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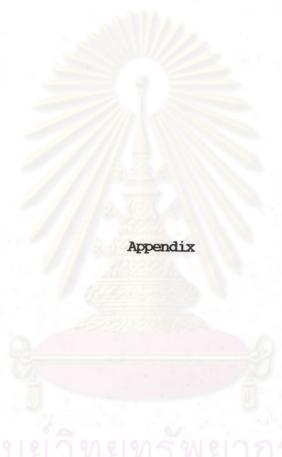
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ศูนย์วิทยทรัพยากร จุฬาลงกรณ์มหาวิทยาลัย



์ ศูนย์วิทยทรัพยากร จุฬาลงกรณ์มหาวิทยาลัย

Table 3

Suborder

Megachiroptera

Family

Pteropodidae Pteropodinae

Subfamily Genus

Cynopterus

Species

Cynopterus brachyotis

		Pigment			Length	Width		
	Width	Distribution	Medulla	Cross-section	(µm.)	(µm.)	Form	Arrangemen
(mm.) X+SD	(µm.) X₃so	L/15g/Dullion			¥±SD	X±SD		
	45.70±	dark-brown line granules, disperse throughout the filament,	uniserial	oval	25.40±	110.5	divergent, entire coronal	annular
	clu	clump of pigment granules at base of each medulary vacuole		M:C	Scale Index (width / length)		0	
				1:1	1,90			

Suborder

Megachiroptera

Family

Pteropodidae Pteropodinae

Subfamily Genus

Cynopterus

Species

Cynopterus sphinx

		Filament Structure					Scale Structure	
Length (mm.)	Width (pm.) X±SD		Medula	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemen
-	38.10± dark-bro 0.287 disperse clump of	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial	oval	25.40± 0.356	35.60± 0.375	divergent, entire coronal	annular
0.210				M;C	Scale Index (width / length)			
		7.534.045.04.14.40.40.40.40.40.40.40.40.40.40.40.40.40		1:1	1.	40		7

Suborder

Megachiroptera

Family

Pteropodidae

Subfamily

Pteropodinae

Genus

Cynopterus

Species

Cynopterus horsfieldi

		Filament Structure					Scale Structure	
(mm.)	Width (pm.)  X±SD	Distribution	Medula	Cross-section	Part of the last	Width (µm.) X±SD	Form	Árrangemen
8.02± 0.293	38.11±	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	oval	25.40±		divergent, entire coronal	annular
				M:C	Scale Index (width / length)			
				1:1				1

Table 5

Table 6

Suborder

Megachiroptera

Family Subfamily Pteropodidae Pteropodinae

Genus

Chironax

Species

Chironax melanocephalus

(mm.)	Width (am.)	Pignent Distribution	Medulla	Cross-section		Width (μm.) X±SD	Form	Arrangeme
9.03± 0.351	30.49±	dark-brown tine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial Iadder	round	29.80±	30.50± 0.446	divergent, entire coronal	annular
	0.353			M:C	Scale Index (width / length)			
				1:1				

Suborder

Megachiroptera

Family Subfamily Pteropodidae Pteropodinae

Genus

Balionycteris

Species

Balionycteris maculata

		Filament Structure		In the same				
ength	Width	Pigment			Length	Width		
	(pm.)	Distribution	Medulia	Cross-section	(um.)	(um.)	Form	Arrangem
	X±50				X±SD	X±SD		
		red-brown tine granules,	uniserial	round	20.30±	45.70±	appress, repand coronal	alternat
, , ,		and the second	ladder		0,412	0.304		
0.249	0.384			M:C	Scale Index (width / length)			
	1							
				1:1	2.	25		

