

## Supplementary Materials

### Supplementary Materials and Methods

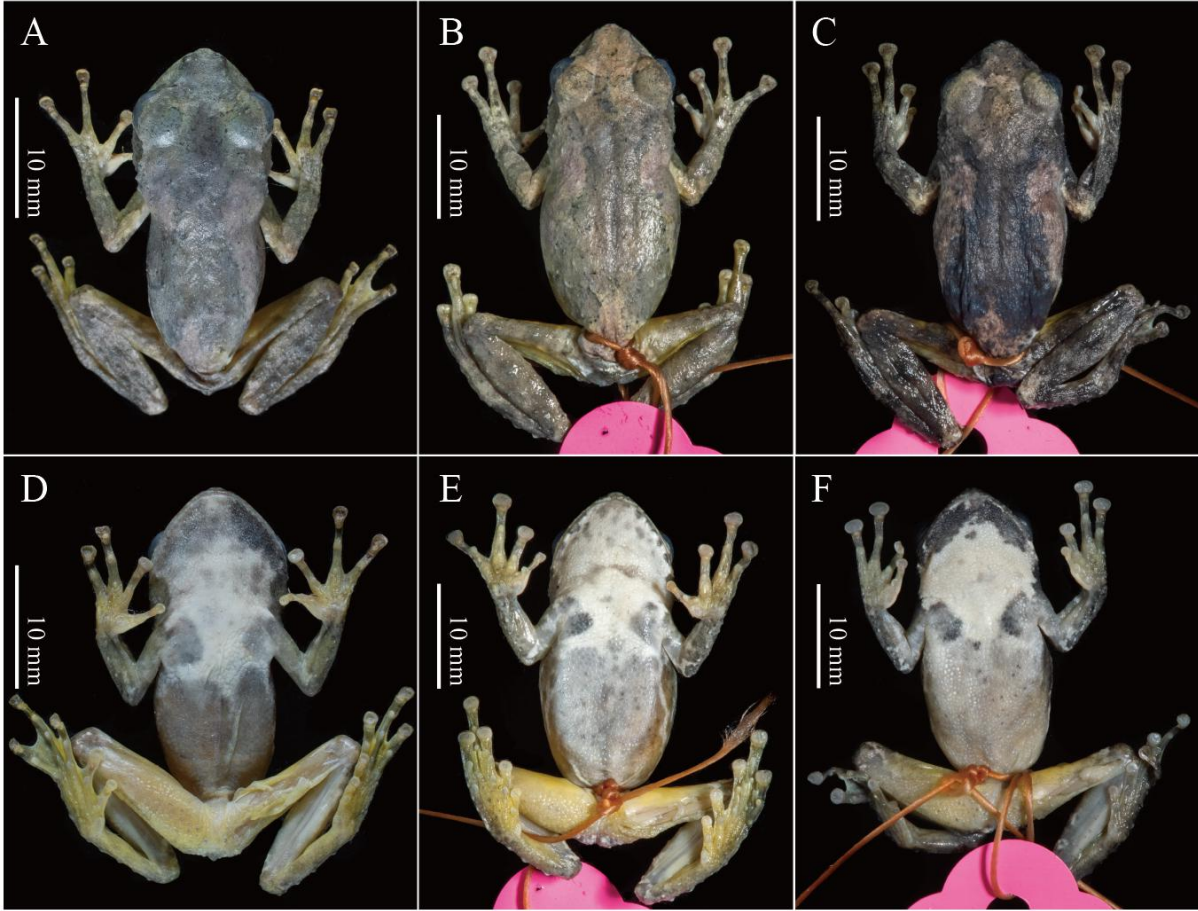
**DNA extraction, polymerase chain reaction (PCR), and sequencing:** Total genomic DNA was extracted using a QIAamp DNA Mini Kit (QIAGEN, Hilden, Germany) following the manufacturer's instructions. Fragments of the mitochondrial 16S rRNA gene were amplified for each sample using primer pairs L3975 (5'-CGCCTGTTTACCAAAAACAT-3') and H4551 (5'-CCGGTCTGAACTCAGATCACGT-3') (Simon et al., 1994). PCR amplifications for the mitochondrial 16S rRNA gene were performed in a 25  $\mu$ L volume reaction under the following conditions: initial denaturing step at 95 °C for 4 min; 36 cycles of denaturing at 95 °C for 40 s, annealing at 55 °C for 40 s, and extension at 72 °C for 70 s, and a final extension step at 72 °C for 10 min. The target fragment of 16S rRNA was 550 bp in length and was sequenced using an ABI3730 automated DNA sequencer by Sangon Biotechnologies Co., Ltd. (Shanghai, China). DNA sequences of all remaining congeners of *Kurixalus* were obtained from GenBank and all new sequences were uploaded to GenBank under accession Nos. OL306314–OL306319 (Supplementary Table S2). We chose *Buergeria buergeri* (Temminck and Schlegel, 1838) as an outgroup species following previous research on the phylogenetic relationships within the genus *Kurixalus* (Zeng et al., 2021). Due to the lack of molecular data, *K. appendiculatus* (Günther, 1858) and *K. verrucosus* (Boulenger, 1983) were not included in phylogenetic analysis, but this did not affect the phylogenetic position of the new species. According to Zeng et al. (2021), *K. appendiculatus* is phylogenetically closer to *K. chaseni* (Smith, 1924) and *K. absconditus* Mediyansyah, Hamidy, Munir, & Matsui, 2019, both of which were classified as Clade C in this study (Figure 1H). In addition, *K. verrucosus* is more morphologically and phylogenetically similar to *K. odontotarsus* in Clade B than to *Kurixalus qionglaiensis* **sp. nov.** in Clade A (Yu et al., 2017).

