Morphometric characteristics and age-depended colour changes in *Acanthodactylus schreiberi* (Sauria: Lacertidae) from a sand-dune ecosystem in Cyprus

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Morphometric characteristics and colour patterns were studied during a three year period (spring 2007 - spring 2010), in a population of the lacertid lizard *Acanthodactylus schreiberi schreiberi* occupying a well preserved dune ecosystem on the island of Cyprus. Data were collected from 444 individuals (150 of them were recaptured from two to eight consecutive seasons) in the field and 46 juveniles hatched in the laboratory. Based on their maturity stage and age, the studied individuals were grouped into five different age classes (two classes for subadults and three for adults). Morphometric characteristics (snout-vent length, tail length, body mass, head dimensions, mouth opening) along with colouration of body parts (tail, neck, flanks) and colour patterns of the dorsal side were examined in all age classes. Sexual dimorphism was observed for all the morphometric characteristics of individuals belonging to each mature age class, along with correlations between the body length and the most of the body colour patterns. The presence of broken stripes on the back and yellow colour on the flanks of the body are positively correlated with the snout-vent length (SVL) of both male and female individuals (ANOVA: p<0.05) (stripes broke to spots and white flanks obtaining a yellow colour as SVL increase), while the colour pattern of the tail is positively correlated both with SVL and the period of the year (ANCOVA: p<0.05). Subadults have a reddish tail that alters to white during maturation in males and yellow in females, while the colour of the neck in females becomes yellow as their age advances. Individuals of the species bear a unique colour pattern on their back that can be seen as a combination of continued or broken light-coloured stripes with brown-red spots on a blackish background. Although these patterns clearly altered during maturation and in the subsequent age classes, they can easily be used for the individual’s identification (like a fingerprint) at any age. The results of this study are comparable with similar results from other related lacertids.

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