Suborder

Megachiroptera

Pteropodidae

Family Subfamily

Pteropodinae

Genus

Sphaerias

Species

Sphaerias blanfordi

		Filament Structure	r-				Scale Structure	I succession and a second
(mm.)	Wadth (um.) X±SD		Medulla	Cross-section		Width (µm.) X±SD	Form	Arrangemen
	35.43±	dark-brown fine granules, disperse throughout the filament,	uniserial	round	22.80± 0.405		divergent, unequal hastate	alternate
		clump of pigment granules at base of each meduliary vacuole		M:C	Scale Index (width / length)			
				1:1	t.	42		

Table 8

Table 9

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Megaerops

Species <u>Megaerops</u> niphanae

		Filament Structur	e				Scale Structure	Table and a second
(mm.)	Width (pms) X±SD	Pigment Exstribution	Medula	Cross-section		Width (µm.) X±SD	Form	Arrangemer
7.00±	28.39±	28.39± dark-brown line granules, un	uniserial	round	25.40± 0.387	29.30± 0.424	divergent, unequal hastate	alternate
0,332	0.505			M:C	Scale Index (width / length)			
				101				

Suborder Megachiroptera
Family Pteropodidae

Subfamily Pteropodinae

Genus Megaerops

Species Megaerops ecaudatus

		Filament Structur	e				Scale Structure	Tiere de la compa
(mm.)	Width (pm.)	Distribution	Medulla	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemer
X±SD 8.03± 0.284	0.325	11/1	uniserial ladder	round	20.30± 0.424	15.40± 0.475	divergent, unequal hastate	annular
				M:C		index / length)		
				1:1	0.	75		

Suborder Megachiroptera

Family Pteropodidae
Subfamily Pteropodinae
Genus Rousettus

Species Rousettus amplexicaudatus

		Filament Structure						
Length:	Width	Pigment			Length	Width		
(mm.)		Distribution	Medulia	Cross-section	(um.)	(µm.)	Form	Arrangeme
					X±SD	X±SD		
	X±SD		uniserial	oval			divergent, unequal hastate	annular
6.99±	38.69±	dark-brown line granules,	Uniserial	Ovar	1000	1	200.6777.22.459	
0.339	0.357	disperse throughout the shaft,	ladder		0.299	0.362		1
	1	clump of granules at base of		M:C	Scale	fodex		1
		each medulary vacuole			(width	/ length)		
		each meduliary vacuole		1:1	0.98			

Suborder Megachiroptera Table 10

Family Pteropodidae
Subfamily Pteropodinae
Genus Rousettus

Species Rousettus leschenaulti

		Filament Structu	ure			,	Scale Structure	
(mm.)	Width (pm.) Z <sub>±</sub> SO		Medulia	Cross-section	(sm.)	Width (um.) X±SD	Form	Arrangeme
8.00± 0.261	56.40±	dark-brown line granules, uniser	uniserial ladder	round	30.50±	58.90±	divergent, broad lobate coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.	93		

Suborder Megachiroptera Table 11

Family Pteropodidae Subfamily Pteropodinae

Genus <u>Pteropus</u>

Species <u>Pteropus lylei</u>

		Filament Structure					Scale Structure	
(mm.)	Width (µm.)	Pigment Distribution	Medulla	Cross-section		Width (µm.) X±SD	Form	Arrangement
	17-200	dark-brown fine granules, dense throughout the shaft	fragmental	oval		113.50±	appress, irregular mosaic with smooth margin, distant	
				M:C	Scale Index (width / length)			
				1:1	2.	23		

Suborder Megachiroptera Table 12

Family Pteropodidae Subfamily Pteropodinae

Genus Pteropus

Species Pteropus hypomelanus

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section		Width (um.) X±SD	Form	Arrangement
	139.69±	dark-brown fine granules, dense throughout the shaft	fragmental	round	100	D COL	appress, irregular mosaic with smooth margin, distant	
				M:C	Scale Index (width/length)			
				1:1	3.	16		

