

Table S1. Species information of Hynobiids in this study. DNA vouchers deposited at Chengdu Institute of Biology (CIB), Chinese academy of sciences

Species	Sample No.	Locality	Position	Date	Collector	Accession No.	
						COI	16S
<i>Batrachuperus</i>							
<i>Batrachuperus pinchonii</i>	XM871	Baoxing, Sichuan	/	June19, 2001	Fu J Z; Liu Z J	JN165778	JN165894
<i>Batrachuperus pinchonii</i>	XM879	Baoxing, Sichuan	/	June19, 2001	Fu J Z; Liu Z J	JN165779	JN165895
<i>Batrachuperus pinchonii</i>	XM880	Baoxing, Sichuan	/	June19, 2001	Fu J Z; Liu Z J	JN165780	JN165896
<i>Batrachuperus pinchonii</i>	XM882	Baoxing, Sichuan	/	June19, 2001	Fu J Z; Liu Z J	JN165781	JN165897
<i>Batrachuperus pinchonii</i>	ZYC1401	Baoxing, Sichuan		Aug 4, 2001	Zheng Y C	JN165782	JN165898
<i>Batrachuperus pinchonii</i>	ZYC1402	Baoxing, Sichuan		Aug 5, 2001	Zheng Y C	JN165783	JN165899
<i>Batrachuperus pinchonii</i>	XM2007	Hongya, Sichuan	N29° 26,533' / E102° 53,779'	Apr 23,2000	Li C;Yang J	JN165784	JN165900
<i>Batrachuperus pinchonii</i>	XM503	Dayi, Sichuan	N30° 41,290' / E103° 09,483'	Oct 4, 2000	Zeng X M; Zhang S J	JN165785	JN165901
<i>Batrachuperus pinchonii</i>	XM504	Dayi, Sichuan	N30° 41,290' / E103° 09,483'	Oct 4, 2000	Zeng X M; Zhang S J	JN165786	JN165902
<i>Batrachuperus longdongensis</i>	XM120	E-Mei, Sichuan	/	June15, 2000	Wu G H;	JN165787	JN165903
<i>Batrachuperus longdongensis</i>	XM122	E-Mei, Sichuan	/	June 9, 2000	Wu G H; Yang J	JN165788	JN165904
<i>Batrachuperus longdongensis</i>	XM1372	Hongya, Sichuan	/	July19, 2002	Li X T; Yang S Q	JN165789	JN165905
<i>Batrachuperus taibaiensis</i>	XM685	Zhouzhi, Shanxi	N33° 8/E107° 8	Aug.1999	Liang G	JN165790	JN165906
<i>Batrachuperus taibaiensis</i>	XM715	Zhouzhi, Shanxi	N33° 8/E107° 8	Aug.1999	Liang G	JN165791	JN165907
<i>Batrachuperus karlschmidti</i>	LC103	Yajiang, Sichuan	N30° 02,083' /E100° 51,824'	June12, 2001	Li C	JN165792	JN165908
<i>Batrachuperus karlschmidti</i>	LC104	Yajiang, Sichuan	N30° 02,083' /E100° 51,824'	June12, 2001	Li C	JN165793	JN165909
<i>Batrachuperus tibetanus</i>	XM200	Xihe, Gansu	N33° 54,243' /E105° 27,822'	June25, 2000	Fu J Z; Liu Z J	JN165794	JN165910
<i>Batrachuperus tibetanus</i>	XM201	Xihe, Gansu	N33° 54,243' /E105° 27,822'	June25, 2000	Fu J Z; Liu Z J	JN165795	JN165911
<i>Batrachuperus tibetanus</i>	XM156	Linxia, Gansu	N35° 28,215' /E102° 54,373'	June14, 2000	Fu J Z; Liu Z J	JN165796	JN165912
