

## Supplemental Tables

**Sup. Table 1.** DNA sequences, voucher specimens, geographic origin, and GenBank accession numbers for taxa included in the molecular phylogenetic analyses of *Duttaphrynus*. Newly generated sequences of *Duttaphrynus dhara* sp. nov. from Meghalaya, India is indicated in bold.

Species name	Voucher no.	Genbank no.	Country	Region
<i>Bufotes turanensis</i>	-	MN968722	-	-
<i>Duttaphrynus atukoralei</i>	DZ1362	KM921790	Sri Lanka	Galle
<i>Duttaphrynus atukoralei</i>	DZ1170	KM921791	Sri Lanka	Galle
<i>Duttaphrynus atukoralei</i>	DZ1169	KM921792	Sri Lanka	Galle
<i>Duttaphrynus beddomii</i>	UZM48	OP049927	India	-
<i>Duttaphrynus beddomii</i>	UZM47	OP049926	India	-
<i>Duttaphrynus beddomii</i>	UZM01	ON645284	India	-
<i>Duttaphrynus beddomii</i>	WILD-14-AMP-510	MW445916	India	Shendurney
<i>Duttaphrynus brevirostris</i>	SDBDU2008.410	MZ816170	India	Bhagamandala
<i>Duttaphrynus brevirostris</i>	BNHS6126	MZ816171	India	Kempholey
<i>Duttaphrynus brevirostris</i>	SDBDU2015.3075	MZ816172	India	Manipal
<i>Duttaphrynus brevirostris</i>	SDB4714	FJ882786	India	Western Ghats
<i>Duttaphrynus brevirostris</i>	141	EU071759	India	-
<i>Duttaphrynus brevirostris</i>	Bmel-In1	AB530640	India	Bajipe
<i>Duttaphrynus chandai</i>	MZMU1466-1	MT705015	India	Mizoram
<i>Duttaphrynus chandai</i>	MZMU1466	MT627443	India	Mizoram
<i>Duttaphrynus chandai</i>	MZMU2729	OQ780572	-	-
<i>Duttaphrynus crocus</i>	CAS220193	FJ882789	Myanmar	Rhakhin State
<i>Duttaphrynus himalayanus</i>	SNL635a / INC-2018.635a	PQ555398	China	Keyrong
<i>Duttaphrynus himalayanus</i>	SNL680a / INC-2018.680a	PQ555397	China	Keyrong
<i>Duttaphrynus himalayanus</i>	SDB4566	FJ882790	India	-
<i>Duttaphrynus himalayanus</i>	MVZHerp241543	KT031500	Nepal	Himalayas
<i>Duttaphrynus himalayanus</i>	MVZHerp241544	KT031501	Nepal	Himalayas
<i>Duttaphrynus himalayanus</i>	DH1	KY000448	India	Uttarakhand
<i>Duttaphrynus himalayanus</i>	DH3	KY000450	India	Uttarakhand
<i>Duttaphrynus himalayanus</i>	KIZ08305	MW111525	China	Zhangmu town, Nyalam county
<i>Duttaphrynus himalayanus</i>	WT035.29608	OQ079485	India	-
<i>Duttaphrynus himalayanus</i>	WT160.2208	OQ079483	India	-
<i>Duttaphrynus himalayanus</i>	WT.004.27608	OQ079481	India	-
<i>Duttaphrynus himalayanus</i>	KIZYPX16862	MW181686	China	-
<i>Duttaphrynus himalayanus</i>	CDZMTU242	MT982992	Nepal	-

