

Genetically informed range extension for *Kurixalus inexpectatus* (Anura: Rhacophoridae) in Fujian, with ecological niche modeling to guide further searches

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SUPPLEMENTARY MATERIAL

Table S1. *Kurixalus* Sample information. The table shows the information for all sequences used in this study, along with locality information for each specimen and GenBank accession numbers for each sequence and the corresponding literature reference. Taxonomy for species names following Frost (2024a), with unnamed clades following naming from Yu et al. (2017a).

Specimen ID	Species	Locality	Latitude	Longitude	COI	TYR	12S-Val-16S	Literature
ROM33963	<i>K. baliogaster</i>	Vietnam, Gia Lai, Krong Pa	13.25	108.65	KX554646			Yu et al. 2017
B07	<i>K. berylliniris</i>	Taiwan, Taitung	22.82	121.01	KT259061			Wu et al. 2016
B08	<i>K. berylliniris</i>	Taiwan, Taitung	22.82	121.01	KT259062			Wu et al. 2016
THNHM10052	<i>K. bisacculus</i>	Thailand, Pua, Nan	19.13	101.03	KX554634			Yu et al. 2017
THNHM10051	<i>K. bisacculus</i>	Thailand, Pua, Nan	19.13	101.03	KX554633			Yu et al. 2017
KUHE19333	<i>K. bisacculus</i>	Thailand, Loei, Phu Luanag	17.09	101.65	KX554645			Yu et al. 2017
KUHE19330	<i>K. bisacculus</i>	Thailand, Loei, Phu Luanag	17.09	101.65	KX554644			Yu et al. 2017
MNHN 1999.5942	<i>K. cf. bisacculus</i> (Clade F)	Vietnam, Lao Cai, Sa Pa	22.3	103.8	KR087741			Yu et al. 2017
MNHN 1999.5941	<i>K. cf. bisacculus</i> (Clade F)	Vietnam, Lao Cai, Sa Pa	22.3	103.8	KR087742			Yu et al. 2017
FMNH 255654	<i>K. cf. bisacculus</i> (Clade F)	Vietnam, Nghe An, Con Cuong	19.0	104.8	KX554587			Yu et al. 2017
KIZ 3317	<i>K. cf. bisacculus</i> (Clade F)	China, Yunnan, Wenshan	23.35	104.02	KX554596			Yu et al. 2017
YGH71153	<i>K. cf. bisacculus</i> (Clade F)	China, Yunnan, Wenshan	23.35	104.02	KX554597			Yu et al. 2017
YGH080166	<i>K. cf. bisacculus</i> (Clade F)	China, Yunnan, Pingbian	23.09	103.76	KX554582			Yu et al. 2017
FMNH261902	<i>K. cf. bisacculus</i> (Clade G)	Cambodia, Kampot, Kampot	10.62	104.13	KX554641			Yu et al. 2017
FMNH261901	<i>K. cf. bisacculus</i> (Clade G)	Cambodia, Kampot, Kampot	10.62	104.13	KX554640			Yu et al. 2017
FMNH261900	<i>K. cf. bisacculus</i> (Clade G)	Cambodia, Kampot, Kampot	10.62	104.13	KX554639			Yu et al. 2017
KUHE19428	<i>K. cf. bisacculus</i> (Clade K)	Thailand, Nakhon Si Thammarat	8.51	99.73	KX554643		AB933290	Yu et al. 2017
Rao14111306	<i>K. hainanus</i>	China, Yunnan, Wenshan	23.35	104.02	KX554603			Yu et al. 2017

