Supplementary Data

Supplementary Materials and Methods

Permission for field surveys in Xishuangbanna, Yunnan Province, China, were provided by the Xishuangbanna Nature Reserve Administration.

Eudiscopus denticulus was sampled from three sites in Xishuangbanna, Yunnan Province, China: Mandian (1981) E100°40'23″, N22°7'28″, 716 m a.s.l.; Mandan (2019) E101°39'23″, N21°29'17″, 746 m a.s.l.; and Mengla (2019) E101°30'43″, N21°30'45″, 874 m a.s.l. during two summer surveys in 1981 and 2019. According to a note of the survey in 1981, *E. denticulus* specimens were collected in a bamboo forest using several mist nets at a height of 2–4 m. The new samples from 2019 were captured in harp-traps in closed rainforest with bamboo trees nearby. It is worth noting that the specimens collected in 1981 and deposited in Kunming Natural History Museum of Zoology were originally identified as *Tylonycteris* sp. They were determined as *E. denticulus* by Dr. Yu, Prof. Wu, and Dr. Li during re-examination of the chiropteran collection in 2019. The specimens used in the study are all adults based on the status of the epiphyseal cartilage gap in the metacarpal joint (Kunz & Anthony, 1982). The samples are currently stored in the collections of the Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming, Yunnan, China (KIZ) and School of Life Sciences, Guangzhou University, Guangdong, China (GZHU). Comparative materials used in this study are housed in the collections of the American Museum of Natural History, New York, USA (AMNH); Hungarian Natural History Museum, Budapest, Hungary (HNHM); Institute of Ecology and Biological

Resources, Hanoi, Vietnam (IEBR); and Natural History Museum, London, UK (BMNH). Six external measurements were recorded to the nearest 0.1 mm with a MITUTOYO digital caliper and body mass was recorded to the nearest 0.1 g using a TANITA spring scale (Model: 1476, Japan). External measurements included: HB: body length from tip of face/chin to anus; T: tail length from tip of tail to beginning of first tail vertebrae; E: ear length from base of ear where it attaches to head to tip of pinna; HF: hind foot length from heel to tip of longest toe, including claw; Tib: length of tibia from knee to ankle; FA: forearm length from elbow to wrist with both joints folded. Seventeen cranial and dental measurements were recorded to the nearest 0.01 mm using a MITUTOYO digital caliper, including: GTL: greatest length of skull from posterior edge of skull to front of incisors; CCL: condylocanine length from exoccipital condyle to most anterior part of canine; CBL: condylobasal length from exoccipital condyle to posterior rim of alveolus of first upper incisor; BCW: braincase width, greatest width across braincase; BCH: braincase height from basisphenoid at level of hamular processes to highest part of skull; ZYW: zygomatic width, greatest width of skull across zygomatic arches; MAW: mastoid width, greatest distance across mastoid region; PL: palatal length from anterior palatal emargination to midpoint of posterior palatal emargination; IOW: interorbital width, least width of interorbital constriction; UIM^{3}L: length of maxillary toothrow from front of incisor to posterior edge of 3rd upper molar; UCM^{3}L: length of maxillary toothrow from front of canine to posterior edge of 3rd upper molar; UCCW: greatest breadth across upper canines; UM^{3}M^{3}W: width across upper molars, greatest width measured across outer edges of

third upper molars; LIM_3L: length of mandibular toothrow from front of incisor to posterior edge of 3rd lower molar; LCM_3L: length of mandibular toothrow from front of canine to posterior edge of 3rd lower molar; MANL: greatest length of mandible, greatest length from posterior edge of mandibular condyles to front of lower incisors; PCH: coronoid process height from inferior surface of angular process of ramus to tip of coronoid process. In the R environment (R Development Core Team, Vienna, www.R-project.org), principal component analysis (PCA) with varimax rotation was performed on 10 craniodental measurements (variables shown in bold in Table 1) using the "psych" package according to the integrity of our data. We also compared the species from middle Vietnam (Pu Huong) and China via *t*-test to illustrate geographic variations. To facilitate species determination in the future, the skull of one specimen (KIZ 811353) was scanned using a RexcanDS3 Silver 3D laser scanner with a maximum resolution of 0.01 mm. The scanned PHY files (cranium and mandible) are provided in the Supplementary Data.

Complete genomic DNA of a male *E. denticulus* individual (GZHU 19159) was extracted from liver tissue using a MiniBEST Universal Genomic DNA Extraction Kit (Takara, Dalian), and was further sequenced using Illumina Hiseq X. An Illumina PE library (460 bp library) was constructed and the whole mitochondrial genome was scanned by bioinformatics analysis after quality control of the obtained sequencing data. The complete mitochondrial genome was assembled and annotated using MitoZ (Meng et al., 2018) (GenBank accession numbers: MW085031). We also amplified the partial cytochrome oxidase subunit I gene from two samples (GZHU 19160 and

GZHU 19159) by polymerase chain reaction (PCR) (*Co1*, 659 bp) for species determination (GenBank accession number: MT822524 and MT822523). To determine the phylogenetic relationship of *E. denticulus*, we generated two data matrices, one containing 360 valid/putative vespertilionid species, representing a wider taxon sampling scale, and one using complete mitochondrial sequences, including 101 taxa (see taxonomic list and accession numbers in Table S1). All sequences were aligned using MUSCLE (Edgar, 2004). Maximum-likelihood phylogenies were conducted using IQ-TREE (Nguyen et al., 2015) with best-fit models and partition settings selected by PartitionFinder2 (Lanfear et al., 2016). Branch support was estimated using the Ultrafast option for bootstrap analysis with 1 000 replicates (Nguyen et al., 2015). To illustrate the intraspecific phylogeographic relationships, the phylogenies and haplotype network included all available *CoI* sequences of *E. denticulus* was inferred using IQ-TREE (Nguyen et al., 2015) and PopART (Clement et al., 2000; Leigh & Bryant, 2015).

Echolocation calls of three individuals sampled in 2019 (GZHU 19159♀, 19160♂, 19164♀) were recorded using a Pettersson D500X ultrasound detector (Pettersson Elektronik AB) when the animal was flying in a room (5 m×4 m×3 m). The sampling frequency was set to 500 kHz in 16 bits quality. The recorded sound files were analyzed in BatSound 4.1.4 (FFT size: 512 points). For each echolocation call, we measured duration (DUR, ms), highest frequency (HF, kHz), lowest frequency (LF, kHz), and frequency with most energy (FMAX, kHz).

MaxEnt was used to model current potential distribution of *E. denticulus* in

Southeast Asia. The occurrence data were derived from our sample coordinates, related references (Kock & Kovac, 2000; Wilson & Mittermeier, 2019; Zsebők et al., 2014), and the Global Biodiversity Information Facility (GBIF) database (Occurrence dataset https://doi.org/10.15468/igaciv accessed via GBIF.org on 2019-10-14). To evaluate the influence of our new record on our prediction, two MaxEnt models (Phillips et al., 2005; Phillips & Dudík, 2008) were run using the same settings with or without the Chinese occurrences. Latitude and longitude coordinates for each sample were entered into the Biodiversity and Climate Change Virtual Laboratory (BCCVL, Griffith University) as biological data (Hallgren et al., 2016). Ten "WorldClim, current climate (1950–2000), 2.5 arc min (~5 km)" climate variables (i.e., annual mean temperature (BIO1), max temperature of warmest month (BIO5), min temperature of coldest month (BIO6), mean temperature of wettest quarter (BIO8), mean temperature of driest quarter (BIO9), mean temperature of warmest quarter (BIO10), annual precipitation (BIO12), precipitation seasonality (BIO15), precipitation of warmest quarter (BIO18), precipitation of coldest quarter (BIO19)), which are considered the most influential on chiropteran distribution (Hu et al., 2019; Li et al., 2005), were selected in the BCCVL collections. Receiver operating characteristic (ROC) curves were assessed, where the area under the curve (AUC) was used to evaluate the accuracy of the resulting model. The final potential species distribution map had a range of values from zero to one, which were regrouped into three classes as 'high potential' (>0.70), 'moderate potential' (0.30–0.70), and 'least potential' (<0.3) habitats; only 'high potential' regions are illustrated.

