

New evidence for distinctiveness of the island-endemic Príncipe giant tree frog (Arthroleptidae: *Leptopelis palmatus*)

Table S1: Sampling details and maximum female body size for *Leptopelis* gene tree.

Genus	species	Voucher	16s	Male SVL (mm)	Female SVL (mm)	Max SVL (mm)	Reference
<i>Leptopelis</i>	<i>anebos</i>	UTEP:20563	JX996037	39	49	49	Portillo & Greenbaum 2014
<i>Leptopelis</i>	<i>argenteus</i>	CAS:HERP:169938	DQ283226	45	52	52	Harper et al. 2010
<i>Leptopelis</i>	<i>aubryi</i>	USNM:Herp:558525	KY080234	42	59	59	Channing & Rodel 2019
<i>Leptopelis</i>	<i>aubryioides</i>	CAS:HERP:253974	KX671753	35	45	45	Channing & Rodel 2019
<i>Leptopelis</i>	<i>bocagii</i>	UF:185603	MK036433	52	58	58	Schiotz 1999
<i>Leptopelis</i>	<i>boulengeri</i>	NCSM:Herp:84372	MN240524	48	81	81	Schiotz 1999
<i>Leptopelis</i>	<i>brevirostris</i>	CAS:HERP:207830	MH509989	45	64	64	Channing & Rodel 2019
<i>Leptopelis</i>	<i>calcaratus</i>	CAS:HERP:253982	KX671758	42	57	57	Schiotz 1999
<i>Leptopelis</i>	<i>concolor</i>	SL 1177	KY177070	34	51	51	Channing & Rodel 2019
<i>Leptopelis</i>	<i>fiziensis</i>	UTEP:20455	JX298067	35	46	46	Greenbaum et al. 2012
<i>Leptopelis</i>	<i>flavomaculatus</i>	SL 1183	KY177067	50	70	70	Schiotz 1999
<i>Leptopelis</i>	<i>gramineus</i>	ZNHM (MW-6301)	JX464899	45	63	63	Schiotz 1999
<i>Leptopelis</i>	<i>grandiceps</i>	MTSN 7685	KY177000	33	45	45	Channing & Rodel 2019
<i>Leptopelis</i>	<i>karissimbensis</i>	UTEP:20123	HQ130761	47		47	Roelke et al. 2011
<i>Leptopelis</i>	<i>kivuensis</i>	CAS:Herp:201700	FJ151060	26	36	36	Channing & Rodel 2019
<i>Leptopelis</i>	<i>macrotis</i>	ZMB:79584	KF888338	46	84	86.5	Channing & Rodel 2019
<i>Leptopelis</i>	<i>millsoni</i>	UTEP:20134	HQ130757	49	87	87	Channing & Rodel 2019
<i>Leptopelis</i>	<i>modestus</i>	CAS:HERP:207807	KM047146	35	41	41	Schiotz 1999
<i>Leptopelis</i>	<i>mossambicus</i>	AACRG2873	MH115737	52	63	63	Schiotz 1999
<i>Leptopelis</i>	<i>natalensis</i>	AACRG3159	MH115743	50	65	65	Schiotz 1999
<i>Leptopelis</i>	<i>notatus</i>	CAS:HERP:253325	MH510003	50	74	74	Schiotz 1999
<i>Leptopelis</i>	<i>ocellatus</i>	CAS:HERP:253598	KX492625	46	58	58	Schiotz 1999
<i>Leptopelis</i>	<i>palmatus</i>	CAS:HERP:219177	HQ130756	46	110	110	Schiotz 1999
<i>Leptopelis</i>	<i>rufus</i>	CAS:HERP:256683	KX671762	55	87	87	Schiotz 1999
<i>Leptopelis</i>	<i>spiritusnoctis</i>	ZMB:79578	KF888332	35	52	52	Channing & Rodel 2019
<i>Leptopelis</i>	<i>susanae</i>	ZNHM (SL-343)	JX464931	37	53	53	Schiotz 1999
<i>Leptopelis</i>	<i>vanmutellii</i>	ZNHM (SL-330)	JX464927	39	46	46	Schiotz 1999
<i>Leptopelis</i>	<i>vermiculatus</i>	CAS:HERP:168661	DQ283242	50	85	85	Schiotz 1999
<i>Leptopelis</i>	<i>viridis</i>	MVZ:Herp:253298	KX492626	35	48	48	Schiotz 1999
<i>Leptopelis</i>	<i>yaldeni</i>	ZNHM (AM-021)	JX464959	34	43	43	Schiotz 1999
<i>Cardioglossa</i>	<i>schioetzi</i>	MCZ:Herp:A-137912	FJ151123			NA	NA
<i>Arthroleptis</i>	<i>affinis</i>	MCZ:Herp:A-138241	FJ151152			NA	NA

Table S2: Specimen data, morphological measurements, genbank numbers, and natural history

Species	Catalog No.	Field No.	Locality	Latitude	Longitude	Sex	SVL	TMP	DISC	EYE	I6S	Call	Color	Perch Height		