<i>Duttaphrynus melanostictus</i>	DJ9447	ON220128	Pakistan	Oghi
<i>Duttaphrynus melanostictus</i>	SNL9a / INC-2019.9a	PQ555365	Thailand	Aonang
<i>Duttaphrynus melanostictus</i>	SNL1032 / INC-2010.1032	PQ555409	India	Arambol, north Goa
<i>Duttaphrynus melanostictus</i>	SNL672 / INC-2018.672	PQ555380	Nepal	Mudling
<i>Duttaphrynus melanostictus</i>	SNL15 / INC-2013.15	PQ555367	Cambodia	Phnom Bokar
<i>Duttaphrynus melanostictus</i>	-	AF249061	India	-
<i>Duttaphrynus melanostictus</i>	SDB4594	FJ882839	India	-
<i>Duttaphrynus melanostictus</i>	MVZHerp226298	KT031502	Vietnam	Tam Dao, Vinh Yen
<i>Duttaphrynus melanostictus</i>	CAS247174	KF665340	Myanmar	Sagaing Division, Sagaing District
<i>Duttaphrynus melanostictus</i>	DM3	KY000455	India	Uttarakhand
<i>Duttaphrynus melanostictus</i>	DJ9425	ON220127	Pakistan	Chattar, Bagrian
<i>Duttaphrynus melanostictus</i>	143	EU071761	India	-
<i>Duttaphrynus melanostictus</i>	144	EU071762	India	-
<i>Duttaphrynus melanostictus</i>	145	EU071763	India	-
<i>Duttaphrynus melanostictus</i>	Bmel-In2	AB530641	India	Western Ghats, Mangalore, Padil
<i>Duttaphrynus melanostictus</i>	Bmel-Th	AB530645	Thailand	Ranong Province
<i>Duttaphrynus melanostictus</i>	KAO 129	MF319517	Nepal	Shivapuri east
<i>Duttaphrynus melanostictus</i>	USNM.Herp.520316	MG935762	Myanmar	Sagaing, Chatthin, ca. 2 km WNW of, Chatthin Wildlife Sanctuary, San Myaung camp, Kanbalur Township
<i>Duttaphrynus melanostictus</i>	USNM.Herp.523959	MG935763	Myanmar	Sagaing, Chatthin, ca. 2 km WNW of, Chatthin Wildlife Sanctuary, San Myaung camp, Kanbalur Township
<i>Duttaphrynus melanostictus</i>	USNM.587838	MT608782	Myanmar	Tanintharyi, Myeik, Masanpar Village, island 10.5 km WSW of Myeik
<i>Duttaphrynus melanostictus</i>	-	MT921855	-	-
<i>Duttaphrynus melanostictus</i>	USNM594902	MT609689	Myanmar	Tanintharyi, Langan, Hlaing (Anne)
<i>Duttaphrynus melanostictus</i>	USNM594903	MT609690	Myanmar	Tanintharyi, Langan, Hlaing (Anne)
<i>Duttaphrynus melanostictus</i>	USNM594904	MT609691	Myanmar	Tanintharyi, Langan, Hlaing (Anne)
<i>Duttaphrynus melanostictus</i>	USNM594905	MT609692	Myanmar	Tanintharyi, Langan, Hlaing (Anne)
<i>Duttaphrynus melanostictus</i>	USNM594906	MT609693	Myanmar	Tanintharyi, Langan, Lan Gan, Lanngan Village
<i>Duttaphrynus melanostictus</i>	MNHN-RA.1902.0132	PQ555410	India	Nilgiris, Coonoor
<i>Duttaphrynus melanostictus</i>	MNHN-RA.1902.0133	PQ555411	India	Nilgiris, Coonoor
<i>Duttaphrynus microtypanum</i>	SDB927	FJ882792	India	Kempholey
<i>Duttaphrynus microtypanum</i>	UZM52	OP049931	India	-
<b><i>Duttaphrynus dhara sp. nov.</i></b>	<b>ADBUHW180</b>	<b>PX702608</b>	<b>India</b>	<b>Meghalaya, East Khasi Hills</b>
<b><i>Duttaphrynus dhara sp. nov.</i></b>	<b>ADBUHW182</b>	<b>PX702609</b>	<b>India</b>	<b>Meghalaya, East Khasi Hills</b>
<i>Duttaphrynus parietalis</i>	SDB10100	FJ882784	India	Western Ghats
<i>Duttaphrynus scaber</i>	SDB532	FJ882785	India	Western Ghats