**Phylogenetic analysis:** Sequences were aligned using the MUSCLE option (Edgar, 2004) in MEGA X (Kumar et al., 2018) with default parameters. We ran JModelTest v2.1.2 (Darriba et al., 2012) with Bayesian inference criteria (BIC) on the alignment, resulting in the best-fitting substitution model of GTR+G for the data. The bootstrap consensus tree inferred from 1 000 replicates was used to represent the evolutionary history of the taxa for maximum-likelihood (ML) analysis. Finally, uncorrected *p*-genetic distances between species were calculated in MEGA X (Kumar et al., 2018).

**Morphology:** Morphometric data were taken using digital calipers to the nearest 0.1 mm. Morphological terminology followed Fei et al. (2009) and Yu et al. (2017). The morphometrics of the new species are summarized in Supplementary Table S1. For comparative analysis of all 20 named congeners of *Kurixalus*, due to the high likelihood of undiagnosed diversity within the genus, we obtained morphological data from original species descriptions and subsequent publications where available (Annandale, 1912; Bossuyt & Dubois, 2001; Boulenger, 1893; Fei et al., 2009; Günther, 1858; Inger et al., 1999; Kuramoto & Wang, 1987; Mediyansyah et al., 2019; Nguyen et al., 2014a, 2014b; Smith, 1924; Taylor, 1962; Van Nguyen et al., 2020; Wu et al., 2016; Yu et al., 2017, 2018; Zeng et al., 2021; Zhao et al., 2005). *Kurixalus qionglaiensis* **sp. nov.** can be distinguished from all currently recognized congeners by a combination of morphological characters (following

Zeng et al. (2021)), as summarized in Supplementary Table S4.

