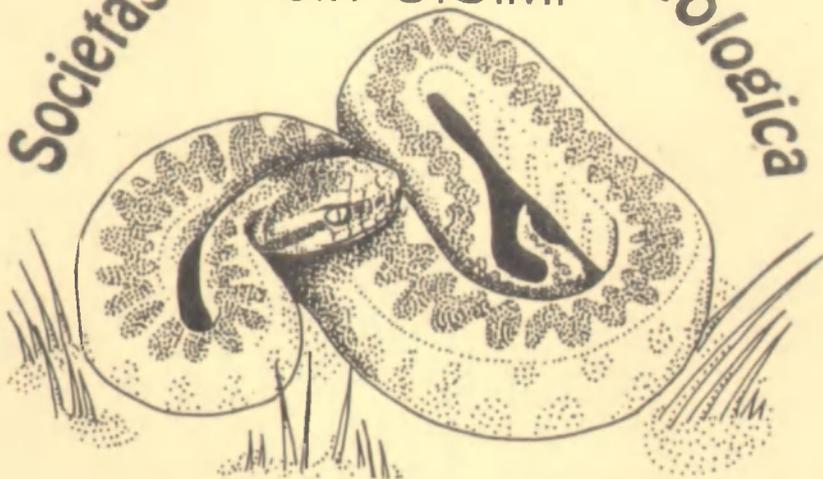


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**ABSTRACTS**

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TOSINI, G., LANZA, B. & BACU, M.

(Firenze, Italy)

Skin reflectance and energy input of melanic and non-melanic populations of wall lizard (*Podarcis muralis*)

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*Podarcis muralis* is a small to medium sized European lacertid showing a remarkable chromatic polymorphism and a number of more or less darkened microinsular populations (or subspecies). Granting that dark skin should increase the heating rate in such heliothermic lizard as *P. muralis*, some authors stressed the thermoregulatory significance of darkening in a microinsular environment.

The present study was aimed to investigate the skin reflectance and the energy input, in the range 0.4 - 2.2  $\mu$ . of melanic and non-melanic populations of *P. muralis*.

Our data show that non-melanic specimens present reflectance values a little higher (about 2%) than melanic animals; consequently energy input is higher in the latter ones ( $\bar{x}$  = 0.016 cal/  $\text{cm}^2$  / min). However, the slight gain in the skin energy input is probably insufficient to warrant a real functional advantage from a thermoregulatory point of view.

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TUNIYEV, B.S.

(Sochi, USSR)

Mediterranean influence on the herpetofauna of the Caucasian Isthmus

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The Caucasus as a whole is part of eastern Mediterranean. It unites different groups of herpetofauna of different origin. Among these are Mediterranean, European, Colchis, Asia Minor, Turanian and Iranian species. The Mediterranean species have different presence in various regions of the Caucasian Isthmus in accordance with the migration time of ancestral species and with the corrections of Pleistocene. The largest and ancient centre of Mediterranean species (preserved since Pliocene) is situated in eastern Transcaucasia and it is called the Kuro-Araxian refugium (including Zuwand and Talysh). Some smaller refugia are situated between the main Caucasian range and Peredovoy range on the northern Caucasus. These refugia were preserved since Pliocene and perhaps had new migration during Holocene. These are Gunibsky, Itumkalinsky, Targimsky, Northern-Ossetian and others. Finally a small refugium (preserved since Holocene) is situated on the Black Sea coast between the cities Anapa and Sukhumi. The existence of all refugia of Mediterranean herpetofauna in the Caucasian Isthmus is determined by the modern crossing of the January  $-3^{\circ}\text{C}$  isotherm and 400-800 mm isohyet. The preservation of the Black Sea coast refugium became possible with an annual sum of temperatures exceeding  $5000^{\circ}\text{C}$ . The northern Caucasus refugia of the Mediterranean herpetofauna preserved because of the rain shade of Peredovoy range, which formed semiarid hollows with hemixerophiles vegetations.