REFERENCES

Clement M, Posada D, Crandall KA. 2000. TCS: a computer program to estimate gene genealogies. *Molecular Ecology*, **9**(10): 1657–1659.

Hallgren W, Beaumont L, Bowness A, Chambers L, Graham E, Holewa H, et al. 2016. The biodiversity and climate change virtual laboratory: where ecology meets big data. *Environmental Modelling & Software*, **76**: 182–186.

Kock D, Kovac D. 2000. *Eudiscopus denticulus* (Osgood 1932) in Thailand with notes on its roost (Chiroptera: Vespertilionidae). *Zeitschrift für Säugetierkunde*, **65**(2): 121–123.

Kunz TH, Anthony ELP. 1982. Age estimation and postnatal development in the Mexican free-tailed bat (*Tadarida brasiliensis mexicana*): birth size, growth rates, and age estimation. *Journal of Mammalgy*, **76**(3): 123–138.

Lanfear R, Frandsen PB, Wright AM, Senfeld T, Calcott B. 2016. PartitionFinder 2: New Methods for Selecting Partitioned Models of Evolution for Molecular and Morphological Phylogenetic Analyses. *Molecular Biology & Evolution*, **34**(3): 772–773.

Leigh JW, Bryant D. 2015. Popart: full-feature software for haplotype network construction. *Methods in Ecology and Evolution*, **6**(9): 1110–1116.

Li YC, Meng YH, Zhang LC, Ye Q. 2005. Analysis of environmental factors on geographical distribution of Chinese Chiroptera. *Acta Zoologica Sinica*, **51**(3): 413–422. (in Chinese)

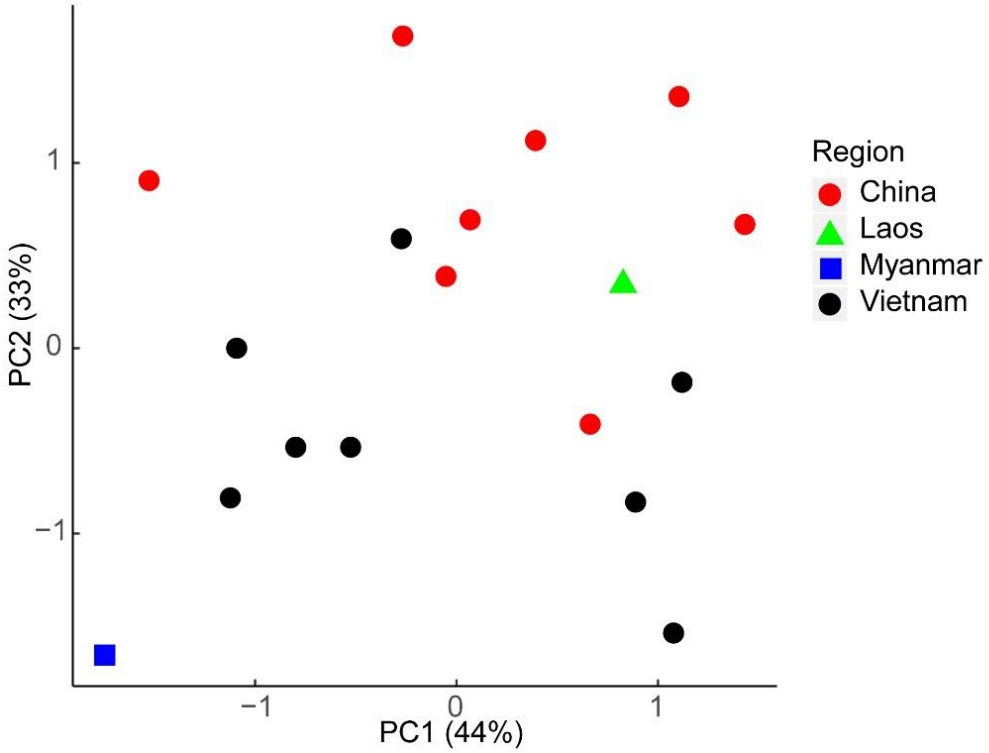
Meng GL, Li YY, Chentao Y, Liu SL. 2019. MitoZ: A toolkit for animal mitochondrial genome assembly, annotation and visualization. *Nucleic Acids Research*, **47**(11): e63.

Nguyen LT, Schmidt HA, von Haeseler A, Minh BQ. 2015. IQ-TREE: a fast and effective stochastic algorithm for estimating maximum-likelihood phylogenies. *Molecular Biology and Evolution*, **32**(1): 268–274.

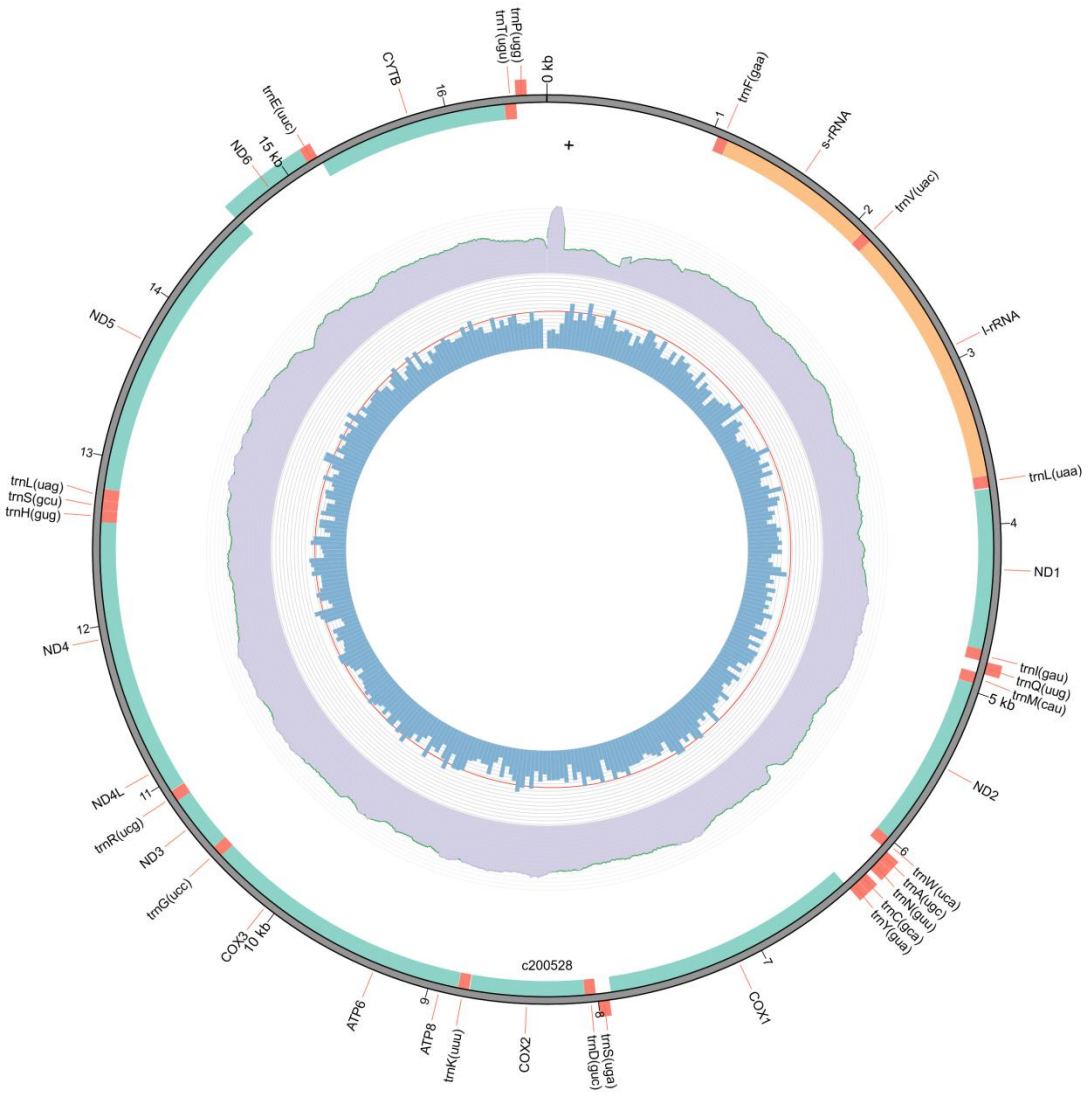
Wilson DE, Mittermeier RA. 2019. Handbook of the Mammals of the World-Volume 9: Bats. Barcelona: Lynx Edicions.