Measurements included: snout-vent length (SVL, from tip of snout to vent); head length (HL, from tip of snout to rear of jaws); head width (HW, width of head at widest point); snout length (SL, from tip of snout to anterior corner of eye); internarial distance (IND, distance between nares); interorbital distance (IOD, minimum distance between upper eyelids); upper eyelid width (UEW, maximum width of upper eyelid); eye diameter (ED, diameter of exposed portion of eyeball); distance between nostril and eye (DNE, from posterior border of nostril to anterior border of eye); tympanum diameter (TD, greater of vertical or horizontal diameter of tympanum); forelimb length (FLL, from elbow to tip of third finger); thigh length (THL, distance from vent to knee); tibia length (TL, distance from knee to heel); foot length (FL, from proximal end of inner metatarsal tubercle to tip of fourth toe); length of foot and tarsus (TFL, from tibiotarsal joint to tip of fourth toe); diameter of lower arm (LAD, width of lower arm at widest point); width of disc of finger III (TDW3, width of disc of finger III at widest point); width of disc of toe IV (TDW4, width of disc of toe IV at widest point). Webbing formula followed Myers & Duellman (1982).



**Supplementary Figure S1.** Holotype and paratypes of *Kurixalus qionglaiensis* sp. nov. (CIB 118031, CIB 118032, and CIB 118037), male, in preservative.

Dorsal view of holotype (CIB 118031) (A) and paratypes (CIB 118032 and CIB 118037) (B-C); ventral view of holotype (CIB 118031) (D) and paratypes (CIB 118032 and CIB 118037) (E-F). Photos by Ka Wah Leung and Chun-Peng Guo.

**Supplementary Table S1.** Measurements (in mm) of type specimens of *Kurixalus qionglaiensis* **sp. nov.**

	CIB118031	CIB118032	CIB118033	CIB118034	CIB118035	CIB118036	CIB118037	Mean $\pm$ SD (n=7)
SVL	28.9	33.3	29.8	30.5	31.0	30.5	31.9	30.83 $\pm$ 1.33
HL	9.7	10.4	10.6	10.4	10.8	10.1	10.4	10.33 $\pm$ 0.35
HW	10.7	11.3	10.5	11.0	11.0	10.3	11.0	10.83 $\pm$ 0.32
SL	4.4	4.9	4.9	4.6	4.7	4.5	4.5	4.66 $\pm$ 0.18
IND	2.7	3.4	3.0	3.3	3.2	3.2	2.9	3.09 $\pm$ 0.24
IOD	3.4	3.7	3.7	3.6	3.6	3.5	3.5	3.57 $\pm$ 0.11
UEW	2.9	3.2	3.0	3.2	3.3	3.0	2.9	3.07 $\pm$ 0.13
ED	3.7	4.3	4.1	3.9	4.2	4.2	3.6	4.00 $\pm$ 0.24
DNE	3.2	2.5	3.3	2.9	3.0	2.9	3.0	2.95 $\pm$ 0.25
TD	1.8	2.1	2.0	2.3	2.6	2.0	2.2	2.13 $\pm$ 0.24
FLL	15.1	16.4	15.7	15.9	15.3	15.9	16.1	15.77 $\pm$ 0.43
THL	13.9	13.5	13.5	14.6	12.9	14.3	14.9	13.93 $\pm$ 0.65
TL	13.4	14.3	14.1	14.5	14.2	13.7	14.9	14.15 $\pm$ 0.48
FL	13.3	14.1	13.7	13.9	13.1	13.1	13.9	13.56 $\pm$ 0.39
TFL	19.9	20.8	20.4	21.7	20.2	19.9	21.4	20.61 $\pm$ 0.64
LAD	2.3	3.0	2.4	2.8	3.4	2.0	2.6	2.64 $\pm$ 0.46
TDW3	1.2	1.9	1.5	1.7	1.3	1.7	1.7	1.58 $\pm$ 0.22
TDW4	1.3	1.7	1.2	1.5	1.2	1.5	1.4	1.41 $\pm$ 0.18

Abbreviations are defined in Supplementary Materials and Methods.

**Supplementary Table S2.** Sequences and voucher specimens used for phylogenetic analyses in this study (*B.* = *Buergeria*, *K.* = *Kurixalus*).