KIZPYX19241	<i>K. hainanus</i>	none			PP543604	Xu et al. 2024
KIZHN0806114	<i>K. hainanus</i>	none			PP543603	Xu et al. 2024
KIZHN0806113	<i>K. hainanus</i>	none			PP543602	Xu et al. 2024
KIZHN0806112	<i>K. hainanus</i>	none			PP543601	Xu et al. 2024
KIZHN0806111	<i>K. hainanus</i>	none			PP543600	Xu et al. 2024
KIZHN0806008	<i>K. hainanus</i>	none			PP543599	Xu et al. 2024
KIZ048994	<i>K. hainanus</i>	none			PP543607	Xu et al. 2024
KIZ048784	<i>K. hainanus</i>	none			PP543606	Xu et al. 2024
KIZ048782	<i>K. hainanus</i>	none			PP543609	Xu et al. 2024
KIZ022333	<i>K. hainanus</i>	none			PP543610	Xu et al. 2024
KIZ020417	<i>K. hainanus</i>	none			PP543611	Xu et al. 2024
KIZ010795	<i>K. hainanus</i>	none			PP543608	Xu et al. 2024
KIZ010745	<i>K. hainanus</i>	none			PP543605	Xu et al. 2024
ROM36829	<i>K. hainanus</i>	Vietnam, Hai Duong	21.13	106.37	KC465812	Li et al. 2013
ROM36827	<i>K. hainanus</i>	Vietnam, Hai Duong, Chi Linh	21.13	106.37	KC465813	Li et al. 2013
ROM36726	<i>K. hainanus</i>	Vietnam, Cao Bang, Quang Thanh	22.6	105.93	KC465802	Li et al. 2013
ROM30042	<i>K. hainanus</i>	Vietnam, Tuyen Quang, Pac Ban	22.35	105.42	KC465809	Li et al. 2013
ROM29973	<i>K. hainanus</i>	Vietnam, Vinh Phu, Tam Dao	21.49	105.6	KC465803	Li et al. 2013
ROM29970	<i>K. hainanus</i>	Vietnam, Vinh Phu, Tam Dao	21.49	105.6	KC465804	Li et al. 2013
KIZ03312	<i>K. hainanus</i>	China, Yunnan, Wenshan	23.35	104.02	KC465810	Li et al. 2013
HNNUA1180	<i>K. hainanus</i>	China, Hainan, Diaoluo Mt.	18.71	109.86	EU215548	Li et al. 2013
HN108	<i>K. hainanus</i>	China, Hainan, Yinggeling	19.04	109.55	KC465808	Li et al. 2013
HN007	<i>K. hainanus</i>	China, Hainan, Mt. Wuzhi	18.91	109.68	KC465805	Li et al. 2013
200701269	<i>K. hainanus</i>	China, Guangxi, Jinxiu	23.16	106.35	KC465806	Li et al. 2013
200701268	<i>K. hainanus</i>	China, Guangxi, Jinxiu	23.16	106.35	KC465807	Li et al. 2013
200602006	<i>K. hainanus</i>	China, Yunnan, Wenshan	23.35	104.02	KC465811	Li et al. 2013

