

A new salamander from the late Paleocene-early Eocene of Ukraine

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A new neotenic salamander, Seminobatrachus boltyschkensis gen. et sp. nov., is described based on 14 skeletons of late Paleocene-early Eocene age preserved on drill core slabs from the Cherkassy Region, central Ukraine. The new taxon is diagnosed by the following unique combination of characters: dorsal process of premaxilla posteriorly elongate and overlaps frontal; maxilla greatly reduced in size; parietal-squamosal contact absent; vomerine tooth row long and parallel to maxillary arcade; pterygoid has long anterior process; quadrate ossified; marginal and palatal teeth pedicellate; trunk vertebrae amphicoelous, each having a subcentral keel, anterior basapophysis, and spinal nerve foramina; ribs bicipital; carpals and tarsals unossified; and phalangeal formulae of 2–2–3–2 and 2–2–3–4–2 for manus and pes, respectively. Phylogenetic analysis nests S. boltyschkensis within Urodela (i.e., crown-clade salamanders), but its exact phylogenetic position is equivocal, resolving in one of three ways: (1) in an unresolved trichotomy with Salamandra and (Ambystomatidae + (*Dicamptodon + Rhyacotriton*)) (results obtained in NONAv. 2.0, with the WINCLADAv. 1.00.08 interface; the parsimony ratchet (island hopper) algorithm), (2) as a sister taxon of (Salamandra + (Ambystomatidae + (Dicamptodon + Rhyacotriton))) clade (results obtained in TNT v. 1.1; the implicit enumeration search algorithm) or (3) as a sister taxon of Ambystomatidae (results obtained in PAUP v. 4.0b10; the branch–and–bound search algorithm).

Key words: Caudata, Urodela, phylogeny, Paleocene, Eocene, Ukraine.

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