Species	Voucher number	Locality	16S
<i>B. buergeri</i>	-	Hiroshima, Japan	AB127977
<i>K. absconditus</i>	MZB 21862	Borneo, Indonesia	MN727052
<i>K. baliogaster</i>	ROM 29860	Gia Lai, Vietnam	KX554537
<i>K. banaensis</i>	ROM 32986	Gia Lai, Vietnam	GQ285667
<i>K. berylliniris</i>	11311 (CE01X)	Taiwan, China	DQ468669
<i>K. bisacculus</i>	THNHM 10051	Nan, Thailand	GU227334
<i>K. chaseni</i>	FMNH 267896	Sarawak, Malaysia	JQ060937
<i>K. eiffingeri</i>	11333	Taiwan, China	DQ468670
<i>K. gracilloides</i>	SIEZC 30189	Nghe An, Vietnam	MN510865
<i>K. hainanus</i>	Rao 14111301	Hainan, China	KX554523
<i>K. idiototocus</i>	ZRC1.1.5276	Taiwan, China	GQ204686
<i>K. idiototocus</i>	CAS 211366	Taiwan, China	AF458129
<i>K. lenquanensis</i>	KIZ 170175Y	Yunnan, China	KY768931
<i>K. lenquanensis</i>	KIZ 170182Y	Yunnan, China	KY768938
<i>K. motokawai</i>	VNMN 03458	Kon Tum, Vietnam	LC002888
<i>K. naso</i>	Rao 06301	Tibet, China	KX554484
<i>K. odontotarsus</i>	YGH 090131	Yunnan, China	GU227290
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118031	Qionglai, Sichuan, China	OL306318
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118032	Qionglai, Sichuan, China	OL306316
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118033	Qionglai, Sichuan, China	OL306317
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118034	Qionglai, Sichuan, China	OL306319
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118035	Qionglai, Sichuan, China	OL306315
<i>K. qionglaiensis</i> <b>sp. nov.</b>	CIB 118037	Qionglai, Sichuan, China	OL306314
<i>K. viridescens</i>	VNMN 03802	Khanh Hoa, Vietnam	AB933284
<i>K. wangi</i>	11328 (CE06)	Taiwan, China	DQ468671

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<i>K. yangi</i>	Rao 14102901	Yunnan, China	KX554491
<i>K. raoi</i>	GXNU YU 140144	Xingyi, Guizhou, China	MW345623
<i>K. raoi</i>	GXNU YU 1406033	Xingyi, Guizhou, China	MK348047

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**Supplementary Table S3.** Average uncorrected pairwise distances (%) between members of the genus *Kurixalus* estimated from 16S rRNA sequences.

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<i>K. qionglaiensis</i>																			
1 <b>sp. nov.</b>																			
2 <i>K. idiotocus</i>	4.0																		
3 <i>K. raoi</i>	5.2	1.9																	
4 <i>K. gracilloides</i>	5.9	5.5	6.2																
5 <i>K. lenquanensis</i>	6.0	3.9	3.1	7.0															
6 <i>K. wangi</i>	7.8	6.7	6.2	6.6	6.2														
7 <i>K. eiffingeri</i>	7.9	6.1	5.6	7.1	6.4	4.4													
8 <i>K. berylliniris</i>	8.5	6.3	5.4	6.2	5.8	4.0	5.0												
9 <i>K. yangi</i>	12.3	10.0	9.3	12.5	10.2	10.3	10.9	11.6											
10 <i>K. naso</i>	12.6	10.3	8.7	11.7	10.3	10.1	11.7	10.8	4.4										
11 <i>K. odontotarsus</i>	13.5	11.5	10.8	12.5	10.8	11.7	12.1	12.0	6.0	7.5									
12 <i>K. hainanus</i>	14.3	12.1	11.0	13.4	11.0	12.1	13.1	12.9	7.1	7.3	3.2								
13 <i>K. banaensis</i>	14.5	12.7	12.2	12.2	12.3	12.8	13.5	12.6	8.9	9.3	8.1	9.4							
14 <i>K. baliogaster</i>	14.8	12.6	11.4	13.4	11.9	11.7	12.7	13.1	6.6	7.5	4.2	2.7	9.0						
15 <i>K. bisacculus</i>	14.8	12.8	11.7	12.9	11.7	12.0	12.9	13.2	6.9	7.5	3.4	0.6	9.4	2.6					
16 <i>K. viridescens</i>	15.6	13.8	13.3	13.0	14.1	12.7	13.7	13.2	9.6	10.0	9.0	9.3	6.3	9.4	9.1				
17 <i>K. motokawai</i>	16.2	14.2	13.8	13.2	15.1	14.6	14.7	14.3	11.9	11.9	10.9	11.2	8.5	11.3	11.5	9.9			
18 <i>K. absconditus</i>	17.7	15.8	14.9	15.4	16.1	14.0	15.6	14.6	15.2	13.4	15.2	14.9	14.7	15.1	14.9	15.5	14.0		
19 <i>K. chaseni</i>	21.6	20.0	18.8	20.3	20.2	20.6	22.2	19.7	18.4	17.7	20.4	20.4	18.9	21.3	20.3	21.7	20.1	10.2	