Table 14

Suborder

Subfamily

Megachiroptera

Family

Pteropodidae Pteropodinae

Genus

Pteropus

Species

Pteropus vampyrus

energy series		Filament Struc			Scale Structure				
Length	Width	Pigment			Length	Width			
(mm.)	(pm.)	Distribution	Medulfa	Cross-section	(µm)	(µm.)	Form	Arrangemen	
X±SO	X±SD				X±SD	x±sd			
9.99± 0.301	99.06± red-brown fine granules, 0.325 dense throughout the shaft		fragmental	round	38.10± 101.60±	appress, irregular mosaic			
			0.00		0.364	0.247	with smooth margin, distant		
				M:C	Scale Index				
				(width / length)					
				1:1	2.0	56			

Suborder

Megachiroptera

Family

Pteropodidae

Subfamily Genus Macroglossinae
Macroglossus

Species

Macroglossus sobrinus

Length	Width	Pigment			Length	Width		
(mm.)	(µm.) X±S0)		Medulia	Cross-section	(µm.) X±SD		Form	Arrangemen
10.02±	7.00014	Garage State and	uniserial ladder	round	30.50± 0.352	30.50±	slightly divergent, repand coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.0	00		

Suborder

Megachiroptera

Table 15

Family

Pteropodidae

Subfamily

Macroglossinae

Genus

Macroglossus

Species

Macroglossus minimus

		Filament Structure		Scale Structure				
Length	Width	Pigment			Length	Width		
(mm.)	(pm.)	Distribution	Medulla	Cross-section	(µm.)	(µm.)	Form	Arrangemen
X±SD	X±SD				X±SD	X±SD		
6.99±	32.29±	yellow-brown fine granules,	uniserial	round	30.50±	33.40±	slightly divergent, repand	alternate
0.286	0.355	disperse throughout the filament	ladder		0.371	0.459	coronal	
				M:C	Scale Index (width / length)			
				1:1	1.	09		

Table 18

Suborder

Megachiroptera

Family

Pteropodidae

Subfamily

Macroglossinae <u>Eonycteris</u>

Genus Species

Eonycteris spelaea

		Filament Structure					Scale Structure	Residence of the second
(mm.)	Width (pml) X±SD	Distribution	Medula	Cross-section	1000	Width (µm.) X±SD	Form	Arrangemen
	30.50±	.50± dark-brown line granules, 373 dense throughout the filament	absent	oval	-	29.40± 0.487	divergent, oblique broad lobate	alternate
					Scale Index (width / length)			

Suborder

Microchiroptera

Superfamily

Emballonuroidea Rhinopomatidae

Family Genus

Rhinopoma

Species

Rhinopoma microphyllum

		Filament Structure	1				Scale Structure	
(mm.)	Width (pm)	Pigment Distribution		Cross-section	Length (µm.) X±SD		Form	Arrangemer
-		0.51± dark-brown fine granules, 0.313 disperse throughout the shaft	absent	oval	38.10± 0.304		divergent, unequal hastate coronal	alternate
					Scale Index (width / length) 0.80		- A	

Suborder

Microchiroptera

Superfamily

Emballonuroidea

Family

Emballonuridae Emballonurinae

Subfamily Genus

Emballonura

Species

Emballonura monticola

		Filament Structure					Scale Structure	Vision de la compa
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section	Comments.	Width (µm.) X±SD	Form	Arrangemen
	20.30± yellow-brown fine granules, 0.349 disperse throughout the filament	yellow-brown fine granules,	absent	oval	25.40± 0.328	20.30± 0.350	divergent, dentate coronal	aiternate
				Scale Index (width / length)				
				0.	80			

Suborder

Microchiroptera

Superfamily

Emballonuroidea Emballonuridae

Family Subfamily

Emballonurinae

Genus

Saccolaimus

Species

Saccolaimus saccolaimus

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SO		Medula	Cross-section	Length (jen.) X±SD	Width (um.) X±SD	Form	Arrangemen
6.99± 0.240	21,29± dark-brown tine granules, 0.386 disperse throughout the filament	dark-brown tine granules,	absent	oval	38.10±	22.90± 0.368	divaricate, denticulate	alternale
				Scale Index (width / length)				
				1	0.	50		