<i>Batrachuperus tibetanus</i>	XM158	Zhuoni, Gansu	N34° 32,002' /E103° 29,185'	June15, 2000	Fu J Z; Liu Z J	JN165797	JN165913
<i>Batrachuperus tibetanus</i>	LC160	Jiuzhaigou, Sichuan	N33° 05,597' /E103° 92,642'	Apr.10,2005	Li C	JN165798	JN165914
<i>Batrachuperus tibetanus</i>	LC165	Jiuzhaigou, Sichuan	N33° 21,404' /E103° 90,486'	Apr.12,2005	Li C	JN165799	JN165915

<i>Batrachuperus tibetanus</i>	LC168	Jiuzhaigou, Sichuan	N33° 19,675' / E103° 90,486'	Apr.12,2005	Li C	JN165800	JN165916
<i>Batrachuperus tibetanus</i>	XM1407	Jiuzhaigou, Sichuan	N33° 19,675' / E103° 90,486'	Apr.12,2005	Li C	JN165801	JN165917
<i>Batrachuperus</i> sp1	XM1290	Daocheng, Sichuan	N29° 11,341' / E100° 06,618'	May.8,2002	Liu Z J	JN165802	JN165918
<i>Batrachuperus</i> sp1	XM1309	Xiangcheng, Sichuan	N29° 09,182' / E99° 56,028'	May.9,2002	Liu Z J	JN165803	JN165919
<i>Batrachuperus</i> sp1	XM1311	Xiangcheng, Sichuan	N29° 09,182' / E99° 56,028'	May.9,2002	Liu Z J	JN165804	JN165920
<i>Salamandrella</i>							
<i>Salamandrella keyserlingii</i>	XM2107	Fusong, Jilin	N41° 62,387' / E127° 93,946'	May 3rd,2006	Zeng X M;Chen Y Y	JN165805	JN165921
<i>Salamandrella keyserlingii</i>	XM1882	Fusong, Jilin	N41° 62,387' / E127° 93,946'	May 3rd,2006	Zeng X M;Chen Y Y	JN165806	JN165922
<i>Salamandrella keyserlingii</i>	XM1802	Bin, Heilongjiang	N45° 61,874' / E127° 26,569'	Apr.29,2006	Zeng X M;Chen Y Y	JN165807	JN165923
<i>Salamandrella keyserlingii</i>	XM1804	Bin, Heilongjiang	N45° 61,874' / E127° 26,569'	Apr.29,2006	Zeng X M;Chen Y Y	JN165808	JN165924
<i>Salamandrella keyserlingii</i>	XM1879	Bin, Heilongjiang	N45° 71,002' / E126° 86,279'	Apr.30,2006	Zeng X M;Chen Y Y	JN165809	JN165925
<i>Salamandrella keyserlingii</i>	XM1880	Haerbin, Heilongjiang	N45° 71,002' / E126° 86,279'	Apr.30,2006	Zeng X M;Chen Y Y	JN165810	JN165926
<i>Salamandrella keyserlingii</i>	XM2055	Xunke, Heilongjiang	/	June5,2006	Zhao W G	JN165811	JN165927
<i>Salamandrella keyserlingii</i>	XM2056	Xunke, Heilongjiang	/	June5,2006	Zhao W G	JN165812	JN165928
<i>Salamandrella keyserlingii</i>	XM2057	Huma, Heilongjiang	/	June5,2006	Zhao W G	JN165813	JN165929
<i>Salamandrella keyserlingii</i>	XM2059	Huma, Heilongjiang	/	June5,2006	Zhao W G	JN165814	JN165930
<i>Pachyhynobius</i>							
<i>Pachyhynobius shangchengensis</i>	XM2017	Xinyang, Henan	N31° 43,623' / E115° 32,607'	Apr.24,2006	Xiong J L	JN165815	JN165931