**Supplementary Table S4.** Morphological comparison between species of the genus *Kurixalus*, following Zeng et al. (2021).

Species	Adult SVL (in mm)		Snout shape	Vocal sac	Iris
	Male	Female			
<i>K. qionglaiensis</i> <b>sp. nov.</b>	28.9–33.3 (mean 30.8)	?	Pointed with projection on tip	Single external	Golden brown
<i>K. absconditus</i>	27.3	?	Pointed with projection on tip	? (single vocal slit)	Golden
<i>K. appendiculatus</i>	29.3–35.4	41.1–51.5	Pointed with projection on tip	Single internal	Brown
<i>K. baliogaster</i>	33–33.3	35.8–41.5	Pointed with projection on tip	Single internal	Golden brown
<i>K. banaensis</i>	26.2–33.2	30.5–37	Pointed with projection on tip	Single internal	?
<i>K. berylliniris</i>	29–42.3 (mean 34.4)	35.8–41.5 (mean 37.8)	Pointed with projection on tip	Single internal	Emerald to light green
<i>K. bisacculus</i>	30–31.5	?	Pointed with projection on tip	Paired external	?
<i>K. chaseni</i>	30.1–33.4	30.6–44.3	Pointed with projection on tip	Single internal	Golden
<i>K. eiffingeri</i>	23.9–34.7 (mean 31.5)	33.7–35.3 (mean 34.3)	Pointed with projection on tip	Single internal	Golden
<i>K. gracilloides</i>	27.9–31.2	?	Obtusely pointed with no projection on tip	Single internal	Golden brown
<i>K. hainanus</i>	30–39.1 (mean 33.9)	40.6–47.8 (mean 44.1)	Pointed with projection on tip	Single internal	Golden
<i>K. idiootocus</i>	24.9–29.3	37.5	Pointed with projection on tip	Single external	Golden brown
<i>K. lenquanensis</i>	25–28.9 (mean 27)	?	Obtusely pointed with no projection on tip	Single internal	Golden brown
<i>K. motokawai</i>	23.2–28.4 (mean 26.1)	25.1	Pointed with projection on tip	Single internal	Golden brown
<i>K. naso</i>	29.3–32.5	43	Pointed with projection on tip	Single internal	Golden brown
<i>K. odontotarsus</i>	28–35.5 (mean 32.1)	43	Pointed with projection on tip	Single internal	Golden brown



<i>K. raoi</i>	28.2–32.2 (mean 30.3)	38.6	Round with no projection on tip	Single internal (two vocal slit)	Golden brown
<i>K. verrucosus</i>	41	43–45	Round with no projection on tip	?	Golden
<i>K. viridescens</i>	?	28.7–36.6	Pointed with projection on tip	?	Gold
<i>K. wangi</i>	28.6–31.6 (mean 30)	30.8–37.1 (mean 34.3)	Pointed with projection on tip	Single internal	Golden yellow
<i>K. yangi</i>	31.6–34.7 (mean 33.2)	?	Pointed with projection on tip	Single internal	Golden brown

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**Supplementary Table S4.** Morphological comparison between species of the genus *Kurixalus*, following Zeng et al. (2021).