YGH090281	<i>K. hainanus</i>	China, Guangxi, Jingxi	23.16	106.35	KX554605			Yu et al. 2017
YGH090280	<i>K. hainanus</i>	China, Guangxi, Jingxi	23.16	106.35	KX554604			Yu et al. 2017
YGH090267	<i>K. hainanus</i>	China, Guangxi, Nanning	22.97	108.35	KX554611			Yu et al. 2017
YGH090201	<i>K. hainanus</i>	China, Guangdong, Longmeng	22.97	108.35	KX554616			Yu et al. 2017
YGH090202	<i>K. hainanus</i>	China, Guangdong, Longmeng	23.7	114.1	KX554617			Yu et al. 2017
YGH090204	<i>K. hainanus</i>	China, Guangdong, Longmeng	23.7	114.1	KX554618			Yu et al. 2017
MVZHerp236725	<i>K. hainanus</i>	China, Hainan, Bawangling	19.13	109.09	KX554625			Yu et al. 2017
MVZHerp236722	<i>K. hainanus</i>	China, Hainan, Mt. Wuzhi	18.91	109.68	KX554624			Yu et al. 2017
KIZ060821015	<i>K. hainanus</i>	China, Guangxi, Jinxiu	24.1	110.19	KX554615			Yu et al. 2017
JL-17-11	<i>K. idiootocus</i>	Taiwan, Yilan	24.76	121.73	MH034257			none
JL74-1-1	<i>K. idiootocus</i>	Taiwan, Yilan	24.46	121.78	MH034256			none
A127	<i>K. idiootocus</i>	Taiwan, Taipei, Wulai	24.79	121.54	DQ468682			Wu et al. 2016
18241	<i>K. idiootocus</i>	Taiwan, Yilan	24.89	121.86	MH034248			none
17759	<i>K. idiootocus</i>	Taiwan, Taipei, Xindian	24.9	121.57	MH034255			none
17496	<i>K. idiootocus</i>	Taiwan, Taichung, Wufeng, Tunglin	24.05	120.73	MH034254			none
16581	<i>K. idiootocus</i>	Taiwan, Yilan, Yuanshan	24.75	121.64	MH034253			none
16580	<i>K. idiootocus</i>	Taiwan, Yilan, Yuanshan	24.75	121.64	MH034252			none
15887	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.93	120.88	MH034251			none
15886	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.93	120.88	MH034250			none
15885	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.93	120.88	MH034249			none
19KiTw001	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.92	120.89	PV592041	PV59075 7	PV590758	This study
19KiTw002	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.92	120.89	PV592042	PV59075 6	PV590759	This study
19KiTw003	<i>K. idiootocus</i>	Taiwan, Nantou, Yuchih	23.92	120.89	PV592043	PV59075 5	PV590760	This study
UMFS5702	<i>K. idiootocus</i>	Taiwan, Nantou, Tung Fu	23.7	120.9			DQ283054	Frost et al. 2006

SCUM061107L	<i>K. idiootocus</i>	Taiwan, Lianhuachi	24.22	121.49	EU215547	Li et al. 2008
KUHE12979	<i>K. idiootocus</i>	Taiwan, Jiayi	23.48	120.48	AB933306	Nguyen et al. 2014

AF458129	<i>K. idiootocus</i>	Taiwan, Taipei, Wulai	23.92	117.20			AF458129	Wilkinson et al. 2002
24KuriC001	<i>K. inexpectatus</i>	China, Fujian, Yunxiao	23.92	117.20	PV592044	PV590754	PV590761	This study
24KuriC002	<i>K. inexpectatus</i>	China, Fujian, Yunxiao	23.92	117.20	PV592045	PV590753	PV590762	This study
24KuriC003	<i>K. inexpectatus</i>	China, Fujian, Yunxiao	23.92	117.20	PV592046	PV590752	PV590763	This study
18RhaC001	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86			MW115094	Messenger et al. 2022; this study
18RhaC002	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86			MW115093	Messenger et al. 2022; this study
18RhaC003	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86			MW115095	Messenger et al. 2022; this study
18RhaC005	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86	PV592037	MW148396	MW115092	Messenger et al. 2022; this study
18RhaC006	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86			MW115090	Messenger et al. 2022; this study
18RhaC008	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86	PV592038	MW148400	MW115088	Messenger et al. 2022; this study
18RhaC009	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86	PV592039	MW148401	MW115091	Messenger et al. 2022; this study
18RhaC010	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86	PV592040	MW148402	MW115096	Messenger et al. 2022; this study
18RhaC012	<i>K. inexpectatus</i>	China, Zhejiang, Huzhou	31.07	119.86			MW115089	Messenger et al. 2022; this study
YGH20160043	<i>K. lenquanensis</i>	China, Yunnan, Mengzi	23.34	103.49	MK348051			Yu et al. 2020
YGH20160036	<i>K. lenquanensis</i>	China, Yunnan, Mengzi	23.34	103.49	MK348050			Yu et al. 2020
Rao06193	<i>K. naso</i>	China, Tibet, Motuo	29.32	95.32	KX554540			Yu et al. 2017
MNHN 2004.0351	<i>K. odontotarsus</i>	Laos, Phongsali, Long Nai Khao	21.7	102.1	KR087747			Yu et al. 2017
		Laos, Louangphrabang, Ban Keng						
MNHN 2006.2456	<i>K. odontotarsus</i>	Koung	19.9	102.1	KR087750			Yu et al. 2017
YGH090176	<i>K. odontotarsus</i>	China, Yunnan, Mengyang	22.08	100.88	KX554574			Yu et al. 2017
YGH090133	<i>K. odontotarsus</i>	China, Yunnan, Caiyanghe	22.57	101.19	KX554577			Yu et al. 2017
YGH090131	<i>K. odontotarsus</i>	China, Yunnan, Caiyanghe	22.57	101.19	KX554576			Yu et al. 2017
Rao14001643	<i>K. odontotarsus</i>	China, Yunnan, Cangyuan	23.25	99.23	KX554672			Yu et al. 2017
SCUM060688L	<i>K. odontotarsus</i>	China, Yunnan, Jinghong, Mengyan	22.04	100.91			EU215549	Li et al. 2008

