

TAXONOMIC STATUS OF THE INDIAN SUBSPECIES OF THE KELAART'S
PIPISTRELLE, *PIPISTRELLUS CEYLONICUS* KELAART
[CHIROPTERA : VESPERTILIONIDAE]

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ABSTRACT

Detailed taxonomic studies on the different subspecies of *Pipistrellus ceylonicus* occurring in India has been made. Of the three recognized forms, *P. c. indicus*, *P. c. chrysothrix* and *P. c. subcanus* only *indicus* has been maintained, and the other two forms are synonymized with it.

INTRODUCTION

Kelaart (1853) described the species *Scotophilus ceylonicus* from Sri Lanka. Dobson (1878), while describing *Vesperugo indicus*, mentioned that since the type specimen of *Scotophilus ceylonicus* Kelaart was lost, it was not possible to recognize the species with certainty. However, he opined that it might be identical with *indicus*. Blanford (1888) after studying the description given by Kelaart of the upper incisors of *ceylonicus*, accepted *ceylonicus* as a valid species, and later (1891) treated *indicus* as its synonym. Wroughton (1899) followed Blanford and described another species *Pipistrellus chrysothrix*. Thomas (1915) suggested that *P. chrysothrix* was founded on a specimen of *P. ceylonicus* with abnormal incisors and recognized four subspecies of it. *P. ceylonicus*, viz., the nominate subspecies from Sri Lanka, a larger and dark subspecies (*indicus*) from south-western India, a small-sized subspecies of intermediate colour (*chrysothrix*) from the neighbourhood of Bombay, and a greyish subspecies (*subcanus*) from Kathiawar and Kutch. Wroughton (1916a, 1916b, 1918), Tate (1942), Ellerman and Morrison-Scott (1951), Siddiqi

(1961) and Hill (1963) accepted this arrangement for the subspecies of *P. ceylonicus*. Hill (1963) described another subspecies *P. borneanus* from North Borneo.

While studying the collection of *P. ceylonicus* from different localities in India present at the Zoological Survey of India, I encountered difficulties in identifying the specimens upto subspecies on the basis of the key provided by Thomas (1915) and Wroughton (1918). Hence, it was felt desirable to study the taxonomic status of the Indian subspecies of *P. ceylonicus* afresh.

Material examined : 2 ♀ : Tamil Nadu ; 8 ♂, 7 ♀ : Andhra Pradesh ; 1 ♂, 2 ♀ : Karnatak ; 4 ♂, 6 ♀ : Orissa ; 2 ♂ : Maharashtra ; 4 ♂, 7 ♀ : Gujarat ; 2 ♂, 2 ♀ : West Bengal.

***Pipistrellus ceylonicus indicus* Dobson, 1878.**

1878. *Vesperugo indicus* Dobson, *Cat. chiroptera. Brit. Mus.* 222. Mangalore, Malabar coast, India.
1899. *Pipistrellus chrysothrix* Wroughton, *J. Bombay nat. Hist. Soc.* 12 : 720. Mheskatri, Surat Dangs, India.

1915. *Pipistrellus ceylonicus subcanus* Thomas, J. *Bombay nat. Hist. Soc.* 24 : 90. Yalala, Junagarh, Kathiawar, India.

A detailed comparative study of colouration among the three Indian subspecies of *P. ceylonicus* reveals that there is no marked difference amongst them on this character. Further comparative study of various characters including external and skull measurements (Table) also do not show any significant difference among the previously recognized Indian subspecies. Hence, I would treat *P. ceylonicus indicus* as the only valid

subspecies occurring in India, the other two Indian forms being synonym of it.

The measurements and colour of the nominate subspecies occurring in Sri Lanka seems to be very much similar to the Indian form but since I have not examined any specimen of this subspecies, I hesitate to say anything about its present taxonomic status.

Distribution : Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Orissa, Gujarat, Maharashtra, Uttar Pradesh, Bihar, West Bengal, Bangladesh, and Pakistan.

TABLE 1.

Comparative measurements of *Pipistrellus c. indicus*, *Pipistrellus c. chrysothrix* and *Pipistrellus c. subcanus*.

Ex	<i>P. c. indicus</i>	<i>P. c. chrysothrix</i>	<i>P. c. subcanus</i>
External	10♂, 14♀	4♂, 6♀	4♂, 7♀
Fa	35.3-39.4 (37.9)	34.5-39.2 (37.8)	34.3-38.3 (37.1)
E	8.7-13.5 (11.6)	11.8-13.8 (12)	9-13.6 (11)
Tb	12.2-15.5 (14.3)	12-14.8 (14.6)	12.7-15 (14.4)
F & cl	7.7-10.6 (8.1)	7-9.6 (7.8)	7-9.6 (7.6)
Skull	2♂, 3♀	2♂, 3♀	3♂, 7♀
l	14.5-15.1 (14.8)	13.7-14.9 (14.4)	14.4-14.9 (14.7)
cb	13.1-14.5 (13.9)	13.2-14.4 (13.8)	13.2-14.7 (14.1)
pl	5.5-6.4 (6.2)	6-7.1 (6.6)	5.6-6.4 (6.2)
c ¹ -m ³	5.1-5.7 (5.5)	5.3-5.6 (5.4)	5.4-5.6 (5.5)
c ¹ -c ¹	5-5.1 (5.1)	4.8-5.1 (5)	5-5.4 (5.2)
zw	9.2-10 (9.8)	9.7-10.4 (10.1)	9-10 (9.7)
cw	7.4-7.8 (7.5)	7.2-7.6 (7.4)	7-7.5 (7.3)
ml	10-11.1 (10.8)	10.5-11.1 (10.9)	10-2-11.4 (11.1)

Abbreviations used :

Fa=Length of forearm

E=Length of ear

Tb=Length of tibia

F & cl=Length of foot and claw

l=Maximum length of skull

cb=Condylbasal length

pl=Palatal length

c¹-m³=Length of upper tooth row

c¹-c¹=Maximum distance between canines

zw=zygomatic width

cw=cranial width

ml=Mandibular length

Figures given in parentheses show the average measurements.

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