<i>Pachyhynobius shangchengensis</i>	XM2018	Xinyang, Henan	N31° 43,623' / E115° 32,607'	Apr.24,2006	Xiong J L	JN165816	JN165932
<i>Pachyhynobius shangchengensis</i>	XM2020	Xinyang, Henan	N31° 43,623' / E115° 32,607'	Apr.24,2006	Xiong J L	JN165817	JN165933
<i>Pachyhynobius shangchengensis</i>	XM2036	Xinyang, Henan	N31° 43,623' / E115° 32,607'	Apr.24,2006	Xiong J L	JN165818	JN165934
<i>Pachyhynobius shangchengensis</i>	XM2048	Xinyang, Henan	N 31° 44,646' / E115° 32,626'	Apr.24,2006	Xiong J L	JN165819	JN165935
<i>Pachyhynobius shangchengensis</i>	XM2049	Xinyang, Henan	N 31° 44,646' / E115° 32,626'	Apr.23,2006	Xiong J L	JN165820	JN165936
<i>Pseudohynobius</i>							
<i>Pseudohynobius flavomaculatus</i>	XM1135	Lichuan, Hubei	N30° 31,468' / E109° 05,680'	Apr.23,2002	Liu Z J	JN165821	JN165937

<i>Pseudohynobius flavomaculatus</i>	XM1136	Lichuan, Hubei	N30° 31,468' / E109° 05,680'	Apr.23,2002	Liu Z J	JN165822	JN165938
<i>Pseudohynobius flavomaculatus</i>	200087	Sangzhi, Hunan	/	Aug.8,2000	Jiang J P	JN165823	JN165939
<i>Pseudohynobius flavomaculatus</i>	XM3182	Youyang, Chongqing	N29° 19,790' / E108° 55,169'	Oct 3, 2007	Hou M	JN165824	JN165940
<i>Pseudohynobius jinjo</i>	BMS20010715020	Wulong, Chongqing	/	July 15,2001	He X F	JN165825	JN165941
<i>Pseudohynobius jinjo</i>	ZYC824	Nanchuan, Chongqing	N29° 00,854' /E107° 11,178'	May 16,2001	Liu Z J;Zheng Y C	JN165826	JN165942
<i>Pseudohynobius jinjo</i>	ZYC828	Nanchuan, Chongqing	N29° 00,854' /E107° 11,178'	May 16,2001	Liu Z J;Zheng Y C	JN165827	JN165943
<i>Pseudohynobius guizhouensis</i>	XM2832	Guiding, Guizhou	N26° 18,479' /E107° 20,303'	May 8,2007	Hou M;Jiang K	JN165828	JN165944
<i>Pseudohynobius kuankuoshuiensis</i>	XM1073	Suiyang; Guizhou	N28° 12,959' /E107° 10,597'	Sep.25,2001	Liu Z J	JN165829	JN165945
<i>Pseudohynobius kuankuoshuiensis</i>	XM1074	Suiyang; Guizhou	N28° 12,959' /E107° 10,597'	Sep.25,2001	Liu Z J	JN165830	JN165946
<i>Pseudohynobius shuichengensis</i>	XM1081	Liupanshui,Guizhou	N26° 34/E104° 51	Sep.8,2001	Tian Y Z	JN165831	JN165947
<i>Pseudohynobius shuichengensis</i>	XM1082	Liupanshui,Guizhou	N26° 34/E104° 51	Sep.8,2001	Tian Y Z	JN165832	JN165948
<i>Pseudohynobius puxiongensis</i>	XM3323	Yuexi,Sichuan	N28° 30,988' /E102° 49,47'	Apr.28,2008	Chen Q;Gu H F	JN165833	JN165949
<i>Pseudohynobius puxiongensis</i>	XM3365	Yuexi,Sichuan	N28° 30,988' /E102° 49,47	Apr.27,2008	Chen Q;Gu H F	JN165834	JN165950
<i>Liua</i>							
