

Morphological characteristics of *Coronella austriaca* Laurenti, 1768 (Colubridae, Reptilia) in the Samara region

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Abstract. The morphological characteristics of *Coronella austriaca* Laurenti, 1768 in the Samara region are presented. The proportion of melanists in the total sample ($n = 147$) was 2.04%. In wild-caught individuals of different ages and in calves obtained under laboratory conditions which were not in a state of molting, five variants of belly coloration ($n = 140$) were recorded, namely: black (17.1%), gray (5.0%), brown (17.9%), beige (2.9 %), and orange (57.1%). The first variant of coloration prevailed in mature snakes (48.6%, $n = 37$), while the latter did in newborns (72.5%, $n = 58$). The gray and beige shades of the belly began to appear after the second wintering, not occurring in newborns, underyearlings and yearlings. Individuals of both sexes in the total sample showed differences in the change rate of body weight with age, namely: longer and thinner individuals were observed among immature females ($L.corp. < 475$ mm) than among males of the same size; after reaching sexual maturity ($L.corp. > 475$ mm) females weighed more than males (on average). The proportion of underyearlings caught in nature in the total sample was 8.8%. The female underyearlings ($n = 8$) had, on average, a greater body length with the head ($L.corp.$) and a smaller tail length ($L.cd.$) as compared to males ($n = 5$), as well as they were slightly larger than males by total length ($L.total$) on average. The average value of the $L.corp. / L.cd.$ index was higher in female underyearlings than in males (5.5 and 4.9, respectively). The ranges of its variability (4.9–5.9 for females and 4.2–4.9 for males, respectively) intersected in heterosexual underyearlings by only one value, 4.9. Sexually mature females ($n = 37$), compared to males ($n = 35$), had higher average and maximum values of $L.corp.$ but lower average values of $L.cd.$ The $L.corp. / L.cd.$ index was less, on average, in adult males than in females; the ranges of its variability (3.1–4.4 and 4.5–7.5, respectively) did not overlap. Males had a lower mean value of $Ventr.$ and more $Scd.$ as compared with females (170.6 and 56.2 versus 184.0 and 49.5, respectively). The variability ranges of the first trait did not overlap and could be used to determine the sex of young individuals. The CAPO index in males ($n = 61$) was 0.62, which was somewhat higher than that in females ($n = 45$), 0.42. The proportion of asymmetric individuals of both sexes ($n = 106$) according to bilateral characteristics ($Lab.$, $Temp.I$ L/R, $Temp.II$, and L/R) was 54%.

Keywords: Colubridae, *Coronella austriaca*, morphological characteristics, coloration, asymmetry

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