<i>L. palmatus</i>	CAS 219177	RCD-14098	Fonta de Tchiptique	01 39 56.5 N	007 22 52.7 E	F	100.3	5.1	5.8	9.9	HQ130756		olive green (Drewes & Stoelting 2004)			
<i>L. palmatus</i>	CAS 219351	RCD-14289	Rio Papagaio	01 38 22.1 N	007 23 45.8 E	F	88.6	5.6	4.7	11.1			olive green/brown, cream spots (Drewes & Stoelting 2004)			
<i>L. palmatus</i>	CAS 219372	RCD-14320	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	45.9	2.8	2.4	6.9						
<i>L. palmatus</i>	CAS 219378	RCD-14326	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	42.6	2.8	2.3	6.8						
<i>L. palmatus</i>	CAS 219379	RCD-14327	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	44.9	2.4	2.3	6.2						
<i>L. palmatus</i>	CAS 219380	RCD-14328	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	43.2	2.7	2.2	7.2						
<i>L. palmatus</i>	CAS 219381	RCD-14329	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	42.0	2.9	2.3	6.2						
<i>L. palmatus</i>	CAS 219382	RCD-14330	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	M	41.6	2.3	2.2	6.4						
<i>L. palmatus</i>	CAS 219384	RCD-14332	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	J					not measured	MW689304				
<i>L. palmatus</i>	CAS 219399	RCD-14347	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	F	60.4	3.1	3.0	8.5			MW689305			
<i>L. palmatus</i>	CAS 219401	RCD-14349	Ribeira Das Agulhas	01 35 20.7 N	007 22 46.3 E	F	68.1	3.9	3.6	8.6			MW689306	on ground (Drewes & Stoelting 2004)		
<i>L. palmatus</i>	CAS 233428	RCD-14452	between Santo Antonio and Sao Joaquim	01 37 20.7 N	007 23 07.4 E	F	59.3	3.9	2.8	6.7			MW689307			
<i>L. palmatus</i>	CAS 233434	RCD-14474	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M	44.4	2.9	1.9	6.4			MW689308			
<i>L. palmatus</i>	CAS 233435	RCD-14475	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M					not measured	MW689309				
<i>L. palmatus</i>	CAS 233437	RCD-14477	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M	37.4	2.4	1.7	6.0						
<i>L. palmatus</i>	CAS 233438	RCD-14478	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M	40.2	2.8	2.3	6.1						
<i>L. palmatus</i>	CAS 233439	RCD-14479	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M	43.4	2.6	1.7	6.8						
<i>L. palmatus</i>	CAS 233441	RCD-14481	Pico de Principe	01 35 16.98 N	007 22 50.76 E	F	64.2	3.6	3.4	8.8						
<i>L. palmatus</i>	CAS 233443	RCD-14483	Pico de Principe	01 35 16.98 N	007 22 50.76 E	M	44.4	3.2	2.2	6.8						
<i>L. palmatus</i>	CAS 233532	RCD-14430	Papagao River	01 37 27.78 N	007 24 58.92 E	F	85.5	4.9	4.2	9.5			MW689310			
<i>L. palmatus</i>	CAS 238874	RCD-14650	Pico Papagaio	01 37 08.9 N	007 23 32.6 E	-					not measured	MW689331				
<i>L. palmatus</i>	CAS 238881	RCD-14657	Pico Papagaio	01 37 05.9 N	007 23 32.6 E	-					not measured	MW689311				
<i>L. palmatus</i>	CAS 251573	RCD-14788	Pico de Mesa	01 34 59.6 N	007 21 22.6 E	J					not measured	MW689312				
<i>L. palmatus</i>	CAS 258910	RCB0654	between Gaspar and Sundi	01 39 39.3 N	007 23 38.5 E	M	59.0	3.6	3.1	7.8			MW689313	bright green	2 m, vine	