<i>Liua tsinpaensis</i>	ZYC915	Wanyuan,Sichuan	N32° 06,321' /E108° 08,870'	May 23,2001	Liu Z J;Zheng Y C	JN165835	JN165951
<i>Liua tsinpaensis</i>	ZYC918	Wanyuan,Sichuan	N32° 06,321' /E108° 08,870'	May 23,2001	Liu Z J;Zheng Y C	JN165836	JN165952
<i>Liua tsinpaensis</i>	ZYC922	Wanyuan,Sichuan	N32° 06,321' /E108° 08,870'	May 23,2001	Liu Z J;Zheng Y C	JN165837	JN165953
<i>Liua shihi</i>	XM284	Xuanhan, Sichuan		May 2000	/		JN165954
<i>Liua shihi</i>	XM285	Xuanhan, Sichuan		May 2000	/	JN165838	JN165955
<i>Liua shihi</i>	XM868	Shennongjia, Hubei		June 2rd,2001	Liu Z J;Zheng Y C	JN165839	JN165956
<i>Liua shihi</i>	XM897	Shennongjia, Hubei	/	June 2rd,2001	Liu Z J;Zheng Y C	JN165840	JN165957
<i>Liua shihi</i>	ZYC1008	Shennongjia, Hubei	N31° 41,001' /E110° 225,461'	May 30,2001	Liu Z J;Zheng Y C	JN165841	JN165958
<i>Liua shihi</i>	ZYC1011	Shennongjia, Hubei	N31° 41,001' /E110° 25,461'	May 30,2001	Liu Z J;Zheng Y C	JN165842	JN165959
<i>Liua shihi</i>	ZYC1031	Shennongjia, Hubei	N31° 43,883' / E110° 28,509'	June.22,2001	Liu Z J;Zheng Y C	JN165843	JN165960
<i>Liua shihi</i>	ZYC1033	Shennongjia, Hubei	N31° 43,883' / E110° 28,509'	June.23,2001	Liu Z J;Zheng Y C	JN165844	JN165961
<i>Liua shihi</i>	XM1162	Wuxi, Chongqing	N31° 23,991' /E109° 37,531'	Apr.28,2002	Liu Z J	JN165845	JN165962
<i>Liua shihi</i>	XM1155	Wushan, Chongqing	N31° 20,228' /E109° 54,168'	Apr.29,2002	Liu Z J	JN165846	JN165963

<i>Liua shihi</i>	XM1156	Wushan, Chongqing	N31° 20,228' /E109° 54,168'	Apr.29,2002	Liu Z J	JN165847	JN165964
<i>Liua shihi</i>	XM1221	Wushan, Chongqing	N31° 17,341' /N110° 14,522'	Apr.30,2002	Liu Z J		JN165965
<i>Liua shihi</i>	XM1224	Wushan, Chongqing	N31° 17,341' /N110° 14,522'	Apr.30,2002	Liu Z J	JN165848	JN165966
<i>Liua shihi</i>	XM2043	Wushan, Chongqing	N31° 37,161' /E109° 91,220'	July 2006	Xiong J L	JN165849	JN165967
<i>Liua shihi</i>	XM2044	Wushan, Chongqing	N31° 37,161' /E109° 91,220'	July 2006	Xiong J L	JN165850	JN165968
<i>Liua shihi</i>	XM1152	Chengkou, Chongqing	N30° 31,468' /E109° 05,680'	Apr.26,2002	Liu Z J	JN165851	JN165969
<i>Liua shihi</i>	XM1153	Chengkou, Chongqing	N30° 31,468' /E109° 05,680'	Apr.26,2002	Liu Z J	JN165852	JN165970
<i>Liua shihi</i>	XM1226	Kai, Chongqing	N31° 35,762' /N108° 46,993'	Apr.25,2002	Liu Z J	JN165853	JN165971
<i>Liua shihi</i>	XM1228	Kai, Chongqing	N31° 35,762' /N108° 46,993'	Apr.25,2002	Liu Z J	JN165854	JN165972
<i>Hynobius</i>							