<i>Duttaphrynus scaber</i>	Bsca-In1	AB530643	India	Mudigere
<i>Duttaphrynus scaber</i>	Bsca-In2	AB530644	India	Mudigere
<i>Duttaphrynus scaber</i>	ZSI/WRC/A/2172	MW052562	India	Western Ghats, Goa
<i>Duttaphrynus sp.</i>	CAS233251	KF665335	Myanmar	Chin State, Falam Township, Laiva Village
<i>Duttaphrynus stuarti</i>	CAS221485	FJ882788	Myanmar	Kachin State
<i>Duttaphrynus stuarti</i>	CAS242587	KT031518	China	Yunnan
<i>Duttaphrynus stuarti</i>	KIZ-95L010	AF160780	China	Yunnan, Pingbian Co.
<i>Duttaphrynus stuarti</i>	KIZ06714	MW111526	China	surrounding of Yarang, Mêdog, Tibet
<i>Duttaphrynus stuarti</i>	-	MN411629	-	-
<i>Duttaphrynus stuarti</i>	KIZ06653	MW183275	China	surrounding of Xigong lake, Beibeng, Mêdog, Tibet
<i>Duttaphrynus stuarti medogensis</i>	KIZ07367	MW133340	China	-
<i>Duttaphrynus stuarti medogensis</i>	KIZ014053	MW133341	China	Xiachayu Town, Zayu county
<i>Firouzophrynus brevirostris</i>	Bmel-In3	AB530642	India	Shirva
<i>Firouzophrynus dhufarensis</i>	SNL310 / INC-2014.310	PQ555381	Oman	-
<i>Firouzophrynus dhufarensis</i>	SNL311 / INC-2014.311	PQ555382	Oman	-
<i>Firouzophrynus dhufarensis</i>	CAS227584	FJ882837	Oman	-
<i>Firouzophrynus dhufarensis</i>	MVZHerp242774	KT031498	Oman	Ayn Hamran
<i>Firouzophrynus dhufarensis</i>	MVZHerp242775	KT031499	Oman	Wadi Tanuf
<i>Firouzophrynus hololius</i>	SDB4240	FJ882781	India	-
<i>Firouzophrynus olivaceus</i>	SNL70a / INC-2016.70a	PQ555372	Iran	Minab
<i>Firouzophrynus olivaceus</i>	DJ11195	PQ555364	Pakistan	Aghor, Hingol
<i>Firouzophrynus olivaceus</i>	SNL71a / INC-2016.71a	PQ555373	Iran	Minab
<i>Firouzophrynus olivaceus</i>	MVZHerp234225	KT031504	Iran	Issa-abad
<i>Firouzophrynus olivaceus</i>	MVZHerp234226	KT031505	Iran	Bampur river
<i>Firouzophrynus olivaceus</i>	ZCYK.Boli	LC640611	-	-
<i>Firouzophrynus peninsularis</i>	SDBDU4018	MZ816173	India	Tamil Nadu, Coimbatore district
<i>Firouzophrynus peninsularis</i>	SDBDU6370	MZ816174	India	Karnataka, Kodagu district (Wattakolli)
<i>Firouzophrynus peninsularis</i>	SDBDU3759	MZ816175	India	Maharashtra, Solapur district
<i>Firouzophrynus peninsularis</i>	SDB4020	FJ882787	India	Western Ghats
<i>Firouzophrynus peninsularis</i>	27	EU071742	India	-
<i>Firouzophrynus stomaticus</i>	SNL92a / INC-2013.92a	PQ555374	India	Bhadarwah
<i>Firouzophrynus stomaticus</i>	SDBDU2015.2909	MZ816176	India	Assam
<i>Firouzophrynus stomaticus</i>	SDBDU2012.2268	MZ816177	India	Bihar

**Sup. Table 2.** Uncorrected pairwise genetic distances ( $p$ -distances; %) based on the mitochondrial 16S rRNA gene among members of the *Duttaphrynus stuarti* species group included in this study. Distances involving *Duttaphrynus dhara* sp. nov. are highlighted to emphasize genetic divergence from closely related taxa.