<i>L. palmatus</i>	CAS 258911	RCB0655	between Gaspar and Sundi	01 39 39.3 N	007 23 38.5 E	F	82.1	5.6	4.8	10.4			MW689302	olive green, yellow spots	3 m, palm frond	
<i>L. palmatus</i>	CAS 258916	RCB0652	Nova Estrela	01 37 00.0 N	007 25 26.3 E	M	59.5	3.8	3.3	8.7			MW689314	bright green	4 m, branch	
<i>L. palmatus</i>	CAS 258917	RCB0653	Nova Estrela	01 37 00.0 N	007 25 26.3 E	M	63.6	4.1	3.9	8.9			MW689315	bright green	2.5 m, palm frond	
<i>L. palmatus</i>	CAS 258958	RCB0694	between Ponta do Sol and Monte Alegre	01 38 06.8 N	007 22 44.3 E	F	100.0	6.5	5.6	11.4			MW689316	dark green/black	30 cm, on boulder	
<i>L. palmatus</i>	CAS 261007	RCB0800	between Sao Joaquim and Pico Principe	01 36 33.23 N	007 22 34.07 E	J					not measured	MW689320	light brown	50 cm, thin branch		
<i>L. palmatus</i>	CAS 261008	RCB0801	between Sao Joaquim and Pico Principe	01 36 33.23 N	007 22 34.07 E	M	54.3	4.0	2.9	8.6			MW689321	olive green/brown	2 m, palm frond	
<i>L. palmatus</i>	CAS 261009	RCB0802	between Sao Joaquim and Pico Principe	01 36 40.18 N	007 22 30.43 E	F	72.0	4.1	3.8	8.6			MW689322	bright green	1 m, palm frond	
<i>L. palmatus</i>	CAS 261010	RCB0805	between Gaspar and Sundi	01 39 37.66 N	007 23 38.33 E	F	97.7	5.7	4.6	11.3				olive green	10 cm, tree root	
<i>L. palmatus</i>	CAS 261014	RCB0825	rd to Infante Don Henrique	01 35 54.17 N	007 25 00.62 E	F	90.8	4.7	5.2	8.6			MW689324	dark brown	30 cm, on boulder in stream	
<i>L. palmatus</i>	CAS 261015	RCB0826	rd to Infante Don Henrique	01 35 54.17 N	007 25 00.62 E	F	85.5	5.0	4.8	9.8			MW689325	dark brown	30 cm, on boulder in stream	
<i>L. palmatus</i>	CAS 261016	RCB0827	rd to Infante Don Henrique	01 35 54.17 N	007 25 00.62 E	F	96.8	5.2	5.0	9.7			MW689322	dark green/black	2 m, thin branch	
<i>L. palmatus</i>	CAS 261018	RCB0833	Sentada Rio Porco	01 32 49.16 N	007 22 56.24 E	M	65.2	3.8	3.6	8.6			MW689327	dark brown	leaf litter	
<i>L. palmatus</i>	CAS 261019	RCB0834	Sentada Rio Porco	01 32 50.28 N	007 22 54.26 E	F	92.4	4.9	4.9	9.4			MW689328	olive green/brown	1 m, tree buttress	
<i>L. palmatus</i>	CAS 261022	RCB0840	Pico de Mesa	01 34 57.11 N	007 21 08.86 E	J					not measured	MW689329	olive green/brown	50 cm, tree trunk		
<i>L. palmatus</i>	CAS 261023	RCB0841	Pico de Mesa	01 34 57.11 N	007 21 08.86 E	J					not measured	MW689334	mottled green/brown	1 m, leaf		
<i>L. palmatus</i>	CAS 261024	RCB0842	Pico de Mesa	01 34 57.11 N	007 21 08.86 E	J					not measured	MW689330	mottled green/brown	1.5 m, branch		
<i>L. palmatus</i>	USNM 591753	RCB0797	between Sao Joaquim and Pico Principe	01 36 37.1 N	007 22 30.3 E	F	76.6	4.3	4.5	7.4			MW689317	yellow, black mottling	20 cm, palm frond	
<i>L. palmatus</i>	USNM 591754	RCB0798	between Sao Joaquim and Pico Principe	01 36 33.23 N	007 22 34.07 E	M	55.7	3.6	3.2	6.4			MW689318	ML_206529	olive green, yellow spots	2 m, palm frond
<i>L. palmatus</i>	USNM 591755	RCB0799	between Sao Joaquim and Pico Principe	01 36 33.23 N	007 22 34.07 E	M	55.2	3.4	3.3	7.2			MW689319	olive green, yellow spots	3 m, tree trunk	
<i>L. palmatus</i>	USNM 591756	RCB0804	between Gaspar and Sundi	01 39 37.66 N	007 23 38.33 E	M	65.4	4.1	3.3	7.5			MW689323	olive green, yellow spots	1 m, vine	
