

# Geographic variation in the skull morphology of *Trachylepis aurata transcaucasica* Chernov, 1926 (Sauria: Scincidae) in the Zagros Mountains, Western Iran

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**Abstract.** A total of 52 dry skulls of the Golden Skink, *Trachylepis aurata transcaucasica*, were compared from four provinces (West Azarbaijan, Kurdistan, Kermanshah, Loristan) in the Zagros Mountains. Post-ANOVA pairwise analysis (LSD) as well as two multivariate analyses including Principal Component Analysis (PCA) and Canonical Variate Analysis (DFA) of 36 cranial and dental characteristics across all groups verified significant differences in some characters. Discriminant analysis confirms that all four populations, to a greater or lesser extent, have tendencies to differ from each other.

**Key words.** Scincidae, *Trachylepis aurata transcaucasica*, skull morphology, Zagros Mountains, Iranian Plateau.

## Introduction

The family Scincidae is a morphologically and ecologically diverse family comprising more than 80 genera and 1300 contemporary species (MAUSFELD et al. 2000). Five genera and some 14-15 species occur on the Iranian Plateau. One of these genera is *Mabuya* (sensu lato) Fitzinger, 1843 with three taxa in Iran. These include the former *Mabuya aurata septemtaeniata* (Reuss, 1834), *M. a. transcaucasica* Chernov, 1926 and *Mabuya vitatta*. (Olivier, 1804). The former subspecies *septemtaeniata* was given species rank but with a change in its generic name to *Euprepis septemtaeniata* by MAUSFELD & SCHMITZ (2003). In the same year, BAUER (2003) changed *Euprepis* Wagler, 1830 to *Trachylepis* Fitzinger, 1843. The subspecies *transcaucasica* was first assigned to *Euprepis aurata* as *E. a. transcaucasica* and then to *Trachylepis* as *T. aurata transcaucasica*. *Mabuya* (sensu stricto) is restricted to South America (MAUSFELD et al. 2002). *Trachylepis septemtaeniata* (Reuss, 1834) remains the valid name for the populations known from Eritrea, Oman, the United Arab Emirates, Qatar, Bahrain, Saudi Arabia, Syria, Iraq, Armenia, Azerbaijan, Iran and Turkmenistan (MORAVEC et al. 2006). Nevertheless, more detailed study is necessary to clarify the exact distribution and taxonomic status of this species complex. *Trachylepis a. transcaucasica* has already been investigated from the view point of intraspecific geographic variation as well as of sexual dimorphism; there was no difference between males and females in almost all morphological characters (FAIZI & RASTEGAR-POUYANI 2006). In this paper, we analyse the skull morphology of *T. a. transcaucasica* from various areas to evaluate patterns of geographic variation in the Zagros Mountains, western Iran.