<i>Hynobius yiwuensis</i>	XM3289	Ningbo, Zhejiang	N29° 12,778' /E121° 56,070'	/	Hou M	JN165855	JN165973
<i>Hynobius yiwuensis</i>	XM3290	Ningbo, Zhejiang	N29° 12,778' /E121° 56,070'	/	Hou M	JN165856	JN165974
<i>Hynobius yiwuensis</i>	XM2864	Xiaoshan, Zhenjiang	N29° 56,557' /E120° 19,365'	Jun.7,2007	Hou M;Zhou Z C	JN165857	JN165975
<i>Hynobius yiwuensis</i>	XM2865	Xiaoshan, Zhenjiang	N29° 56,557' /E120° 19,365'	Jun.7,2007	Hou M;Zhou Z C	JN165858	JN165976
<i>Hynobius yiwuensis</i>	XM2215	Yiwu, Zhejiang	N29° 28,611' /E120° 05,675'	Jun.14,2007	Hou M;Zhou Z C	JN165859	JN165977
<i>Hynobius yiwuensis</i>	XM2216	Yiwu, Zhejiang	N29° 28,611' /E120° 05,675'	Jun.14,2007	Hou M;Zhou Z C	JN165860	JN165978
<i>Hynobius yiwuensis</i>	JF227	Zhoushan, Zhejiang	N30° 01,66' /E122° 08,66'	/	Fu J Z;Liu Z J	JN165861	JN165979
<i>Hynobius yiwuensis</i>	JF228	Zhoushan, Zhejiang	N30° 01,66' /E122° 08,66'	/	Fu J Z;Liu Z J	JN165862	JN165980
<i>Hynobius yiwuensis</i>	JF301	Zhenhai, Zhejiang	N29° 50,25' /E121° 52,66'	/	Fu J Z;Liu Z J	JN165863	JN165981
<i>Hynobius yiwuensis</i>	JF302	Zhenhai, Zhejiang	N29° 50,25' /E121° 52,66'	/	Fu J Z;Liu Z J	JN165864	JN165982
<i>Hynobius maoershanensis</i>	XM2127	Guilin, Guangxi	N25° 53,750' /E110° 25,962'	Jun.25,2006	Hou M;Chen Q	JN165865	JN165983
<i>Hynobius maoershanensis</i>	XM2142	Guilin, Guangxi	N25° 53,750' /E110° 25,962'	Jun.25,2006	Hou M;Chen Q	JN165866	JN165984
<i>Hynobius chinensis</i>	XM2250	Yichang, Hubei	N30° 58,416' /E110° 66,579'	Feb.14,2007	Liu Z J;Chen Q	JN165867	JN165985
<i>Hynobius chinensis</i>	XM2251	Yichang, Hubei	N30° 58,416' /E110° 66,579'	Feb.14,2007	Liu Z J;Chen Q	JN165868	JN165986
<i>Hynobius chinensis</i>	XM2252	Yichang, Hubei	N30° 58,416' /E110° 66,579'	Feb.14,2007	Liu Z J;Chen Q	JN165869	JN165987
<i>Hynobius chinensis</i>	XM2257	Yichang, Hubei	N30° 58,416' /E110° 66,579'	Feb.14,2007	Liu Z J;Chen Q	JN165870	JN165988
<i>Hynobius leechii</i>	XM200095	Qianshan, Liaoning	N41° 01,313' /E123° 07,606'	Apr.26,2000	Zhao E M;Liu Z J	JN165871	JN165989

<i>Hynobius leechii</i>	XM200099	Qianshan, Liaoning	N41° 01,313' /E123° 07,606'	Apr.26,2000	Zhao E M;Liu Z J	JN165872	JN165990
<i>Hynobius leechii</i>	XM2000111	Zhuanghe, Liaoning	N40° 01,387' /E123° 28,024'	Apr.29,2000	Zhao E M;Liu Z J	JN165873	JN165991
<i>Hynobius leechii</i>	XM2000112	Zhuanghe, Liaoning	N40° 01,387' /E123° 28,024'	Apr.29,2000	Zhao E M;Liu Z J	JN165874	JN165992