Suborder

Microchiroptera

Superfamily

Emballonuroidea Emballonuridae

Family Subfamily

Emballonurinae

Genus

Taphozous

Species

Taphozous longimanus

		Filament Structure					Scale Structure	
(mm.)	Weath (pm.) X±SD	Pigment Distribution	Medulla	Cross-section		Width (µm.) X±SD	Form	Arrangemen
		dark-brown fine granules, form cross-banding throughout	absent	absent oval	38.10± 0.416	33.40± 0.395	divaricate, dentate coronal	alternate
		the filament			Scale Index (width / length)			
					0.	87		

Suborder

Microchiroptera

Table 21

Table 20

Superfamily

Emballonuroidea

Family

Emballonuridae

Subfamily

Emballonurinae

Genus

Taphozous

Species

Taphozous melanopogon

	300.00	Filament Structure				Scale Structure		
Length (mm.)	Width (pm.)	Pigment Distribution	Medulia	Oross-section	Length (unt.)		Form	Arrangement
X±SD	X <sub>±</sub> SD					X±SD		
6.00±		yellow-brown fine granules, form cross-banding throughout	absent	oval	25.40 <u>±</u> 0.305	1000	divergent, dentate coronal	annular
	the filament			Scale Index (width / length)				
					1.	05		

Table 24

Suborder

Microchiroptera

Superfamily

Emballonuroidea

Family Subfamily Emballonuridae Emballonurinae

Genus

Taphozous

Species

Taphozous theobaldi

(mm.) (pm.) Distribution X±SD X±SD X±SD X±SD X±SD X±SD X±SD X±SD			Filament Structure	Local Control (Sec.	T	2010000	10000000	Scale Structure	
5.01± 25.79± yellow-brown fine granules, absent oval 25.41± 27.23± divergent, dentate coronal 0.248 0.392 form cross-banding throughout the shatt	(mm.)	(pm.)	Distribution	Medulia	Cross-section	(µm.)	(µm.)	Form	Arrangemer
the shall Scale Index	5.01±	25.79± yellow-brown fine granules, 0.392 form cross-banding throughout	yellow-brown fine granules,	absent	oval	1	1	divergent, dentate coronal	alternate
(widen / length)					Scale Index (width / length)				

Suborder

Microchiroptera

Superfamily

Emballonuroidea

Family

Craseonycteridae Craseonycteris

Genus Species

Craseonycteris thonglongyai

		Filament Structure	,				Scale Structure	
(mm.)	Width (pmL) X±SD		Medulfa	Cross-section		Width (um.) X±SD	Form	Arrangemen
6.00±	33.51± dark-brown fine granules.		uniserial • ladder	round	25.38± 0.336		divergent, unequal hastate	alternate
0.263			M:C	Scale Index (width / length)		91		
			1:1					

Suborder

Superfamily

Microchiroptera
Rhinolophoidea

Family

Nycteridae

Genus

Nycteris

Species

Nycteris tragata

		Filament Structu	He				Scale Structure	
(mm.)	Width (pm.) X±SD	Distribution	Medulia	Cross-section		Width (µm.) X±SD	Form	Arrangemen
-	34.11± dark-brown fine granules, 0.384 disperse throughout the shaft	dark-brown fine granules,	absent	round	25.44± 0.285		appress, unequal hastate coronal	annular
				Scale Index (width / length)				
				1.	33			

Table 27

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Megadermatidae

Family Genus

Megaderma

Species

Megaderma lyra

		Filament Struct	ure				Scale Structure	
(mm-)	Width (pm.) X±SD	Distribution	Medulia	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemen
7.00± 3	37.41±	dark-brown fine granules, disperse throughout the shaft	uniserial	oval .		36.32±	slightly divergent, unequal	alternate
		M:C: Scale Index: pointe (width / length)	pointed peak					
				1:1	1.4	43		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Megadermatidae

