

ABSTRACTS

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The Shield-Headed Vipers of the Caucasian Isthmus and Armenian Highland

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There are 12 known taxa of vipers on the Caucasian Isthmus and adjacent territory. The shield-headed vipers (7 species) from two different groups with independent history of speciation and long-time secondary sympatry. Warm and humid Colchis has given an origin of representatives of the *Vipera kaznakovi* complex (*V. kaznakovi*, *V. dinniki*, *V. darevskii*, *V. pontica*) while the xerophilous parts of Armenian Highland and Inner Daghestan have formed the mountain-steppe vipers of the *Vipera ursinii* complex (*V. eriwanensis*, *V. lotievi*). Extremely high external polymorphism of *V. dinniki* and noted variation among mountain-steppe vipers show the continuation of modern processes of Viper's microevolution in several physiography distinct localities of studied area.

Biogeography of Vipers of Southwest Asia

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The biography and taxonomy of the vipers of the Palearctic region is discussed. The monophyletic pattern of or within the "European group" (*Vipera* s. 1., *Pseudocerastes*, *Eristicophis*) is reanalyzed. Reproductive strategies and ecological adaptations in species and groups of taxa are discussed from a phylogenetic perspective.

Structural Organization of Dorsal Ventricular Ridge (DVR) of Reptilian Telencephalon (Comparative aspects)

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Dorsal ventricular ridge (DVR) is a complex multifunctional center of reptilian telencephalon, homologous to mammalian neocortex or avian hyperstriatum. Cytoarchitectonics and neuronal composition of DVR of 16 reptilian species of all systematic groups was investigated (we have priority in analyzing a number of species, exp. *Vipera berus*, *Vipera lebetina*, *Gecko gecko*, *Lacerta armeniaca*). DVR has highly complex organization including a number of cytoarchitectonic regions and multicellular clusters of neurons (from 3 to several dozen). The complexity of DVR as well as the structure of separate zones varies considerably between species and groups. We have priority in showing, that DVR structure varies in one hemisphere of the same species. Morpho-functional organization of reptilian telencephalon and problems of homology