<b>Species</b>	<b>Dorsal skin texture</b>	<b>Dorsal ground color</b>	<b>SL vs. ED</b>	<b>Vomerine teeth</b>
<i>K. qionglaiensis</i> <b>sp. nov.</b>	Rough with numerous large tubercles	Brown	SL greater than ED	Present
<i>K. absconditus</i>	Rough with small tubercles	Brown	SL greater than ED	Present
<i>K. appendiculatus</i>	Rough with small tubercles	Brown	SL greater than ED	Present
<i>K. baliogaster</i>	Smooth	Dark brown	SL equal to or less than ED	Present
<i>K. banaensis</i>	Scattered with tubercles	Brown	SL greater than ED	Absent
<i>K. berylliniris</i>	Rough with small tubercles	Dark green to deep tan	?	Present
<i>K. bisacculus</i>	Scattered with tubercles	Dark brown	SL as long as ED	Present
<i>K. chaseni</i>	Scattered with tubercles	Brown	?	Present
<i>K. eiffingeri</i>	Rough with tubercles	Brown	SL greater than ED	Present
<i>K. gracilloides</i>	Rough with small tubercles	Golden-brown	SL less than ED	Present
<i>K. hainanus</i>	Rough with tubercles	Brown	SL less or greater than ED	Present
<i>K. idiootocus</i>	Rough with numerous small tubercles	Grayish brown, yellowish brown, or dark brown	SL greater than ED	Present
<i>K. lenquanensis</i>	Rough with numerous small tubercles	Grayish brown	SL less than ED	Present
<i>K. motokawai</i>	Scattered with sparse small tubercles	Brown	SL greater than ED	Absent
<i>K. naso</i>	Rough with tubercles	Purplish brown	SL greater than ED	Present
<i>K. odontotarsus</i>	Rough with tubercles	Grayish brown or dark brown	SL equal to or less than ED	Present
<i>K. raoi</i>	Scattered with a few small tubercles	Light brown or dark brown	SL greater than ED	Present

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<i>K. verrucosus</i>	Rough with small warts	Grey or brown	SL equal to ED	Present
<i>K. viridescens</i>	Nearly smooth with few small tubercles	Solid green	SL greater than ED	Absent
<i>K. wangi</i>	Scattered with small tubercles	Dark brownish-green	?	Present
<i>K. yangi</i>	Scattered with numerous small tubercles	Brown	SL greater than ED	Present

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**Supplementary Table S4.** Morphological comparison between species of the genus *Kurixalus*, following Zeng et al. (2021).

<b>Species</b>	<b>Nuptial pad</b>	<b>Tibiotarsal articulation</b>	<b>Mandibular symphysis</b>	<b>Throat skin</b>	<b>Color pattern on chin</b>
<i>K. qionglaiensis</i> <b>sp. nov.</b>	Present, slight	Reaching the posterior border of eye	Weak	Finely granular	Clouded with dark
<i>K. absconditus</i>	Absent	Reaching the center of eye	Prominent	Smooth	Scattered with small dark speckles
<i>K. appendiculatus</i>	?	?	?	Smooth	Nearly immaculate
<i>K. baliogaster</i>	Present, slight	?	Weak	Smooth	Scattered with large dark speckles
<i>K. banaensis</i>	?	?	?	Smooth	?
<i>K. berylliniris</i>	Present, greatly expanded	Reaching between eye and nostril	Weak	Smooth	Faintly maculated with black spots
<i>K. bisacculus</i>	Present, slight	Reaching between eye and nostril	Weak	Finely granular	Clouded blackish
<i>K. chaseni</i>	?	Reaching the tip of snout	Weak	Granular	Scattered with small dark speckles
<i>K. eiffingeri</i>	Present, greatly expanded	Reaching the posterior border of eye	?	Smooth	?
<i>K. gracilloides</i>	Present, slight	Reaching between eye and nostril	?	Finely granular	Scattered with dense dark spots
<i>K. hainanus</i>	Present, slight	Reaching between eye and nostril	Weak	Finely granular	Scattered with large dark spots
<i>K. idiootocus</i>	Present, slight	Reaching the center of eye	Weak	Finely granular	Clouded blackish
<i>K. lenquanensis</i>	Present, slight	Reaching the center of eye	Weak	Finely granular	Clouded with dark
<i>K. motokawai</i>	?	Reaching the center of eye	?	Granular	Scattered with dark spots
<i>K. naso</i>	Present, slight	Reaching the eye	Weak	Granular	Scattered with dark spots