Genus

Megaderma

Species <u>Megaderma</u> spasma

		Filament Structure					Scale Structure	
Length	Width	Pigment			Length	Width		
(mm.)	(pmL)	Distribution	Medulla	Cross-section	(µm.)	(um.)	Form	Arrangemen
x±sD	x <sub>±</sub> so				x̄±so	X±SD		
9.00±	35.49±	dark-brown fine granules,	uniserial	oval	30.48±	34.93±	slightly divergent, unequal	alternate
0.262	0.357	disperse throughout the filament	ladder 0.415 0.412 hastate coronal	hastate coronal				
				M:C	Scale	Index (length)		
				1:1	1.	14		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus malayanus

		Filament Structure					Scale Structure	
Length (mmL) X±SD	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section	Length (pen.) X±SD		Form	Arrangemen
7.00± 0.241		yellow-brown line granules, disperse throughout the filament	absent	oval	0.348 Scale	(length)	slightly divergent, unequal hastate coronal	alternate

Table 30

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus affinis

		Filament Structur	е				Scale Structure	
(mm-)		Pigraeni Distribution	Medulia	Cross-section	Length (µm.) X±SD	(um.)	Form	Arrangemen
0.228	23.80±	dark-brown line granules,	absent	oval	25.40± 0.357	1.00	appress, unequal hastate coronal	alternate
	13.51± 0.341				index ( length)			
		,			0.	91		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus robinsoni

		Filament Structure					Scale Structure	· Laurence
(mm.)	Width (um.) X±SD	Distribution	Medulia	Cross-section		Width (µm.) X±SD	Form	Arrangemen
-	20.11±	dark-brown fine granules,	absent	oval	27.91± 0.386		slightly divergent, unequal hastate coronal	aiternate
0.240	11.49± 0.289				(width	Index Hength)		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus stheno

		Filament Structure					Scale Structure	
Length (mm.) X±SD	Width (pm.)	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangement
6.99±	20.92±	yellow-brown fine granules, disperse throughout the shall	absent	oval	30.50±	1000	slightly divergent, unequal hastate coronal	alternate
0.258	0.365 11.88± 0.326	disperse in organism in orange				Index / length) 67		

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus thomasi

		Filament Structure		Control (1)		0.00000000		
ength	Width	Pigment			Length	WIGEN		
	(pm.)	Distribution	Medulia	Cross-section	(µm.)	(µm.)	Form	Arrangemen
2717101210202	SECTION AND INCOME.				X±SD	X±SD		
	X±SD		State of the state	4.7-1	05.00	00 414	slightly divergent, equal	alternate
8.01±	20.30±	dark-brown fine granules,	absent	oval	1			1
0.248	0.375	disperse throughout the filament			0.405	0.354	hastate coronal	1
0.240					Scale	Index		
	10.18±				(width	/ length)		
	0.341			1	0.	.31		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family Genus Rhinolophidae Rhinolophus

Species

Rhinolophus lepidus

		Filament Structure	9				Scale Structure	
	(µmL)	Pigment Distribution	Medulia	Cross-section		Width (um.) X±SD	Form	Arrangemen
7.00±		dark-brown fine granules, 0.407 disperse throughout the shaft	absent	oval	25.04± 0.399	17/18	slightly divergent, unequal hastate coronal	alternate
0.253	11.52±					index / length)		
	0.542				0.	.83		

Suborder

Microchiroptera

Superfamily

Rhinolophoidae

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus acuminatus

		Filament Structure	)				Scale Structure	
Length (mm.)		Pigment Distribution	Medulia	Cross-section	1998 025	Width (um.) X±SD		Arrangemen
	22.41±	dark-prown fine granules, disperse throughout the shaft	absent	oval	0.392 Scale (width			alternate