<i>Hynobius leechii</i>	XM2047	Huanren, Liaoning	N41° 33,518' /E124° 91,445'	May. 5,2006	Zhu Y P	JN165875	JN165993
<i>Hynobius leechii</i>	XM2120	Huanren, Liaoning	N41° 33,518' /E124° 91,445'	May.5,2006	Zhu Y P	JN165876	JN165994
<i>Hynobius leechii</i>	XM2000105	Fengcheng, Liaoning	N40° 31,314' /E123° 58,460'	Apr.28,2000	Zhao E M;Liu Z J	JN165877	JN165995
<i>Hynobius leechii</i>	XM2000106	Fengcheng, Liaoning	N40° 31,314' /E123° 58,460'	Apr.28,2000	Zhao E M;Liu Z J	JN165878	JN165996
<i>Hynobius leechii</i>	XM2000117	Gaizhou, Liaoning	N40° 01,066' /E122° 21,513'	Apr.29,2000	Zhao E M;Liu Z J	JN165879	JN165997
<i>Hynobius leechii</i>	XM2000119	Gaizhou, Liaoning	N40° 01,066' /E122° 21,513'	Apr.29,2000	Zhao E M;Liu Z J	JN165880	JN165998
<i>Hynobius leechii</i>	XM2000107	Donggang, Liaoning	N40° 01,387' /E123° 28,024'	Apr.27,2000	Zhao E M;Liu Z J	JN165881	JN165999
<i>Hynobius leechii</i>	XM2000109	Donggang, Liaoning	N40° 01,387' /E123° 28,024'	Apr.27,2000	Zhao E M;Liu Z J	JN165882	JN166000
<i>Hynobius leechii</i>	XM2000100	Liaoyang, Liaoning	N40° 58,973' /E123° 38,801'	Apr.26,2000	Zhao E M;Liu Z J	JN165883	JN166001
<i>Hynobius leechii</i>	XM2000101	Liaoyang, Liaoning	N40° 58,973' /E123° 38,801'	Apr.26,2000	Zhao E M;Liu Z J	JN165884	JN166002
<i>Hynobius leechii</i>	XM1867	Fusong, Jilin	N42° 56,996' /E127° 93,287'	May.3rd,2006	Zeng X M;Chen Y Y	JN165885	JN166003
<i>Hynobius leechii</i>	XM1868	Fusong, Jilin	N42° 56,996' /E127° 93,287'	May.3rd,2006	Zeng X M;Chen Y Y	JN165886	JN166004
<i>Hynobius leechii</i>	XM2136	Fusong, Jilin	N41° 62,387' /E127° 93,946'	May.3rd,2006	Zeng X M;Chen Y Y	JN165887	JN166005
<i>Hynobius leechii</i>	XM1905	Tonghua, Jilin	N41° 42,385' /E126° 28,218'	May.4,2006	Zeng X M;Chen Y Y	JN165888	JN166006
<i>Hynobius leechii</i>	XM2131	Tonghua, Jilin	N41° 42,385' /E126° 28,218'	May.4,2006	Zeng X M;Chen Y Y	JN165889	JN166007
<i>Onychodactylus</i>							
<i>Onychodactylus fischeri</i>	XM1682	Fusong, Jilin	N42° 62,387' /E127° 93,946'	May.3rd,2006	Zeng X M;Chen Y Y	JN165890	JN166008
<i>Onychodactylus fischeri</i>	XM2019	Xiuyan, Liaoning	N41° 80,348' /E123° 47,328'	May.6,2006	Zeng X M;Chen Y Y	JN165891	JN166009
<i>Onychodactylus fischeri</i>	XM2065	Tonghua, Jilin	N41° 42,385' /E126° 28,218'	May.4,2006	Zeng X M;Chen Y Y	JN165892	JN166010
<i>Onychodactylus fischeri</i>	XM2066	Tonghua Jilin	N41° 42,385' /E126° 28,218'	May.4,2006	Zeng X M;Chen Y Y	JN165893	JN166011