The description of the first rock-dwelling species of butterfly lizard Leiolepis Cuvier, 1829 (Squamata, Agamidae) from the Khorat Plateau in northeastern Thailand

ABSTRACT

A new species of rock-dwelling Leiolepis is described from the Khorat Plateau in northeastern Thailand. Leiolepis glaurung sp. nov. can be differentiated from all other sexual species of Leiolepis by a combination of having a black gular region with a wide medial yellow stripe, a yellow ventrum with black mottling, bright red to orange subcaudal coloration, having reduced to no expandable flanks, and having only one black transverse bar on the flanks. This is the first rocky habitat-adapted Leiolepis. Leiolepis glaurung sp. nov. demonstrates numerous ecological adaptations to survive in these rocky habitats. Leiolepis are known for their expandable flanks with bright display colors, however Leiolepis glaurung sp. nov. has reduced or no ability to expand its flanks. We hypothesize this is an adaptation to reduce their body diameter to better fit into smaller rocky burrows unlike the larger and deeper burrows constructed in looser soils by other Leiolepis species. This discovery increases the number of Leiolepis species in Thailand to six, and worldwide to 11.