<i>K. odontotarsus</i>	Present, slight	Reaching the center of eye	Weak	Finely granular	Scattered with black spots
<i>K. raoi</i>	Present, slight	Reaching the center of eye	Weak	Granular	Clouded with dark
<i>K. verrucosus</i>	?	Reaching between eye and nostril	Weak	Smooth	Scattered with black spots
<i>K. viridescens</i>	?	Reaching the center of eye	?	Finely granular	Immaculate
<i>K. wangi</i>	Present, greatly expanded	?	Weak	Slightly granular	Speckled with dark spots
<i>K. yangi</i>	Present, slight	?	Weak	Finely granular	Clouded with dark

**Supplementary Table S4.** Morphological comparison between species of the genus *Kurixalus*, following Zeng et al. (2021).

Species	Outer metacarpal tubercle	Flank	Paired symmetric large dark blotches on chest	Toe webbing formula	Source
<i>K. qionglaiensis</i> <b>sp. nov.</b>	Present	Rough	Present	I 2–2 II 1.5–2.5 III 1.5–2.5 IV 2.5–1.5 V	1
<i>K. absconditus</i>	Absent	Rough	Absent	I 1–2 II 1.5–2 III 1–2 IV 2–1 V	3
<i>K. appendiculatus</i>	Absent	Rough	Absent	?	3, 4
<i>K. baliogaster</i>	Present	Smooth	Absent	I 1.5–2 II 1–2.5 III 1–2.5 IV 2.5–1 V	5
<i>K. banaensis</i>	Present	Smooth	Absent	?	6, 7
<i>K. berylliniris</i>	Present	Smooth or slightly shagreened	Absent	I 1.5–2 II 1.5–2.5 III 2–3 IV 3–1.5 V	8
<i>K. bisacculus</i>	Present	Rough	Absent	I 1.25–2 II 1–2 III 1–2 IV 2–1 V	9
<i>K. chaseni</i>	?	?	Absent	I 1–1.5 II 1–1.5 III 1–(1–1.5) IV 1–(1.5–1) V	3, 10
<i>K. eiffingeri</i>	Present	?	Absent	I 1.5–2 II 1.5–2 III 1.5–2 IV 2–1.5 V	8, 19
<i>K. gracilloides</i>	Present	Rough	Absent	I 2–2.5 II 1.5–3 III 1.5–3.5 IV 3–1.5 V	11
<i>K. hainanus</i>	Present	Rough	Absent	I 1.5–2 II 1–2 III 1–2 IV 1.5–1 V	12, 13
<i>K. idiotocus</i>	Present	Rough with small tubercles	Present	I 2–2 II 1.5–2.5 III 1.5–3 IV 2.5–1.5 V	2, 14
<i>K. lenquanensis</i>	Present	Rough	Absent	I 2–2.5 II 1.5–3 III 1.5–3 IV 2.75–1.5 V	15
<i>K. motokawai</i>	Present	Areolate	Absent	I 2–2 II 1/3–2 III 1–2.5 IV 2.5–1.5 V	7
<i>K. naso</i>	Present	Rough	Absent	I 1–2 II 1–2 III 1–2 IV 2–1 V	13, 16
<i>K. odontotarsus</i>	Present	Rough	Absent	I 2–2 II 1.25–2.5 III 1.5–2.5 IV 2–1.5 V	15, 19
<i>K. raoi</i>	Present	Rough	Present	I 2–2 II 1.5–3 III 2–3 IV 3–2 V	2
<i>K. verrucosus</i>	Present	Rough	Absent	I 1–2 II 1–2 III 1–2 IV 2–1 V	17
<i>K. viridescens</i>	Present	Areolate	Absent	I 2–2.75 II 1.5–2.75 III 1.5–3 IV 2.5–1.75 V	18
<i>K. wangi</i>	Present	Smooth	Absent	I 2–2 II 1.5–2.5 III 2–3 IV 2.5–1 V	8

