

SCANNING ELECTRON MICROSCOPY OF JAW SHEATHS IN EIGHT MEGOPHRYID TADPOLES (AMPHIBIA, ANURA, MEGOPHRYIDAE)

Cheng Li, Zhao-Xiong Dong

Chengdu Institute of Biology, Chinese Academy of Science

Chengdu, Sichuan 610041, China

E-mail: licheng@cib.ac.cn

KEY WORDS: Megophryidae, Tadpoles, Jaw Sheaths, SEM morphology

Abstract The eight megophryids larvae show a distinct dichotomy among the morphology of the jaw sheaths using scanning electron microscopy. The morphology of jaw sheaths of Leptobrachiinae and Leptolalaginae larvae were similar. Their upper jaw sheaths is U-shaped and strong keratinized, the serrations is pyramidal, broad-based and short pointed. While the upper jaw sheaths of Megophryinae larvae were less curved and weak keratinized, with narrow-based and long pointed serrations. These distinctions among the jaw sheaths of three subfamilies tadpoles most can be related to their specific ecological habits and to their dietary specializations.

Figures

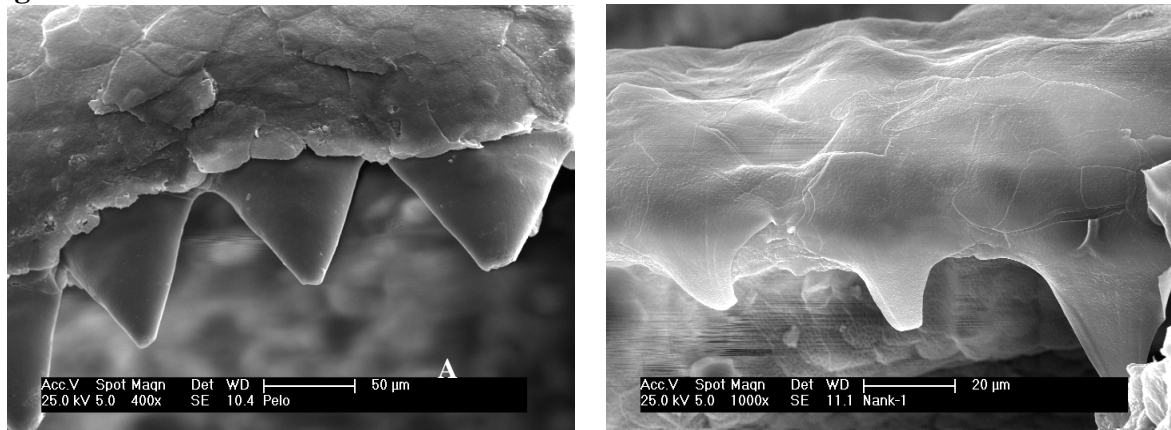


Figure 1: Jaw sheaths of *Leptolalax pelodytoides* (A), and *Xenophrys nankiangensis* (B)

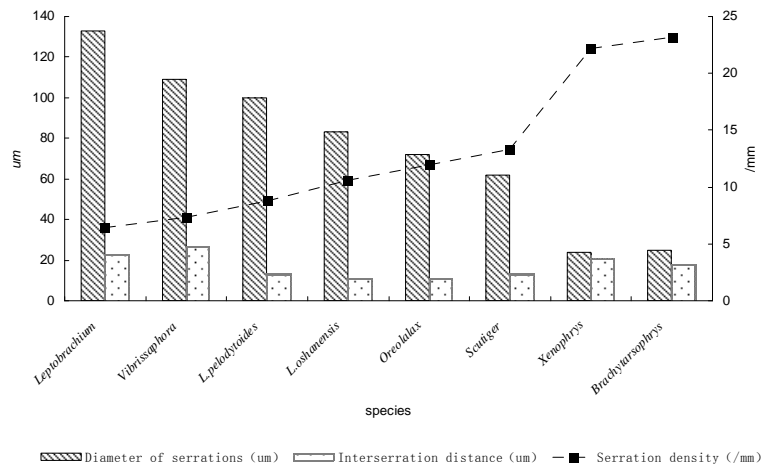


Figure 2: Serrations measurements in tadpoles of nine species

References

- [1] R. Altig and G. F. Johnston, "Guilds of anuran larvae: relationships among development modes, morphologies, and habitats". *Herp. Monogr.* **3**, 81-109 (1989)
- [2] R. W. McDiarmid and R. Altig, *Tadpole: the biology of anuran larvae*, Chapter 3. (The University of Chicago Press, Chicago and London, 1999).
- [3] R. Altig and W. L. Pace, "Scanning electron photomicrographs of tadpole labial teeth". *J. Herp.* **8**, 247-251 (1974)