<i>L. palmatus</i>	USNM 591757	RCB0828	rd to Infante Don Henrique	01 35 54.17 N	007 25 00.62 E	J	23.1	1.5	0.8	4.2			MW689326	light brown	50 cm, plant in stream island	
<i>L. palmatus</i>	USNM 591758	RCB0829	rd to Infante Don Henrique	01 35 48.7 N	007 25 11.9 E	F	90.5	4.9	4.9	8.0			MW689333	olive green, cream spots	small puddle in road	
<i>L. palmatus</i>	USNM 591759	RCB0843	Pico de Mesa	01 34 57.11 N	007 21 08.86 E	J	36.2	2.8	1.9	6.1			MW689303	mottled green/brown	1.5 m, branch	
<i>L. palmatus</i>	USNM 591760	RCB0844	Pico de Mesa	01 34 57.11 N	007 21 08.86 E	J	38.7	2.0	1.9	5.8			MW689335	olive green/brown	1.5 m, branch	
<i>L. rufus</i>	BYU 62285	LJW 265	Cameroon	4.8176	9.6795 F	52.7	2.6	2.3	6.6							
<i>L. rufus</i>	BYU 62286	LJW 266	Cameroon	4.8176	9.6795 F	53.4	3.3	2.6	8.3							
<i>L. rufus</i>	BYU 62288	LJW 288	Cameroon	4.8176	9.6795 F	53.4	3.3	2.6	8.3							
<i>L. rufus</i>	BYU 62289	LJW 289	Cameroon	4.8176	9.6795 M	48.6	2.8	2.8	6.4							
<i>L. rufus</i>	BYU 62291	LJW 291	Cameroon	4.8176	9.6795 F	45.2	3.0	2.4	5.4							
<i>L. rufus</i>	BYU 62293	LJW 294	Cameroon	4.8176	9.6795 F	78.3	3.5	4.3	7.8							
<i>L. rufus</i>	BYU 62296	LJW 348	Cameroon	4.8478	9.8197 M	55.4	1.8	1.7	4.2							
<i>L. rufus</i>	BYU 62298	LJW 371	Cameroon	4.8478	9.8197 F	74.1	3.7	3.3	7.2							
<i>L. rufus</i>	CAS 253836	DMP-769	Cameroon	4.9594	9.8651 M	47.5	3.2	2.9	7.5							
<i>L. rufus</i>	CAS 253837	DMP-770	Cameroon	4.9594	9.8651 M	52.2	3.3	3.0	8.7							
<i>L. rufus</i>	CAS 253838	DMP-771	Cameroon	4.9594	9.8651 M	49.2	3.1	2.8	7.9							
<i>L. rufus</i>	CAS 253839	DMP-772	Cameroon	4.9594	9.8651 F	68.9	3.4	3.9	7.8							
<i>L. rufus</i>	CAS 253968	DMP-908	Cameroon	4.8498	9.7718 F	75.9	4.2	4.1	9.4							
<i>L. rufus</i>	CAS 254042	DMP-958	Cameroon	4.8498	9.7718 M	51.8	2.9	2.9	6.7							
<i>L. rufus</i>	CAS 254043	DMP-959	Cameroon	4.8498	9.7718 M	55.0	3.0	2.8	7.9							
<i>L. rufus</i>	CAS 254044	DMP-960	Cameroon	4.8498	9.7718 M	49.0	2.9	2.6	7.0							
<i>L. rufus</i>	CAS 254045	DMP-962	Cameroon	4.8498	9.7718 M	50.0	2.9	2.6	6.8							
<i>L. rufus</i>	CAS 254046	DMP-964	Cameroon	4.8498	9.7718 F	76.0	3.6	4.2	8.3							
<i>L. rufus</i>	CAS 254047	DMP-965	Cameroon	4.8498	9.7718 F	79.2	3.9	3.5	10.3							
<i>L. rufus</i>	CAS 254048	DMP-966	Cameroon	4.8498	9.7718 F	77.2	3.4	3.9	8.2							
<i>L. rufus</i>	CAS 254049	DMP-967	Cameroon	4.8498	9.7718 M	54.3	3.1	2.4	8.0							
<i>L. rufus</i>	CAS 254050	DMP-968	Cameroon	4.8498	9.7718 F	62.5	3.4	2.8	6.8							
<i>L. rufus</i>	CAS 254051	DMP-970	Cameroon	4.8498	9.7718 M	53.3	3.5	2.7	8.4							
<i>L. rufus</i>	CAS 254098	DMP-1041	Cameroon	4.9478	9.6956 M	50.6	3.4	3.0	7.7							
<i>L. rufus</i>	CAS 254099	DMP-1042	Cameroon	4.9478	9.6956 M	48.3	3.6	2.7	7.4							
<i>L. rufus</i>	CAS 254100	DMP-1043	Cameroon	4.9478	9.6956 M	51.6	3.3	2.6	9.5							
<i>L. rufus</i>	CAS 254131	DMP-1078	Cameroon	4.9606	9.6686 M	50.6	3.6	2.7	7.9							
<i>L. rufus</i>	CAS 254132	DMP-1080	Cameroon	4.9606	9.6686 M	55.2	3.5	2.9	8.5							
<i>L. rufus</i>	CAS 254133	DMP-1081	Cameroon	4.9606	9.6686											

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