JL123-1	<i>K. pollicaris</i>	Taiwan, Nantou, Jhushan	23.73	120.71	MH034244	none
JL96-2	<i>K. pollicaris</i>	Taiwan, Taipei, Xindian	24.85	121.53	MH034245	none

UMFS5969	<i>K. pollicaris</i>	Taiwan, Nantou, Lu-Gu Chi-Tou	23.74	120.77			DQ283122	Frost et al. 2006
CIB119699	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.36	103.3			PP092488	Lyu et al. 2024
CIB119698	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.36	103.3	PP082771		PP092489	Lyu et al. 2024
CIB119697	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3			PP092490	Lyu et al. 2024
CIB119696	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3	PP082772		PP092491	Lyu et al. 2024
CIB119695	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3	PP082773		PP092492	Lyu et al. 2024
CIB119694	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3	PP082774		PP092493	Lyu et al. 2024
CIB119693	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3	PP082775		PP092494	Lyu et al. 2024
CIB119692	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.37	103.3			PP092495	Lyu et al. 2024
CIB118054	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854135			Hou et al. 2021
CIB118053	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854134			Hou et al. 2021
CIB118052	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854133			Hou et al. 2021
CIB118051	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854132			Hou et al. 2021
CIB118050	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854131			Hou et al. 2021
CIB118049	<i>K. qionglaiensis</i>	China, Sichuan, Qionglai	30.6	103.5	OL854130			Hou et al. 2021
GXNUYU140141	<i>K. raoi</i>	China, Guizhou, Xingyi	25.3	105.0	MW346332			Zeng et al. 2021
GXNUYU140143	<i>K. raoi</i>	China, Guizhou, Xingyi	25.3	105.0	MW346333			Zeng et al. 2021
GXNUYU140144	<i>K. raoi</i>	China, Guizhou, Xingyi	25.3	105.0	MW346334			Zeng et al. 2021
W08	<i>K. wangi</i>	Taiwan, Pingtung	22.22	120.83	KT259071			Wu et al. 2016
W07	<i>K. wangi</i>	Taiwan, Pingtung	22.22	120.83	KT259070			Wu et al. 2016
Rao14102913	<i>K. yangi</i>	China, Yunnan, Yingjiang	24.93	97.93	KX554568			Yu et al. 2017
Rao14102912	<i>K. yangi</i>	China, Yunnan, Yingjiang	24.93	97.93	KX554567			Yu et al. 2017
Rao14102911	<i>K. yangi</i>	China, Yunnan, Yingjiang	24.93	97.93	KX554566			Yu et al. 2017
	<i>Theloderma</i>							
CAS247910	<i>albopunctatum</i>	China, Guangxi, Jingxi	23.1	106.3	OP531849	OP561759	OP537794	Luo et al. 2023