No.	Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	<i>Duttaphrynus dhara</i> sp. nov. (PX702608)														
2	<i>Duttaphrynus dhara</i> sp. nov. (PX702609)	0.005													
3	<i>Duttaphrynus</i> sp. (KF665335.1)	0.032	0.038												
4	<i>Duttaphrynus stuarti</i> (FJ882788.1)	0.044	0.049	0.032											
5	<i>Duttaphrynus stuarti</i> (W133341.1)	0.044	0.050	0.021	0.011										
6	<i>Duttaphrynus stuarti</i> (AF160780.1)	0.044	0.049	0.032	0.000	0.011									
7	<i>Duttaphrynus stuarti</i> MN411629.1)	0.044	0.050	0.021	0.011	0.000	0.011								
8	<i>Duttaphrynus stuarti</i> (KT031518.2)	0.044	0.049	0.032	0.000	0.011	0.000	0.011							
9	<i>Duttaphrynus stuarti</i> (MW111526.1)	0.050	0.055	0.027	0.016	0.005	0.016	0.005	0.016						
10	<i>Duttaphrynus stuarti</i> (MW183275.1)	0.050	0.055	0.027	0.016	0.005	0.016	0.005	0.016	0.000					
11	<i>Duttaphrynus stuarti</i> (MW133340.1)	0.050	0.055	0.027	0.016	0.005	0.016	0.005	0.016	0.000	0.000				
12	<i>Duttaphrynus chandai</i> (OQ780572.1)	0.061	0.067	0.038	0.027	0.016	0.027	0.016	0.027	0.021	0.021	0.021			
13	<i>Duttaphrynus chandai</i> (MT705015.1)	0.061	0.067	0.038	0.038	0.027	0.038	0.027	0.038	0.033	0.033	0.033	0.033		
14	<i>Duttaphrynus chandai</i> (MT627443.1)	0.044	0.049	0.032	0.033	0.022	0.033	0.022	0.033	0.027	0.027	0.027	0.027	0.027	

**Sup. Table 3.** Results of principal component analysis (PCA) performed on size-corrected morphometric variables. Standard deviation, proportion of variance, cumulative proportion, and loadings of morphological variables for each principal component axis are presented.

Component	PC1	PC2	PC3
<b>Std. Dev</b>	2.5671	0.8678	0.4198
<b>Proportion Var.</b>	0.8558	0.0978	0.0229
<b>Cumulative Var.</b>	0.8558	0.9536	0.9765
<b>Variable</b>			
<b>HL</b>	0.3856	-0.3707	-0.1119
<b>MN</b>	0.389	-0.3464	-0.0716
<b>EN</b>	0.3248	0.6902	-0.1455
<b>SL</b>	0.3936	0.1891	-0.2265
<b>INS</b>	0.3773	-0.4101	0.0976
<b>PGL</b>	0.3759	0.2018	0.8646
<b>TBL</b>	0.3948	0.1469	-0.3910

**Sup. Table 4.** Morphometric measurements (in mm) of examined specimens of *Duttaphrynus dhara* sp. nov. (holotype ADBU-HW0180 and paratype ADBU-HW0182). Abbreviations for morphological characters are defined in the Materials and Methods section.

Voucher no.	ADBU-HW0180	ADBU-HW0182
Sex	Male	Male
Status	Holotype	Paratype
SVL	41.76	40.05
SUL	39.87	37.53
BW	13.27	14.18
HW	13.76	14.58
HL	11.38	10.94
IOD	5.2	4.37
INS	2.98	3.04
UEW	3.62	3.22
ED	3.96	3.04
EN	3.45	3.9
SL	5.3	4.99
NS	1.73	1.92
TD	1.74	1.04
MBE	4.13	4.18
MN	9.96	9.8
PGW	4.5	4.3
PGL	7.8	7.21
FLL	10.7	11.18
UAL	8.06	8.31
LAL	20.69	21.62
HAL	10.61	10.09
HLL	51.17	51.24
THL	17.11	15.66
TL	17.14	16.25
TSL	10.05	10.33
FL	16.65	15.23
Fin1L	6.61	7.01
Fin2L	7.48	7.18
Fin3L	10.83	10.67

Fin4L	8.06	8.04
Toe1L	5.48	5.02
Toe2L	8.18	7.18
Toe3L	11.85	11.56
Toe4L	16.76	16.58
Toe5L	12.4	11.92

