The Description of A New Species of Thermophis (Serpentes: Colubridae)

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From 2004 to 2006, several field trips in western Sichuan, China were carried out. A number of Thermophis snakes were collected in Litang County. After detailed morphological studies, we found that these Thermophis specimens were much different from those from Xizang (Tibet). We believed that Litang snakes should be a new species and describe it as below.

Thermophis zhaorermii new species

Holotype: SCUM 044804, adult female, collected in August 2004, Litang County, Sichuan, China. Elevation 3700 m. The specimen is deposited in SCUM.

Paratypes: SCUM 044801 ~ 044802, 2 males; SCUM 044803, CUN S16 ~ S20, SAF 001 ~ 004, 9 females. They were collected at the same locality as the holotype. All specimens are deposited in SCUM, CUN, and SAF respectively.

Diagnosis: Thermophis zhaorermii differs mainly from T. baileyi by the following characteristics: 1. the new species exhibits a more anterior occurrence of subcaudal scale of the reduction from 6 to 4 scale rows [76. 75 (76.50 ~ 77.00) vs. 90.42 (85.50 ~ 92.00) in males, and 69.28 (64.00 ~ 74.50) vs. 78.26 (76.00 ~ 81.50) in females]; 2. the new species has a shorter hemipenis (in situ) (the 16th subcaudal vs. 21st ~ 23rd subcaudal) and a more proximally occurrence of the organ fork (the 12th subcaudal vs. the 15th ~ 17th subcaudal); 3. T. zhaorermii exhibits fewer maxillary teeth (16.5 vs. 22.0); 4. all subcaudals are paired (no single one) in the new species, but some subcaudals are undivided in T. baileyi. Furthermore, based on independent molecular mitochondrial and nuclear sequences, the divergences between the two species are large (unpublished data).

A detail description of the new species will be published in another paper.

This species is named for the senior herpetologist Professor Zhao Ermi in recognition of his great contribution to herpetological research in China.

We suggested the common name of the new species as “Sichuan Wenquan She” (四川温泉蛇) in Chinese, and “Sichuan Hot-spring Keel-back” in English. Accordingly, Thermophis baileyi is now referred to as “Xizang Wenquan She” (西藏温泉蛇) in Chinese and “Xizang Hot-spring Keel-back” in English.

Museum abbreviations: CUN: The Central University for Nationalities, Beijing, China; SCUM: Sichuan University Museum, Chengdu, China; SAF: Sichuan Academy of Forest, Chengdu, China.

References

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