Skin Secretion and Shedding Is a Good Source for **Non-Destructive Genetic Sampling in the Chinese Giant** Salamander (Andrias davidianus)

Wentao Guo, Mingzhang Ao*, Wei Li, Jianwen Wang, and Longjiang Yu*

Institute of Resource Biology and Biotechnology, Department of Biotechnology, College of Life Science and Technology, Huazhong University of Science and Technology, and Kev Laboratory of Molecular Biophysics, Ministry of Education, Wuhan, 430074,

China. Fax: 86-27-87792264. E-mail: yulongjiang@mail.hust.edu.cn and amz25@163.com

* Authors for correspondence and reprint requests

A non-destructive method of collecting samples for DNA analysis of the Chinese giant salamander is described and validated. DNA was extracted from the skin secretion and shedding using a Chelex-based method, and partial 12S rRNA gene sequences were amplified and sequenced. Sequences from skin secretion and shedding were cross-checked against

Key words: Non-Destructive Sampling, Skin Secretion, Shedding, Genomic DNA

Z. Naturforsch. **68 c**, 164 – 168 (2013); received March 10, 2012/March 6, 2013

the reported sequences from liver and were found to be identical. This method provides a non-destructive way of carrying out larger studies of the genetics of rare amphibians and

may be of general use for genetic-based field studies of amphibians.