<i>K. yangi</i>	Present	Rough	Absent	I 1.5–2 II 1–2 III 1–2 IV 2–1 V	13
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Note: 1, this study; 2, Mediyansyah et al., 2019; 3, Günther, 1858; 4, Inger et al., 1999; 5, Bossuyt and Dubois, 2001; 6, Van Nguyen et al., 2014a; 7, Wu et al., 2016; 8, Taylor, 1962; 9, Smith, 1924; 10, Van Nguyen et al., 2020; 11, Zhao et al., 2005; 12, Yu et al., 2018; 13, Kuramoto & Wang, 1987; 14, Yu et al., 2017; 15, Annandale, 1912; 16, Zeng et al., 2021; 17, Boulenger, 1893; 18, Van Nguyen et al., 2014b; 19, Fei et al., 2009. Most details were available in References.

**Key to species of *Kurixalus* from China, following Yu et al. (2018).**

1 Limbs with serrated dermal fringes	2
2 Dorsal color not uniformly greenish, generally brownish mixed with dark markings	3
3 Iris emerald to light green	<i>K. berylliniris</i>
– Iris golden	4
4 Nuptial pad greatly expanded	5
– Nuptial pad slight, vomerine teeth present	6
5 Tubercles on lateral margin of finger IV connected with dermal fringe; venter whitish with very little pigmentation; loreal region oblique; canthus rostralis curved	<i>K. wangi</i>
– Tubercles on lateral margin of finger IV separated from each other; venter with numerous fine brownish dots, especially in gular region; loreal region vertical; canthus rostralis straight	<i>K. eiffingeri</i>
6 Smaller body size (adult male SVL less than 30 mm)	7
– Larger body size (adult male SVL greater than 30 mm)	8
7 Snout obtusely pointed, no prominence on tip; pair of large symmetrical dark patches on chest absent; single internal vocal sac	<i>K. lenquanensis</i>
– Snout pointed with small prominence on tip; pair of large symmetrical dark patches present on chest; single external vocal sac	<i>K. idiotocus</i>
8 Pair of large symmetrical dark patches on chest present	9
– Pair of large symmetrical dark patches on chest absent	10
9 Snout round, no projection on tip; tibiotarsal articulation reaching center of eye when appressed; single internal vocal sac	<i>K. raoi</i>
– Snout pointed, small prominence on tip; tibiotarsal articulation reaching posterior border of eye when appressed; single external vocal sac	<i>Kurixalus qionglaiensis</i> <b>sp. nov.</b>
10 Outer metacarpal tubercles present; ventral surface shaded posteriorly with dark spots	11
– Whole ventral surface shaded with large dark spots	12
11 Longer head, snout, and limbs; interorbital distance narrower than internarial distance and upper eyelid width	<i>K. naso</i>
– Shorter head, snout, and limbs; generally interorbital distance wider than internarial distance and upper eyelid width	<i>K. yangi</i>
12 Omosternum not forked.	<i>K. odontotarsus</i>
– Omosternum forked	<i>K. hainanus</i>



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