Zsebők S, Son NT, Csorba G. 2014. Acoustic characteristics of the echolocation call of the disc-footed bat, *Eudiscopus denticulus* (Osgood, 1932) (Chiroptera, Vespertilionidae). *Acta Acustica United with Acustica*, **100**(4): 767–771.

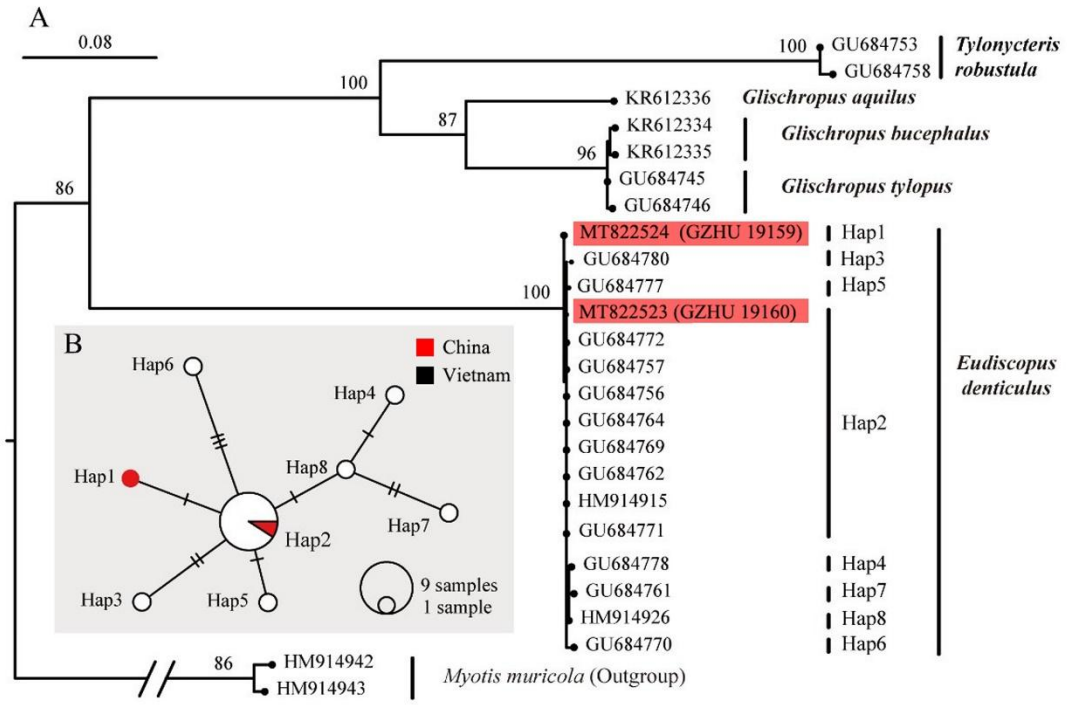
Supplementary Figures and Figure Legends



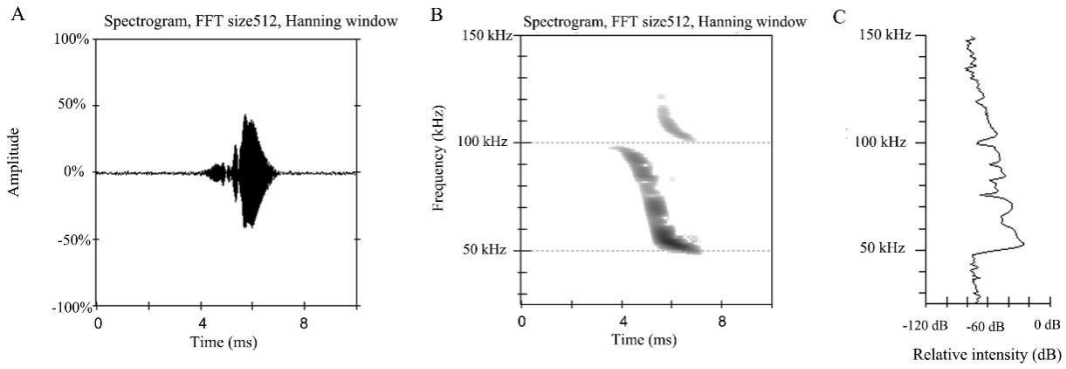
Supplementary Figure S1 Two-dimensional PCA plots for *Eudiscopus denticulus* from China and nearby countries showing projections of individual specimens on first two principal components derived from 10 craniodental measurements.



