

# Morphological and skeletochronological studies on four parthenogenetic species of genus *Darevskia* Arribas, 1999

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**Abstract:** Morphological diversity at 20 pholidotic and 16 meristic characters were studied on three parthenogenetic species *Darevskia unisexualis* (Darevsky, 1966) *D. uzzelli* (Darevsky & Danielyan, 1977) and *D. sapphirina* (Schmidtler, Eiselt & Darevsky, 1994) from Turkey which originated from interspecific hybridization of same parental species *D. raddei* (Boettger, 1892) and *D. valentini* (Boettger, 1892) and compared with parthenogenetic species *D. armeniaca* (Mehely, 1909) which originated from hybridization of *D. mixta* (Mehely, 1909) and *D. valentini* (Boettger, 1892) (Murphy et al, 2000, Fu et al, 2000). *D. armeniaca* significantly differ (ANOVA, Tukey HSD test;  $p < 0.05$ ) from *D. unisexualis* and *D. sapphirina* by 11 pholidotic characters, as well as from *D. uzzelli* by 9 variables. *D. unisexualis* has shown significant differences by 8 pholidotic variables from *D. sapphirina*. Only two pholidotic characters distinguish *D. uzzelli* from *D. sapphirina* and *D. unisexualis*. In addition to meristic characters *D. sapphirina* has shown significant less length and height of head as well as length of legs than *D. armeniaca*, *D. unisexualis* and *D. uzzelli*. The average means of snout-vent length of *D. sapphirina* were less in each age group in comparing with other species. The measurements of bone thickness have revealed the significant high level ( $p < 0.001$ ) of endosteal resorption in femur bones of *D. sapphirina* removing the first growth layers which usually present in bones of the most *Darevskia* species. The oldest lizards in our specimens were aged 6 years in *D. uzzelli* and *D. sapphirina* and 7 years *D. unisexualis* and *D. armeniaca*.