



## Supplementary Material

# Morphometric and Phylogenetic Analysis of Short-Nosed Fruit Bat *Cynopterus sphinx* (Vahl, 1797) Captured from FATA Regions, Pakistan

Iftikhar Hussain<sup>1</sup>, Sardar Azhar Mehmood<sup>1</sup>, Muzafar Shah<sup>2\*</sup>, Mohammad Salim<sup>3</sup>, Shabir Ahmed<sup>1</sup>, Sana Ullah<sup>1</sup>, Sidra Batool<sup>4</sup>, Nadia Saeed<sup>1</sup> and Khalid Usman<sup>1</sup>

<sup>1</sup>Department of Zoology, Hazara University, Mansehra, Pakistan

<sup>2</sup>Centre for Animal Sciences & Fisheries, University of Swat, Swat, Pakistan

<sup>3</sup>Department of Forestry and Wildlife Management, University of Haripur, Haripur, Pakistan

<sup>4</sup>Department of Zoology, Islamia College University, Peshawar, Pakistan

**Supplementary Table I. Comparison of external body parameters (mm) of *Cynopterus sphinx* (n=4) of present study with those of previously described specimens.**

Body Parameters	Bates and Harrison (1997)	Matveev (2005)	Senacha et al. (2006)	Aziz et al. (2007)	Das and Sinha (1971)		Present Study
					Male (n=13)	Female (n=8)	
BM	-	35.4-49.8	-	330-501	-	-	-
HB	98.8 (76.0-113.0)	-	98-108	85-115	99.2 (89-109)	99.1 (91-109)	77.13
E	20.6 (17.5-24.0)	18.1-22.2	19-23	13.0-19.0	20.7 (19-22)	20.9 (19-23)	19.51
FA	70.2 (64.0-79.0)	65.7-70.0	68-75	59.0-75.0	71.2 (67-74.5)	72.5 (67.5-76)	65.49
WS	381.4 (309.0-436.0)	-	340-378	-	-	-	-
2mt	-	-	-	-	-	-	29.55
1ph2mt	-	-	-	-	-	-	7.07
2ph2mt	-	-	-	-	-	-	6.46
3mt	47.0 (43.2-53.4)	-	-	39.0-51.0	-	-	43.31
1ph3mt	-	-	-	-	-	-	29.29
2ph3mt	-	-	-	34.0-43.0	-	-	32.63
3mt	43.4 (40.7-51.1)	-	-	-	-	-	41.22
1st Ph. 3rd Met	-	-	-	-	-	-	23.09
3rd Ph. 4th Met	-	-	-	-	-	-	21.93
4mt	44.4 (41.1-52.1)	-	-	-	-	-	41.19
2ph5mt	-	-	-	-	-	-	21.23
3ph5mt	-	-	-	-	-	-	20.25
TIB	-	25.0-28.3	32-35	21.0-30.0	27.2 (25-29)	28 (24.5-30.5)	26.61
HF	15.6 (12.6-18.0)	12.2-15.6	14-17	12.0-21.0	17.6 (16-20.5)	17 (14.5-18.5)	17.95
T	10.9 (4.5-19.0)	6.1-12.7	15-18	2.0-13.0	15.1 (13-17.5)	15.1 (14- 19)	7.35

N, The number of specimens; BM, Body mass; HB, Head and body; E-Ear, FA, Forearm; TH, Thumb; 2mt, 2<sup>nd</sup> metacarpal; 1ph2mt, 1<sup>st</sup> Phalanx on 2<sup>nd</sup> metacarpal; 2ph2mt, 2<sup>nd</sup> Phalanx on 2<sup>nd</sup> metacarpal; 3mt, 3<sup>rd</sup> metacarpal; 1ph3mt, 1<sup>st</sup> Phalanx on 3<sup>rd</sup> metacarpal; 2ph3mt, 2<sup>nd</sup> Phalanx on 3<sup>rd</sup> metacarpal; 4mt, 4<sup>th</sup> metacarpal; 1ph4mt, 1<sup>st</sup> Phalanx on 4<sup>th</sup> metacarpal; 2ph4mt, 2<sup>nd</sup> Phalanx on 4<sup>th</sup> metacarpal; 5mt, 5<sup>th</sup> metacarpal; 1ph5mt, 1<sup>st</sup> phalanx on 5<sup>th</sup> metacarpal; 2ph5mt, 2<sup>nd</sup> phalanx on 5<sup>th</sup> metacarpal; TIB, Tibia; CA, Calcar; HF, Hind foot.

\* Corresponding author: muzafar@uswat.edu.pk

0030-9923/2021/0003-1157 \$ 9.00/0

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**Supplementary Table II. Comparison of cranial measurements (mm) of the present *C. sphinx* (n=4) with those described previously.**

Cranial measurement	Bates and Harrison (1997)	Matveev (2005)	Das and Sinha (1971)		Present study
			Male (n=13)	Female (n=8)	
Greatest length of skull	30.2-34.9	31.74	33.1 (32-34)	33.1 (31.7-34.5)	32.21
Condyl canine length	-	29.52	-	-	28.86
Condyl basal length	28.4-33.3	29.66-30.12	31.9 (30.6-32.5)	31.9 (30.8-33.3)	30.39
Maxillary tooththrow length	10.2-12.2	11.17	11.3 (10-12)	10.8 (10.5-11)	10.87
Mandibular tooththrow	10.3-13.5	12.26	12.4 (11.6-13)	12.2 (11.8-12.6)	12.65
Length					
Mandible length	22.7-27.5	-	-	-	24.76
Zygomatic breadth	18.8-23.1	-	20.7 (19-22.3)	20.4 (18.8-21.6)	18.82
Breadth of braincase	11.1-14.8	-	14.2 (13.3-14.5)	14.2 (13.2-15)	14.51
Anterior palatal width	-	7.10	-	-	6.36
Posterior palatal width	-	9.43	-	-	9.64
Interorbital constriction	5.4-7.7	-	6.5 (5.8-7)	6.5 (6-7)	6.62