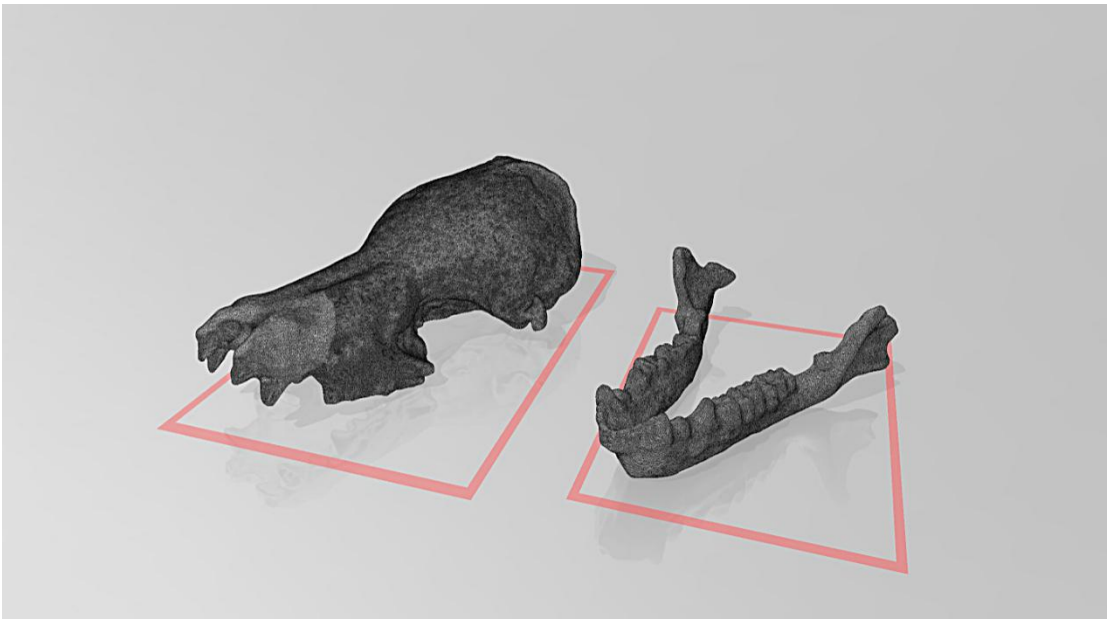
Supplementary Figure S2. Mitogenome visualization of *Eudiscopus denticulus* (GZHU-19159) using MitoZ.



Supplementary Figure S3 Maximum-likelihood phylogenetic trees based on mitochondrial *Co1* segments using IQ-tree (A) and a haplotype network using a *Co1* segment (B). Haplotype names correspond to sequence IDs from phylogenetic analysis.



Supplementary Figure S4 Echolocation call (A-C) of *Eudiscopus denticulus* when flying in a room (5 m×4 m×3 m): spectrum (A), spectrogram (B), and oscillogram (C).



Supplementary Figure S5 Illustration of 3D files of skull of one specimen (KIZ 811353) scanned by RexcanDS3 Silver 3D laser scanner.

Supplementary Table S1. GenBank accession numbers of sequences used in this study

Species	Mitochondrial markers				Nuclear markers	Species	Mitochondrial Genome
	12s	***16s***	*Col*	***Cyt-b***	***RAG2***		
Eudiscopus denticulus GZHU-19160, GZHU-19159	MW085031	MW085031	MT822523 MT822524	MW085031	-	*Eudiscopus denticulus* GZHU-19159	MW085031
Aeorestes cinereus	AY495482	AY495482	GU722981	KP341736	HM561638	*Artibeus lituratus*	JN209840
Aeorestes cinereus cinereus	-	-	KR350085	-	KR350142	*Chaerephon plicatus*	KY581660
Aeorestes semotus	-	-	KR350078	-	KR350134	*Chrotopterus auritus*	KU743905
Aeorestes villosissimus	-	-	MF990082	-	MF990176	*Cynopterus brachyotis*	KM659865
Antrozous dubiaquercus	AY395863	AY395863	JF447180	EF222381	GU328050	*Cynopterus sphinx*	KF750629
Antrozous pallidus	GU328037	AF326088	GU723167	EF222382	GU328047	*Diaemus youngi*	KU743906
Arielulus circumdatus	MF038675	-	GU684800	MF038475	MF038336	*Diphylla ecaudata*	KU743911
Arielulus cuprosus	KC887906	-	-	EU521631	KC887913	*Ectophylla alba*	MH260572
Arielulus sp. GS16483	-	-	-	MF038476	MF038337	*Epomophorus gambianus*	KT963027
Barbastella barbastellus	AF326089	AF326089	JF442794	MF038470	GU328049	*Eptesicus serotinus*	KF111725
Barbastella darjelingensis	-	-	JF442795	-	-	*Glyphonycteris daviesi*	KU743912
Barbastella leucomelas	-	-	JF442796	MG747669	-	*Hipposideros armiger*	JN980966
Barbastella pacifica	-	-	LC456143	LC456156	-	*Hsunycteris thomasi*	KU743907
Barbastella sp. 7184	-	-	LC456144	LC456157	-	*Hypsugo alaschanicus*	KT380130
Cassistrellus dimissus	GU328040	GU328040	MG194430	MG194436	GU328057	*Hypsugo alaschanicus*	MF459671

Cassistrellus yokdonensis	-	-	-	MG194435	MG194433	*Lasiurus borealis*	JN209842
Chalinolobus gouldii	AY495461	AY495461	-	-	HM561665	*Lonchorhina aurita*	KU743908
Chalinolobus neocaledonicus	MF038672	-	-	MF038472	MF038334	*Macrotus californicus*	KU743909
Chalinolobus tuberculatus	AF321051	AF321051	-	NC 002626	-	*Lyrodermy lyra*	MG586969
Corynorhinus mexicanus	AF326090	AF326090	-	KC747679	GU328053	*Miniopterus fuliginosus*	MH523628
Corynorhinus rafinesquii	NC 016872	AF326091	GU723173	NC 016872	GU328055	*Murina cyclotis*	MK747248
Corynorhinus townsendii	AF263238	AF263238	GU723176	KC747680	AY141029	*Murina huttoni*	KU521385
Corynorhinus townsendii australis	-	-	-	JQ917004	-	*Murina leucogaster*	KM893454
Corynorhinus townsendii pallescens	-	-	-	JQ916964	-	*Murina shuipuensis*	MK747249
Dasypterus ega	AY495483	AY495483	MF990086	KP341744	HM561639	*Murina ussuriensis*	JX872285
Dasypterus insularis	-	-	MF990088	KP341747	MF990184	*Myotis albescens*	MF143497
Dasypterus intermedius	-	HM561627	GU722937	KP341748	HM561640	*Myotis atacamensis*	MF143493
Dasypterus intermedius floridanus	-	-	MN326026	-	-	*Myotis auriculus*	MF143486
Dasypterus xanthinus	AY495485	AY495485	GU722941	KP341757	HM561642	*Myotis bechsteinii*	KX757757
Eptesicus bobrinskoi	-	-	JX008037	JX902462	-	*Myotis bombinus*	KT818621
Eptesicus bottae	-	-	-	GQ272573	-	*Myotis brandtii*	KM199849
Eptesicus bottae anatolicus	-	-	-	KF019045	DQ120810	*Myotis brandtii*	KT210199
Eptesicus bottae hingstoni	-	-	-	EU786821	EU786883	*Myotis davidii*	KM233172
Eptesicus bottae ognevi	-	-	-	EU786877	FJ841979	*Myotis dominicensis*	MF143467
Eptesicus bottae taftanimontis	-	-	-	EU786814	FJ841978	*Myotis evotis*	MF143468
Eptesicus brasiliensis	AY495464	AY495464	JF448025	-	HM561644	*Myotis formosus*	HQ184048
Eptesicus chiriquinus	KX381737	-	JF459158	-	-	*Myotis frater*	MH177276
Eptesicus furinalis	AF263234	AF263234	JF454656	EU786865	AY141030	*Myotis horsfieldii*	MF143494
Eptesicus gobiensis	-	-	KX859271	GQ272583	-	*Myotis ikonnikovi*	KF111724
Eptesicus guadeloupensis	MF038679	-	-	MF038480	MF038340	*Myotis keaysi*	MF143477
Eptesicus hottentotus	AY495466	AY495466	KF452622	EU786823	GU328059	*Myotis leibii*	MF143488
Eptesicus isabellinus	-	-	-	EU360699	-	*Myotis lucifugus*	KP273591
Eptesicus isabellinus boscai	-	-	-	EU786838	EU786891	*Myotis lucifugus*	MF143490
Eptesicus isabellinus isabellinus	-	-	-	EU786831	EU786888	*Myotis lucifugus*	MF143491
Eptesicus nilssonii	-	-	JF442810	GQ272582	AB921209	*Myotis macrodactylus*	KF440685
Eptesicus regulus	AY495539	AY495539	-	AY007531	GU328119	*Myotis martiniquensis*	MF143498
Eptesicus sagittula	AY495540	AY495540	-	-	-	*Myotis melanorhinus*	MF143489
Eptesicus serotinus	AY495467	HM561626	HQ580342	MG570068	AB921213	*Myotis muricola*	KT213444
Eptesicus pachyomus andersoni	-	-	-	JX902449	EU786902	*Myotis myotis*	KT901455
Eptesicus serotinus mirza	-	-	-	EU786861	EU786907	*Myotis nigricans*	MF143481
Eptesicus pachyomus	-	-	-	KF019050	KF018941	*Myotis nigricans*	MF143484
Eptesicus serotinus pallens	-	-	-	EU786841	EU786895	*Myotis nigricans*	MF143495