**Sup. Table 5.** Morphological comparison of *Duttaphrynus dhara* sp. nov. with selected congeners occurring in the Indo-Burma region. Diagnostic characters and measurements are compiled from examined specimens and published descriptions (1) SVL in mm; (2) Tympanum; (3) Parotid gland; (4) Preorbital ridge; (5) Supraorbital ridge; (6) Orbitotympanic ridge; (7) Postorbital ridge; (8) Parietal ridge; (9) Finger length; (10) Toe length; (11) Toe webbing; (12) Tarsometatarsal articulation; and (13) Dorsum; ; d = distinct; h = hidden/slightly distinct; s = small, l = large; e = elongated; s = shorten; a = absent; p = present; “?” indicates data unknown.

Characters	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>D. dhara</i> sp.nov.	40.0–41.8	d, s	e	a	a	a	a	a	I<II<IV<III	I<II<III<V<IV	I 1–2 II 2–2.5 III 2–3.5 IV 3.5–1.5 V	reaches posterior end of parotid	glandular warts and spiny spinules
<i>D. chandai</i>	61.2–88.1	h, ?	e	a	p	a	a	a	II<I<IV<III	I<II<V<III<IV	I 1.5–1.5 II 1.5–2.5 III 1.5–3.5 IV 3.5–1.5 V	reaches the middle of parotid gland	granulated
<i>D. stuarti</i>	54.1–71.3	d, ?	e	?	?	?	?	?	II<I<IV<III	?	I 1–2.5 II 2–2.5 III 2–3 IV 2.5–1.5 V	reaches the tip of snout	granulated
<i>D. himalayanus</i>	?	d, s	e	p	p	p	?	?	I<II<IV<III	?	?	reaches the front of the eye or snout	irregular porous warts
<i>D. crocus</i>	54.6–67.8	d, ?	e	p	p	p	p	?	II<I<IV<III	I<II<V<III<IV	I 2–3 II 1–2.5 III 1.5–3.5 IV 3.6–1.5 V	NA	granulated
<i>D. scaber</i>	43.4	d, ?	s	p	p	p	p	p	I<II<IV<III	I<II<V<III<IV	I 0–1 II 1–2 III 2–3.5 IV 3.5–1 V	?	glandular warts and spiny spinules
<i>D. melanostictus</i>	71.6	d, ?	s	p	p	p	p	a	II<IV<I<III	I<II<V<III<IV	I 0–1 II 0–1.5 III 1–3.5 IV 3.5–1 V	reaches the tympanum or the eye	warts with black head
<i>D. parietalis</i>	?	d, ?	s	p	p	p	p	?	II<I<IV<III	?	?	reaches between the eye and the snout	granulated
<i>D. brevirostris</i>	?	d, ?	e	?	?	?	?	?	I=II<IV<III	I<II<V<III<IV	?	not reaching the shoulder	granulated with a small row of larger warts on the median line of the back
<i>D. mamitensis</i>	90	d, l	?	p	p	p	p	p	?	?	I 0-1 II 0-2 III 0-2.5 IV 3-0 V	reaches tympanum	granulated

<i>D. manipurensis</i>	45.0–47.0	d, ?	?	p	p	p	p	p	?	?	I 0–1 II 0–1 III 1–2.5 IV 2.5–0 V	reaches posterior end of parotid	granulated
<i>D. mizoramensis</i>	58	d, ?	?	p	p	p	p	p	?	?	I I–I II 0.5–1.5 III 1–2.75 IV 3–1 V	reaches middle of parotid	granulated with lighter brownish warts
<i>D. nagalandensis</i>	48	d, ?	e	p	p	p	p	p	?	?	I 0–1 II 0–1 III 1–2.5 IV 2.5–0 V	reaches middle of parotid	granulated, white warts, tubercles not black tipped
<i>D. wokhaensis</i>	92	d, 1	e	p	p	p	p	p	?	?	I 0–1 II 0–1.75 III 1–2.33 IV 2.5–0 V	reaches parotid	granulated
<i>D. kiphirensis</i>	73	d, 1	e	p	p	p	p	p	?	?	I 0–1 II 0–1 III 1–2 IV 2–1 V	reaches up to the middle of parotid	granulated