

Table S1. The distribution data of *Liua shihi* collected in published literatures.

Species	Longitude	Latitude	Reference
<i>Liua shihi</i>	106.4036	29.8116	Li, H.; Liu, X. Investigation on amphibian and reptile resources in Jinyun Mountain Nature Reserve of Chongqing City. <i>Guizhou Agricultural Sciences</i> 2010 , 38, 170-172. (In Chinese with English Abstract)
<i>Liua shihi</i>	107.6	31.5	
<i>Liua shihi</i>	108.45	31.52	
<i>Liua shihi</i>	108.58	31.78	
<i>Liua shihi</i>	109.91	31.33	Zeng, X.M.; Fu, J.Z.; Chen, L.Q.; etc. Cryptic species and systematics of the hynobiid salamanders of the <i>Liua</i> - <i>Pseudohynobius</i> complex: Molecular and phylogenetic perspectives. <i>Biochem Syst Ecol</i> 2006, 34, 467-477, doi:10.1016/j.bse.2006.01.006.
<i>Liua shihi</i>	110.14	31.17	
<i>Liua shihi</i>	110.25	31.41	
<i>Liua shihi</i>	110.27	31.43	
<i>Liua shihi</i>	110.28	31.43	
<i>Liua shihi</i>	109.8	31.48	
<i>Liua shihi</i>	108.6716	31.9534	
<i>Liua shihi</i>	109.4705	31.0246	
<i>Liua shihi</i>	109.5764	31.4049	Luo, J.; Gao, H.; Wang, Y.; etc. Study and Protection of Amphibian Species Diversity in Chongqing. <i>Sichuan Journal of Zoology</i> 2005, 378-385. (In Chinese with English Abstract)
<i>Liua shihi</i>	110.3476	31.0481	
<i>Liua shihi</i>	110.6825	31.7505	
<i>Liua shihi</i>	110.9844	30.8319	
<i>Liua shihi</i>	108.9425	30.2972	Li, S.B.; Su, Z.L.; Tong, P.; etc. Investigation on amphibian and reptile resources in Xingdoushan National Nature Reserve of Hubei Province. <i>Sichuan Journal of Zoology</i> 2010, 29, 130-133. (In Chinese with English Abstract)
<i>Liua shihi</i>	109.1466	29.6711	
<i>Liua shihi</i>	109.4866	30.301	
<i>Liua shihi</i>	108.0415	32.0874	Su, Y.; Luo, J.; Gan, X.P.; etc. Investigation and Evaluation of Amphibians in Hua 'eshan National Nature Reserve. <i>Journal of Southwest China Normal University(Natural Science Edition)</i> 2016 , 41, 92-98. (In Chinese with English Abstract)
<i>Liua shihi</i>	109.8855	31.0805	Tian, W.S.Z.M. New species of amphibians published by Professor Liu Chengzhao during his lifetime. <i>Sichuan</i>

			Journal of Zoology 2000, 105-107. (In Chinese)
<i>Liua shihi</i>	109.9028	31.33713333	Zhang, P.; Zeng, X.; Fu, J.; etc. UCE Phylogenomics, detection of a putative hybrid population, and one older mitogenomic node age of <i>Batrachuperus</i> salamanders. <i>Mol Phylogenet Evol</i> 2021, 163, doi:10.1016/j.ympev.2021.107239.
<i>Liua shihi</i>	110.7475	32.0617	Liu, H.; Ai, H.; Ren, S.; etc. Investigation on the diversity of amphibians and reptiles in Yerengu Nature Reserve, Fangxian County, Hubei Province. <i>Sichuan Journal of Zoology</i> 2010, 29, 560-564. (In Chinese with English Abstract)
<i>Liua shihi</i>	110.7534	31.3545	Shu, S.; Dai, Z.; Wu, F.; etc. Investigation on resources of amphibians and reptiles in Wanchaoshan Nature Reserve of Hubei Province. <i>Journal of Central China Normal University (Natural Sciences)</i> 2007, 278-281. (In Chinese with English Abstract)
<i>Liua shihi</i>	111.0526	30.1712	Dai, Z.; Zheng, Z.; Gong, R.; etc. Investigation on amphibian and reptile resources in Houhe National Nature Reserve of Hubei Province. <i>Chinese Journal of Zoology</i> 2009, 44, 48-53. (In Chinese with English Abstract)
<i>Liua shihi</i>	111.2135	30.4786	Tian, K.; Wang, Z.X.; Lei, Y.; etc. Investigation on the Biodiversities of Amphibians and Reptiles in Bengjianzi Nature Reserve, Hubei Province. <i>Sichuan Journal of Zoology</i> 2016, 35, 452-458. (In Chinese with English Abstract)
<i>Liua shihi</i>	111.2674	31.8838	Zeng, L.; Shu, S.; Wang, Q.; etc. Preliminary study on amphibians and reptiles in Wudaoxia Nature Reserve of Hubei Province. <i>Journal of Hubei University(Natural Science)</i> 2008, 30, 407-410. (In Chinese with English Abstract)
<i>Liua shihi</i>	113.4345	32.3851	Zhao, H.; Wang, Q.; Wang, C.; etc. Status and Fauna Analysis of Amphibian Resources in Henan Province. <i>Journal of Henan University(Natural Science)</i> 2015, 45, 705-711. (In Chinese with English Abstract)
<i>Liua shihi</i>	115.4135	31.8043	Wang, X.; Pei, X.; Xu, Y.; etc. Investigation of amphibian diversity in Huangbai Mountain National Forest Park of Henan Province. <i>Chinese Journal of Zoology</i> 2011, 46, 53-56. (In Chinese with English Abstract)