Eptesicus serotinus serotinus	-	-	-	KF019064	KF018940	*Myotis oxyotus*	MF143479
Eptesicus sp. A JLE 2010	-	-	HM540266	-	-	*Myotis petax*	KT199101
Eptesicus sp. VN11 0076	-	-	KX496341	KX496340	-	*Myotis petax*	KT199100
Eptesicus ulapesensis	-	MK332114	MK332113	-	MK332107	*Myotis petax*	KT199099
Eptesicus vulturnus	AY495499	AY495499	-	-	HM561675	*Myotis petax*	KT199102
Euderma maculatum	AF326093	AF326093	JF447253	JF489125	GU328060	*Myotis riparius*	MF143480
Eudiscopus denticulus	FJ755899	-	GU684780	-	-	*Myotis ruber*	MF143478
Glauconycteris alboguttata	MF038722	-	-	MF038519	MF038374	*Myotis thysanodes*	MF143492
Glauconycteris beatrix	AY495469	AY495469	JF444144	MF038540	HM561653	*Myotis vivesi*	MF143476
Glauconycteris cf. humeralis R13 98	MF038699	-	MF038599	MF038498	MF038356	*Myotis volans*	MF143496
Glauconycteris humeralis	MF038697	-	-	MF038496	MF038354	*Myotis yumanensis*	MF143485
Glauconycteris poensis	AY495470	AY495470	JF444146	MF038549	-	*Mystacina tuberculata*	AY960981
Glauconycteris sp. DMR 2017	-	-	MH989420	-	-	*Noctilio leporinus*	KU743910
Glauconycteris superba	MF038759	-	-	MF038561	MF038395	*Nyctalus noctula*	KP273590
Glauconycteris variegata	AY495471	AY495471	MH989322	MF038567	HM561655	*Nyctalus plancyi*	MG603757
Glischropus bucephalus	-	-	KR612335	KR612332	-	*Pipistrellus abramus*	KX355640
Glischropus tylopus	JN190885	-	GU684790	JX570898	JX570915	*Pipistrellus coromandra*	KP688404
Harpiocephalus harpia	AF263235	AF263235	MH137300	MH137366	AY141031	*Pipistrellus kuhlii*	KU058655
Harpiola isodon	FJ743927	-	HM540286	GQ168920	MN549099	*Plecotus auritus*	HM164052
Hesperoptenus blanfordi	JN190884	-	HM540293	MF038482	MF038342	*Plecotus macrobullaris*	KR134353
Hesperoptenus tickelli	MF038683	-	HM540296	MF038483	MF038343	*Plecotus rafinesquii*	JN209841
Histiotus macrotus	AY495472	HM561622	-	-	HM561648	*Pteronotus parnellii*	KF752590
Histiotus magellanicus	-	HM561625	-	-	HM561649	*Pteronotus personatus*	KU569221
Hypsugo alaschanicus	MK135784	NC 029939	KX859272	KX467595	-	*Pteronotus sp*	KX819316
Hypsugo anchietae	JQ039202	JQ039203	-	KM886098	-	*Pteropus alecto*	KF726143
Hypsugo arabicus	-	-	-	KX375190	-	*Pteropus dasymallus*	AB042770
Hypsugo bemainty	-	-	-	KM886062	-	*Pteropus vampyrus*	KP214033
Hypsugo cadornae	GU328041	GU328041	MN508632	JX570899	GU328061	*Rhinolophus ferrumequinum*	KT783534
Hypsugo cf. darwinii	-	HQ848778	-	-	-	*Rhinolophus ferrumequinum*	JN392460
Hypsugo dolichodon	-	-	MH234219	KX429687	-	*Rhinolophus ferrumequinum*	JX084273
Hypsugo macrotis	-	-	KX429684	KX429685	-	*Rhinolophus ferrumequinum*	KT779432
Hypsugo petersi	KC887912	-	MG194431	JX570897	JX570914	*Rhinolophus formosae*	EU166918
Hypsugo pulveratus	-	-	KX496349	KX496348	-	*Rhinolophus luctus*	JN986580
Hypsugo savii	AY495475	AY495475	MN031775	AJ504450	HM561667	*Rhinolophus macrotis*	KP162343
Hypsugo sp. A CMF 2010	-	-	HM540643	-	-	*Rhinolophus pumilus*	AB061526
Hypsugo sp. Hsav III 1	-	HQ848779	-	-	-	*Rhinolophus rex*	KT599913
Hypsugo sp. JA 2016a	-	-	-	-	-	*Rhinolophus sinicus*	KP257597
Ia io	MF038684	DQ989618	JF443950	MF615184	MF038344	*Rhinolophus sinicus*	KR106992

