

**Histological and computed tomography study of osteoderm regeneration in the skink lizard *Eurylepis taeniolata* Blyth, 1854 (Scincidae, Squamata)**

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**Abstract.** Skink lizards have an unusual complex osteoderm, which consists of several bone elements – osteodermitis. We have carried out the first histological and computer microtomographic study of the structure of the original and regenerating complex osteoderms of skink lizards using *Eurylepis taeniolata* as an object. The topography of osteoderms in the integument of the original region of the tail and its regenerated part was studied. The fundamental similarity of the morphology and microstructure of the original and regenerated osteoderms was showed. A description of the development of the microstructure of a complex osteoderm in the process of regeneration is given. The presence of osteodermin on the surface of osteoderms in the studied species was revealed.

**Keywords:** *Eurylepis taeniolata*, osteoderms, microstructure, regeneration

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