

<sup>1</sup> University of Zagreb, Faculty of Forestry and Wood Technology, Institute of Forest Protection and Wildlife Management, Zagreb, Croatia

<sup>2</sup> Agriculture and Forestry School, Vinkovci, Croatia

<sup>3</sup> University of Zagreb, Faculty of Veterinary Medicine, Zagreb, Croatia

\* kkrapinec@sumfak.unizg.hr

DOI: 10.20315/evmc.2025.084

Badgers are members of superfamily Musteloidea (Carnivora, Caniformia) with still controversial systematic relationships. Moreover, based on craniometric analysis from the beginning of the 21<sup>st</sup> century, four separate species were suggested within the genus of Eurasian badgers (*Meles* spp.). Despite the fact that European badger (*Meles meles*) was divided into two subspecies, this suggestion is still not generally accepted. However, because of the relatively wide distribution, some skull variabilities are possible due to more or less pronounced characteristics of sexual dimorphism.

The craniometric analysis was made on 62 skulls of European badgers, collected from Medvednica mountain (8450 ha) within the hunting years 2016/2017–2024/2025. Specimens were separated according to sex (male, female) and age (0 to 5 years, based on canines' cementum annuli). We measured 17 craniometric characteristics. Comparison was made between sex and age categories within Medvednica and among some other European populations (Carpathian, Fennoscandia). Badgers from Medvednica show relatively low level of sexual dimorphism, significant in only 5 craniometric characters – length of lower canines, basal length, condylobasal length, mandibular tooth-row length, and length of the first mandibular molar (M<sub>1</sub>). In general, badgers from Medvednica have larger skulls than badgers from Carpathian and Fennoscandian regions.