Idionycteris phyllotis	AF326094	AF326094	GU723182	KC747681	GU328063	*Rhinolophus thomasi*	KY124333
Kerivoula cf. hardwickii CMF 2010	-	-	HM540716	-	-	*Rhinolophus yunnanensis*	KY808508
Kerivoula cf. lenis CMF 2010	-	-	HM540722	-	-	*Rousettus aegyptiacus*	AB205183
Kerivoula furva	-	-	MH208492	MH208504	KX443576	*Rousettus amplexicaudatus*	MN125184
Kerivoula hardwickii	AF345928	AF345928	MH137335	MG194460	AY141034	*Saccopteryx leptura*	KY681816
Kerivoula intermedia	-	-	HM540733	EU188779	FJ744343	*Tadarida latouchei*	KY581662
Kerivoula krauensis	-	-	KU146863	-	-	*Tadarida teniotis*	KY581661
Kerivoula papillosa	AF345927	AF345927	MH137302	MG194454	AY141035	*Vespertilio murinus*	KU161588
Kerivoula pellucida	AY495476	AY495476	HM540751	MG194461	GU328064	*Vespertilio sinensis*	KJ081440
Kerivoula sp. FAK 2010	-	-	GU585627	GU585651	-	*Vespertilio sinensis*	KM092493
Kerivoula sp. FMNH 190110	-	-	-	MG194442	-	-	-
Kerivoula sp. T017154	-	-	-	MG194468	-	-	-
Kerivoula titania	FJ755902	-	MH137364	MH137402	MH137523	-	-
Kerivoula whiteheadi	-	-	-	MG194463	-	-	-
Laephotis botswanae	MF038673	-	-	MF038473	MF038335	-	-
Laephotis namibensis	AY495477	AY495477	-	EU797443	HM561668	-	-
Laephotis wintoni	-	-	-	EU797446	-	-	-
Lasionycteris noctivagans	AF326095	AF326095	GU722952	KC747682	GU328065	-	-
Lasiurus atratus	AY495478	AY495478	JF448047	KP341704	HM561635	-	-
Lasiurus blossevillii	AY495479	AY495479	GU723019	KP341705	HM561636	-	-
Lasiurus blossevillii frantzii	-	-	MF990092	KP341755	MF990188	-	-
Lasiurus pfeifferi	-	-	MF990090	KP341750	MF990186	-	-
Lasiurus seminolus	AY495484	AY495484	GU723154	KP341753	HM561641	-	-
Lasiurus sp. MVZ AD522	-	-	-	AF376838	-	-	-
Lasiurus sp. n. SAP 2020	-	-	-	MN523651	-	-	-
Mimetillus moloneyi	MF038671	-	MH989159	MF038471	MF038333	-	-
Murina aurata	FJ743930	FJ744698	JQ601545	-	-	-	-
Murina bicolor	FJ743921	-	-	GQ168921	-	-	-
Murina cf. cyclotis 2 CMF 2010	-	-	HM540955	-	-	-	-
Murina cf. cyclotis BOLD:AAC4219	-	-	GU684759	-	-	-	-
Murina cf. eleryi PS120928	-	-	KY034093	-	-	-	-
Murina cf. huttoni CMF 2010	-	-	HM540956	-	-	-	-
Murina cf. peninsularis PS.12.272	-	-	KY034115	-	-	-	-
Murina cf. peninsularis PS120905.1	-	-	KY034139	-	-	-	-
Murina cf. peninsularis PSUZC MM2011.29	-	-	KY034100	-	-	-	-
Murina chrysochaetes	-	-	HM540986	-	MN549096	-	-

Murina cineracea	-	-	-	-	JQ044705	-	-
Murina cyclotis	MK747248	MK747248	MK747248	MG194466	MN549100	-	-
Murina fanjingshanensis	-	-	-	MF543062	MN549093	-	-
Murina florium	FJ743914	-	-	GQ168902	-	-	-
Murina gracilis	FJ743928	-	KJ198570	KJ198141	KX443578	-	-
Murina harpioloides	-	-	JF443974	-	-	-	-
Murina hilgendorfi	FJ743922	-	JF442839	GQ168909	MN549094	-	-
Murina hkakaboraziensis	-	-	MF537343	-	-	-	-
Murina huttoni	AY495490	AY495490	KF772784	-	MN549098	-	-
Murina jaintiana	-	-	MF537350	-	JQ044702	-	-
Murina jinchui	-	-	MN549072	-	MN549091	-	-
Murina leucogaster	NC 025949	NC 025949	JQ601514	KX467598	-	-	-
Murina lorelieae	-	-	JN082179	-	MN549095	-	-
Murina peninsularis	FJ743915	-	KY034118	GQ168911	-	-	-
Murina recondita	-	-	KJ198691	KJ198270	-	-	-
Murina rongjiangensis	-	-	MN549087	-	MN549101	-	-
Murina rozendaali	FJ743908	-	KY034110	EU521627	-	-	-
Murina shuipuensis	MK747249	MK747249	MK747249	MK747249	MN549092	-	-
Murina sp. APBL060517 04	-	-	KY034095	-	-	-	-
Murina sp. B CMF 2010	-	-	HM540966	-	-	-	-
Murina sp. GGJ 2006	-	-	-	DQ435071	-	-	-
Murina sp. hn1151	-	-	-	EF570883	-	-	-
Murina sp. VTT 2014a	-	-	-	-	-	-	-
Murina tubinaris	GU952768	GU952768	KY034074	GQ168915	GU328074	-	-
Myotis adversus	AY495491	AY495491	-	KX467600	-	-	-
Myotis adversus	-	-	-	GU372821	-	-	-
Myotis fimbriatus taiwanensis	-	-	HM541172	KF312497	KF312536	-	-
Myotis alcathoe	HQ529686	LN864497	HG325824	KF874511	EU687471	-	-
Myotis annamiticus	FJ755901	-	HM541007	KF312499	KF312538	-	-
Myotis atacamensis	NC 036324	NC 036324	-	AM261882	-	-	-
Myotis auriculus	NC 036320	NC 036320	GU723206	JX130482	-	-	-
Myotis austroriparius	AY495493	AY495493	GU723113	AM261885	-	-	-
Myotis bechsteinii	NC 034227	NC 034227	JF442864	AF376843	-	-	-
Myotis blythii ancilla	-	-	-	AM284170	KF312539	-	-
Myotis blythii blythii	-	-	-	AF376840	-	-	-
Myotis blythii omari	-	-	-	KF312501	KF312540	-	-
Myotis bocagii	JX276375	AF326096	JF444183	MF038469	GU328077	-	-
Myotis bocagii cupreolus	-	-	-	KF312502	-	-	-
Myotis bombinus amurensis	-	-	-	KF312503	KF312541	-	-
Myotis californicus	AY495495	AY495495	GU723121	JX130524	GU328078	-	-
Myotis capaccinii	AY495494	AY495494	FR856678	AF376845	GU328079	-	-
Myotis cf. ater BOLD:AAA8748	-	-	HM914950	-	-	-	-

Myotis cf. ater CMF 2010	-	-	HM541012	-	-	-	-
Myotis cf. aurascens	-	-	JX008067	-	-	-	-
Myotis cf. formosus MR 2013	-	-	-	KF312519	KF312560	-	-
Myotis cf. keaysi	-	-	-	JX130519	-	-	-
Myotis cf. laniger MR 2013	-	-	-	KF312510	KF312548	-	-
Myotis cf. montivagus MR 2013	-	-	-	-	-	-	-
Myotis cf. muricola	-	-	HM914903	KF312514	KF312553	-	-
Myotis cf. muricola BOLD:AAA8748	-	-	HM914905	-	-	-	-
Myotis cf. nattereri IS 2013	-	-	-	JX826346	-	-	-
Myotis cf. kukunorensis	-	-	-	AY699845	-	-	-
Myotis cf. pequinius	-	-	-	AM284173	KF312551	-	-
Myotis cf. riparius	-	-	-	JX130514	-	-	-
Myotis ciliolabrum	AY495497	AY495496	JF498687	AM261890	GU328080	-	-
Myotis crypticus	-	-	MK214779	MK214770	-	-	-
Myotis csorbai	FJ755892	-	-	-	-	-	-
Myotis dasycneme	MN122855	MN122855	JF442936	AF376846	-	-	-
Myotis daubentonii	AY495498	AY495498	JF442974	KX467602	FN641679	-	-
Myotis daubentonii daubentonii	-	-	-	EU153107	-	-	-
Myotis daubentonii nathalinae	-	-	-	AF376862	KF312555	-	-
Myotis dominicensis	AY495500	NC 036312	-	JN020556	GU328081	-	-
Myotis elegans	AY495501	AY495501	JF499027	AM261891	-	-	-
Myotis emarginatus	AY027818	-	JF442977	AF376849	-	-	-
Myotis escalerai	-	-	-	JF412391	-	-	-
Myotis evotis milleri	KC747664	KC747664	-	KC747695	KC747710	-	-
Myotis fortidens	AY495502	AY495502	-	JX130439	GU328082	-	-
Myotis gomantongensis	-	-	HM541084	-	-	-	-
Myotis grisescens	-	KX755795	GU723217	AM261892	-	-	-
Myotis hajastanicus	-	-	-	AY665138	-	-	-
Myotis hasseltii	FJ755893	AY606940	MK605400	AF376850	-	-	-
Myotis horsfieldii deignani	-	-	-	KF312520	KF312562	-	-
Myotis horsfieldii horsfieldii	-	-	-	KF312521	KF312563	-	-
Myotis ikonnikovi	NC 022698	NC 022698	HQ974652	AY665165	-	-	-
Myotis lucifugus alascensis	KC747660	KC747660	-	KC747691	KC747706	-	-
Myotis lucifugus carissima	KC747661	KC747661	-	KC747692	KC747707	-	-
Myotis lucifugus lucifugus	-	KX755817	-	-	-	-	-
Myotis lucifugus relictus	KC747662	KC747662	-	KC747693	KC747708	-	-
Myotis macrodactylus	NC 022694	NC 022694	KT862814	KX467603	-	-	-
Myotis macropus	-	-	-	AY007526	-	-	-
Myotis martiniquensis	NC 036328	NC 036328	-	JN020561	JN020579	-	-