Table S2. The distribution data of *Liua shihi* collected on website.

Species	Longitude	Latitude	Source
<i>Liua shihi</i>	107.996238	32.822187	The Global Biodiversity Information Facility website (http://www.gbif.org)
<i>Liua shihi</i>	108.347116	30.945958	
<i>Liua shihi</i>	108.85	30.3	
<i>Liua shihi</i>	109.08747	31.77473	
<i>Liua shihi</i>	109.848823	31.485095	
<i>Liua shihi</i>	109.881853	31.071815	
<i>Liua shihi</i>	109.897798	31.33769	
<i>Liua shihi</i>	109.91026	31.37432	
<i>Liua shihi</i>	109.969182	31.406233	
<i>Liua shihi</i>	110.09431	31.361518	
<i>Liua shihi</i>	110.131327	31.454329	
<i>Liua shihi</i>	110.266667	31.216667	
<i>Liua shihi</i>	110.310421	31.435606	
<i>Liua shihi</i>	110.392936	31.020833	
<i>Liua shihi</i>	110.420354	31.456274	
<i>Liua shihi</i>	110.45575	31.40684	
<i>Liua shihi</i>	110.619154	31.656546	
<i>Liua shihi</i>	110.680447	31.743483	
<i>Liua shihi</i>	111.04204	31.01894	
<i>Liua shihi</i>	112	31	
<i>Liua shihi</i>	109.3685	32.3948	

Table S3. The distribution data of *Liua shihi* collected from field survey.

Species	Longitude	Latitude	The field survey site
<i>Liua shihi</i>	109.9823512	31.41700603	Wushan County, Chongqing City
<i>Liua shihi</i>	109.9819247	31.41689044	
<i>Liua shihi</i>	109.9825162	31.41703236	
<i>Liua shihi</i>	109.9826409	31.41705296	
<i>Liua shihi</i>	109.8856938	31.36656954	
<i>Liua shihi</i>	109.9815334	31.47246185	
<i>Liua shihi</i>	109.8855919	31.36653748	
<i>Liua shihi</i>	109.8854926	31.36650083	
<i>Liua shihi</i>	109.1898818	31.52490621	Wuxi County, Chongqing City
<i>Liua shihi</i>	109.1901729	31.5247736	
<i>Liua shihi</i>	109.1901018	31.52477246	
<i>Liua shihi</i>	109.1902064	31.52454725	
<i>Liua shihi</i>	109.1747716	31.49160188	
<i>Liua shihi</i>	108.9422603	31.63721609	
<i>Liua shihi</i>	108.9423877	31.63763512	
<i>Liua shihi</i>	108.9418392	31.63630721	
<i>Liua shihi</i>	108.9419062	31.63666003	
<i>Liua shihi</i>	108.9420685	31.6372001	
<i>Liua shihi</i>	108.9421396	31.63708249	
<i>Liua shihi</i>	108.9421463	31.63742618	
<i>Liua shihi</i>	108.9422026	31.63737251	
<i>Liua shihi</i>	108.9423877	31.6377493	
<i>Liua shihi</i>	108.9423139	31.63782009	
<i>Liua shihi</i>	108.9416592	31.63675978	
<i>Liua shihi</i>	108.9424789	31.63796396	
<i>Liua shihi</i>	108.9428665	31.63804617	
<i>Liua shihi</i>	109.0714288	31.80306241	Chengkou County, Chongqing City
<i>Liua shihi</i>	108.9976318	31.80571915	
<i>Liua shihi</i>	108.8901074	31.78364575	
<i>Liua shihi</i>	108.5450077	31.88457261	
<i>Liua shihi</i>	108.5449541	31.88450884	
<i>Liua shihi</i>	108.5448857	31.88441091	
<i>Liua shihi</i>	108.5448374	31.88433006	
<i>Liua shihi</i>	108.544765	31.88421846	
<i>Liua shihi</i>	109.06666	31.81666	
<i>Liua shihi</i>	108.6573494	32.06806518	
<i>Liua shihi</i>	110.4102339	31.41094468	Shennongjia Forestry District, Hubei Province
<i>Liua shihi</i>	110.4072545	31.42312594	
<i>Liua shihi</i>	110.3820799	31.4353101	