

**A record of melanistic viviparous lizard *Zootoca vivipara* (Lichtenstein, 1823)
(Squamata, Lacertidae) on Prokletije Mountain, Montenegro**

**Nalaz melanistične živorodne gušterice *Zootoca vivipara* (Lichtenstein, 1823) (Squamata,
Lacertidae) na Prokletiju, Crna Gora**

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Different colour morphs occur in many populations of squamate reptiles. The most frequent colour deviation seems to be melanism, which typically occurs with relatively high frequency at higher elevations and latitudes and on certain islands (Luiselli 1992, Forsman 1995, Monney et al. 1995, Bittner et al. 2002, Tanaka 2007). Many lacertid lizards show a great intraspecific variability in pattern and colouration (Arnold et al. 2007). Besides normally coloured specimens, various aberrant forms may also occur. Melanism has been described in many lacertid lizard species: *Dalmatolacerta oxycephala* (Duméril & Bibron, 1839) (Arnold et al. 1985), *Lacerta agilis* Linnaeus 1758 (Krečsák & Hartel 2001), *Podarcis muralis* (Laurenti 1768) (Trócsányi & Korsós 2004), *Algyroides nigropunctatus* (Duméril & Bibron, 1839) (Urošević 2014) and it is considered to be a result of ecological adaptation to a certain environment. Melanism is thought to have thermoregulatory significance (Tossini et al. 1991). However, this is questionable for small lizards so alternative hypotheses have also been suggested: different predation pressures on melanistic lizards in dense vegetation (Gvoždík 1999, Jambrich & Jandžik 2012), or an increased male fitness (Vroonen et al. 2013).

Ground colouration in the Viviparous lizard is very variable: most animals are basically brown but may be grey or olive. In contrast to a relatively low morphological variability characterizing the species throughout the range, it usually shows high intrapopulation variation in pattern (Boulenger 1920, Dély & Böhme 1984). Several colour variants have been described, but melanism appears to be the most common (Boulenger 1917, Petzold 1978, Cavin 1993, Gvoždík 1999).

During the field work on Prokletije mountain on 28 June 2013 we observed a gravid female melanistic Viviparous lizard (Fig. 1) at Raški dol (2200 m a.s.l., N 42° 37' 44.32"; E 20° 05' 12.18") on the border with Kosovo (Fig. 2). South-west from there, at around 1900 m a.s.l. we found several brown-olive individuals of this species (Fig. 3). Melanism in the Viviparous lizard has been recorded many times (Szyndlar 1980, Brown et al. 1984, Westrin 1985, Cavin 1993, Gvoždík 1999, San-Jose et al. 2008, Jambrich & Jandžik 2012, Vrooner et al. 2013), however this is the first case of melanism recorded near the southern distribution border of this species, on the Balkan peninsula.



Figure 1. Melanistic gravid female Viviparous lizard from Raški dol, Prokletije mountain
Slika 1. Melanistična gravidna ženka živorodne gušterice sa lokacije Raški dol, Prokletije



Figure 2. Locality Raški dol, Prokletije mountain, Montenegro
Slika 2. Položaj lokalitera Raški dol, Prokletije, Crna Gora



Figure 3. Typical brown-olive colored Viviparous lizard from Raški dol, Prokletije mountain

Slika 3. Tipično smeđe-maslinasto obojena jedinka živorodne gušterice s lokacije Raški dol, Prokletije

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