Myotis martiniquensis nyctor	-	-	-	JN020567	JN020584	-	-
Myotis melanorhinus	MF143489	MF143489	KP734221	MF143489	KC747709	-	-
Myotis montivagus	FJ755895	-	HM541125	AF376858	-	-	-
Myotis muricola browni	-	-	JN847713	AF376859	-	-	-
Myotis myotis myotis	-	-	-	AF246246	-	-	-
Myotis mystacinus	HQ529658	-	KY754520	AY665167	EU360603	-	-
Myotis nattereri	MN122818	MN122818	KY754521	KF312524	DQ120813	-	-
Myotis nesopolus nesopolus	-	-	-	JN020577	-	-	-
Myotis nigricans	AF326099	NC 036318	MG191831	KP134584	GU328088	-	-
Myotis blythi oxygnathus	-	-	-	AF376841	-	-	-
Myotis oxyotus gardneri	-	-	KX814412	-	-	-	-
Myotis peytoni	-	-	MG821164	-	-	-	-
Myotis phanluongi	FJ755897	-	FJ408726	KF312525	MH328033	-	-
Myotis planiceps	-	-	-	JN628243	JN628239	-	-
Myotis pruinosus	-	-	-	AB855787	-	-	-
Myotis ridleyi	AY495505	AY495505	-	KF312526	KF312572	-	-
Myotis riparius PS2	-	-	JQ601603	-	-	-	-
Myotis rufoniger	-	-	-	KP187885	-	-	-
Myotis septentrionalis	AY495507	MF143487	GU723141	MF143487	GU328090	-	-
Myotis siligorensis	AY495508	AY495508	JF444006	FJ215679	MH328034	-	-
Myotis siligorensis alticraniatus	FJ755898	-	JF443978	KF312530	KF312576	-	-
Myotis simus	MF143473	MF143473	-	JX130506	-	-	-
Myotis sp. 07BC0899YU	-	-	HM486574	-	-	-	-
Myotis sp. 1 HEN0826	-	-	-	FJ607333	-	-	-
Myotis sp. 1 Venezuela	-	-	-	JX130451	-	-	-
Myotis sp. 2 E Ecuador	-	-	-	JX130495	-	-	-
Myotis sp. 2 ZZ 2009	-	-	-	FJ215681	-	-	-
Myotis sp. 20130819 553	-	-	MG191882	-	-	-	-
Myotis sp. 5 Mexico	-	-	-	JX130518	-	-	-
Myotis sp. 6 Paraguay	-	-	-	JX130488	-	-	-
Myotis sp. AM M15111	-	-	-	AY007527	-	-	-
Myotis sp. AVB 2011	-	-	JF444333	-	-	-	-
Myotis sp. E CMF 2010	-	-	HM541082	-	-	-	-
Myotis sp. GZNU200306	DQ989592	DQ989617	-	-	-	-	-
Myotis sp. KK0005	-	-	-	AB106609	-	-	-
Myotis sp. MIBZPL01228	-	-	FR856750	-	-	-	-
Myotis sp. TK 48587	AY495513	AY495513	-	-	-	-	-
Myotis thysanodes	NC 036323	AF326100	GU723125	JX130588	GU328091	-	-
Myotis tschuliensis	-	-	-	AM284171	KF312568	-	-
Myotis velifer	MF143499	AY495509	GU723140	EU680299	AY141033	-	-
Myotis welwitschii	AY495511	AY495511	-	AF376874	GU328093	-	-
Neoromicia brunneus	AY495514	AY495514	JF444137	EU786868	HM561669	-	-
Neoromicia capensis	JQ039230	JQ039225	MF947527	KM886073	JX276347	-	-

Neoromicia cf. guineensisa DMR 2017	-	-	MH989400	-	-	-	-
Neoromicia cf. melckorum KMN 2014	-	-	-	KM886077	-	-	-
Neoromicia cf. rendalli SaSt 2013	-	-	JX508832	-	-	-	-
Neoromicia cf. somalica JA 2016a	-	-	KT598202	-	-	-	-
Neoromicia helios	-	-	KF452644	-	-	-	-
Neoromicia isabella	-	-	-	MK188527	-	-	-
Neoromicia malagasyensis	JQ039210	JQ039211	-	KM886026	-	-	-
Neoromicia matroka	JQ039206	JQ039205	-	KM886036	-	-	-
Neoromicia rendalli	JX276361	AY495515	MH989116	JX276207	HM561670	-	-
Neoromicia robertsi	JQ039214	JQ039213	-	KM886030	-	-	-
Neoromicia somalicus	JX276374	JQ039221	JX508830	JX276300	HM561671	-	-
Neoromicia sp. 1 SaSt 2013	-	-	JX508833	-	-	-	-
Neoromicia sp. IVK 2011	-	-	JF442541	-	-	-	-
Neoromicia tenuipinnis	-	-	MH989306	-	-	-	-
Glauconycteris superba	-	-	MH989457	-	-	-	-
Nyctalus aviator	-	GU461884	-	-	-	-	-
Nyctalus azoreum	-	-	-	DQ887591	-	-	-
Nyctalus lasiopterus	-	-	-	JX570900	JX570916	-	-
Nyctalus leisleri	AY495517	AY495517	JF443044	JX570901	HM561657	-	-
Nyctalus noctula	MN122907	NC 027237	KY754524	JX570902	HM561658	-	-
Nyctalus plancyi	NC 041160	NC 041160	-	KX467596	JX570921	-	-
Nyctalus sp. A JLE 2010	-	-	HM541173	-	-	-	-
Nycticeinops schlieffeni	JX276377	AF326101	KF452661	JX276308	GU328095	-	-
Nycticeius humeralis	AF326102	AF326102	GU723165	KC747697	GU328096	-	-
Nyctophilus geoffroyi	AY495519	AY495519	-	-	-	-	-
Nyctophilus gouldi	AY495521	AY495521	-	-	-	-	-
Otonycteris hemprichii	AF326103	AF326103	-	HM030844	GU328098	-	-
Otonycteris leucophaea	-	-	-	HM030842	-	-	-
Parahypsugo bellieri	-	-	JX508836	MK188521	-	-	-
Parahypsugo crassulus	-	-	KT598199	-	-	-	-
Parahypsugo eisentrauti	AY495473	AY495473	JF444193	MK188522	HM561666	-	-
Parahypsugo happoldorum	-	-	-	MK188526	-	-	-
Perimyotis subflavus	AY495523	AY495523	GU723157	AJ504449	GU328103	-	-
Philetor brachypterus	KC887911	-	HM541205	KX429688	JX570923	-	-
Phoniscus jagorii	-	-	MN255825	MG194467	-	-	-
Pipistrellus cf. coromandra RM 2019	-	-	MH827058	-	-	-	-
Pipistrellus cf. grandidieri JA 2016a	-	-	KT598197	-	-	-	-
Pipistrellus cf. kuhlii	-	-	JX008078	-	-	-	-

Pipistrellus cf. tenuis BOLD:AAB2554	-	-	GU684809	-	-	-	-
Pipistrellus coromandra	AY495524	NC 029191	GU684804	NC 029191	GU328102	-	-
Pipistrellus deserti	-	-	KT613198	KM252760	-	-	-
Pipistrellus hesperidus	JX276376	HM561628	KF452666	KM886096	HM561659	-	-
Pipistrellus javanicus	JQ039198	JQ039199	KX496358	KX496357	GU328105	-	-
Pipistrellus kuhlii kuhlii	-	-	KT613286	-	-	-	-
Pipistrellus kuhlii lepidus	-	MF078005	MF078007	-	MF078010	-	-
Pipistrellus maderensis	-	AJ426636	-	KP455376	-	-	-
Pipistrellus nathusii	AY495528	AF326104	KY754531	AJ504446	HM561660	-	-
Pipistrellus paterculus	-	HM561629	HM541275	-	HM561661	-	-
Pipistrellus pipistrellus	AF326105	HM561630	JF443083	LC426473	HM561662	-	-
Pipistrellus pygmaeus	MN122927	MN122927	KY754534	MN122927	GU328107	-	-
Pipistrellus rueppellii	JX276368	HQ848771	KF452648	JX276316	JX276351	-	-
Pipistrellus sp. 1 SaSt 2013	-	-	JX508839	-	-	-	-
Pipistrellus sp. AVB 2011	-	-	JF444010	-	-	-	-
Pipistrellus sp. G CMF 2010	-	-	HM541240	-	-	-	-
Pipistrellus sp. kuhlii deserti Pkuh I	-	HQ848769	-	-	-	-	-
Pipistrellus sp. MIBZPL03827	-	-	FR856797	-	-	-	-
Pipistrellus sp. PU 5 OR	-	-	MN180079	-	-	-	-
Pipistrellus stenopterus	-	-	MH540193	MH540194	MH540195	-	-
Pipistrellus tenuis	JQ039196	JQ039197	JF444031	-	HM561663	-	-
Plecotus austriacus	AF326107	AF326107	KX859276	KF358522	GU328101	-	-
Plecotus balensis	-	AY531614	-	AF513799	-	-	-
Plecotus cf. kozlovi	-	-	JX008088	-	-	-	-
Plecotus christii	-	AY531615	-	-	-	-	-
Plecotus gaisleri	GU328043	GU328043	MN031827	MN045587	GU328104	-	-
Plecotus kolombatovici	-	AY531619	-	AF513785	-	-	-
Plecotus macrobullaris	KR134369	KR134409	FR856814	NC 027977	DQ120822	-	-
Plecotus macrobullaris macrobullaris	-	AY531628	-	-	-	-	-
Plecotus ognevi	-	DQ294126	HQ974649	MK410318	-	-	-
Plecotus sacrimontis	-	DQ294114	-	LC036641	-	-	-
Plecotus sardus	-	AY175819	FR856817	-	-	-	-
Plecotus sp. JJJ 2003	-	-	-	AY306212	-	-	-
Plecotus sp. MIBZPL00270	-	-	FR856822	-	-	-	-
Plecotus strelkovi	-	DQ294122	-	-	-	-	-
Plecotus teneriffae	-	AJ431658	-	AF513811	-	-	-
Plecotus turkmenicus	-	DQ294117	-	-	-	-	-
Rhogeessa alleni	AF326108	AF326108	-	-	HM561632	-	-
Rhogeessa bickhami	-	-	KX756035	-	-	-	-
Rhogeessa genowaysi	-	-	-	EF222326	-	-	-

Rhogeessa gracilis	KC747667	KC747667	-	EF222362	KC747712	-	-
Rhogeessa parvula	AF326109	AF326109	-	EF222355	GU328108	-	-
Rhogeessa sp. 20130222 359	-	-	MG191868	-	-	-	-
Rhogeessa sp. n. AB 2020	-	-	-	-	-	-	-
Rhogeessa tumida	AF326110	AF326110	JF446544	EF222367	GU328109	-	-
Scotoecus albofuscus	-	-	MH988855	-	-	-	-
Scotoecus hirundo	AY495536	AY495536	-	JX276317	HM561664	-	-
Scotoecus sp. DMR 2017	-	-	-	-	-	-	-
Scotomanes ornatus	AY495537	AY495537	JF444112	MF038484	HM561656	-	-
Scotophilus andrewreborii	-	-	-	MH299526	-	-	-
Scotophilus borbonicus	AY495532	AY495532	-	DQ459067	GU328110	-	-
Scotophilus clade 7 TD 2019	-	-	-	-	-	-	-
Scotophilus dinganii	AY495533	AY495533	JF442689	EU750999	GU328111	-	-
Scotophilus kuhlii	AF326111	AF326111	MG821195	LC426467	GU328113	-	-
Scotophilus leucogaster	AY395867	AY395867	KF452703	EU750940	GU328114	-	-
Scotophilus livingstonii	-	-	-	MH299590	-	-	-
Scotophilus marovaza	-	-	-	EU750943	-	-	-
Scotophilus robustus	-	-	-	EU750948	-	-	-
Scotophilus sp. IVK 2011	-	-	JF442686	-	-	-	-
Scotophilus tandrefana	-	-	-	EU750941	-	-	-
Scotophilus trujilloi	-	-	-	MH299598	-	-	-
Scotophilus viridis	AF326112	AF326112	KF452711	EU750991	GU328117	-	-
Scotophilus viridis nigritellus	-	-	-	EU750976	-	-	-
Submyotodon latirostris	GU952769	GU952769	-	KP187906	GU328084	-	-
Thainycteris aureocollaris	-	HM561621	HM541980	-	HM561643	-	-
Tylonycteris fulvida	-	-	KX496535	KX496526	-	-	-
Tylonycteris malayana	-	-	KX496420	KX496411	-	-	-
Tylonycteris pachypus	AY495538	AY495538	GU684806	EF517315	HM561672	-	-
Tylonycteris robustula	-	HM561631	GU684781	MN366287	HM561673	-	-
Tylonycteris tonkinensis	-	-	KX496461	KX496451	-	-	-
Vespertilio murinus	AY395866	MN122857	KY754559	LC052295	HM561676	-	-
Vespertilio sinensis	KM092493	KM092493	JF443153	KX467594	-	-	-