Table 33

Table 36

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus pusillus

		Filament Structure					Scale Structure	ı .
(mm.)	Width (pm.) X±SD	Distribution	Medula	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemer
	22.90± red-brown line granules. 0.391 disperse throughout the shall 12.88± 0.384	absent	ovai	20.50± 0.424	20.50± 22.51± slightly divergent, unequal 0.424 0.377 hastate coronal		alternate	
					index (length)			
	0.304				1.	09		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family Genus Rhinolophidae Rhinolophus

Species

Rhinolophus macrotis

Pigment Distribution	Medulla	Cross-section		(µm.)	Form	Arrangemen
			XTOU	X±SD		
s00 dark-brown line granules, 356 disperse throughout the filament .21±	absent	oval	20.54± 0.385	1	slightly divergent, unequal hastate coronal	alternate
	disperse throughout the filament	disperse throughout the filament	disperse throughout the filament	Scale (width-	disperse throughout the filament  0.385   0.386  Scale Index  (width / length)	disperse throughout the filament  Scale Index: (width / length)

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus coelophyllus

		Filament Structure					Scale Structure	
(mm.)	Width (um.) X±SD	Pigment Distribution	Medula	Cross-section		Width (um.) X±SD	Form	Arrængemen
9.00± 0.285	22.51±	22.51± yellow-brown fine granules, 0.368 disperse throughout the shaft 11.93±	absent	oval	20.30±	17.75	appress, unequal hastate coronal	annular
	11.93± 0.327					Index (length)		
	0.321				1.	04		

Table 39

Suborder Superfamily Microchiroptera Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus shameli

		Filament Structu	не	Laurence de la companyone	381886	10000000	Scale Structure	
(mm.)	Width (pm.)	Pigment Distribution	Medulla	Cross-section		Widsh (µm.) X±SD	Form	Arrangeme
X±S0 6.00± 0.279	24.30±	0± dark-brown fine granules, 27 disperse throughout the shaft 2±	absent	oval	25.40± 0.331	100	slightly divergent, unequal hastate coronal	alternate
	0.327 14.92± 0.343				Scale Index (width / length)			

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus marshalli

		Filament Structure					Scale Structure	E e e e e e
(mm.)	Width (pm.) X±SD	Distribution	Medulia	Oross-section		Width (um.) X±SD	Form	Arrangemen
10.01±	25.81±	yellow-brown fine granules,     disperse throughout the filament	absent	oval	17.81±	25.37± 0.375	appress, unequal hastate coronal	alternate
0.288	0.345				Scale Index (width / length)			
	3.070				1.	42		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus paradoxolophus

		Filament Structur	e				Scale Structure	
(mm.)	Width (µm.) X±SD	Pigment Distribution	Medulia	Cross-section	(pm.)	Width (um.) X±SD	Form	Arrangemen
10.99±	23.40±	0± dark-brown line granules, 16 disperse throughout the filament	absent	oval		23,10± 0.394	appress, unequal hastate coronal	alternate
0.292	0.316 15.93± 0.325				(width	Index / length)		

Suborder Superfamily

Microchiroptera Rhinolophoidea Rhinolophidae

Family Genus Species

Rhinolophus
Rhinolophus trifoliatus

Scale Structure Filament Structure Length Width Pigment Width Length Form (um.) (um.) Distribution (pmL) (mm.) X±SD x±s0 X450 X<sub>2</sub>SD 25.42± 21.20± appress, equal hastate annular absent oval dark-brown line granules, 10.01± 22.39± 0.305 coronal 0.370 disperse throughout the filament 0.286 0.311 Scale Index 13.87± (width / length) 0.298

0.83

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Rhinolophidae

Family Genus

Rhinolophus

Species

Rhinolophus luctus

		Filament Structure					Scale Structure	
(mm.)	Width (µm.) X±SD	Pigment Distribution	Medulia	Cross-section		Width (um.) X±SD	Form	Arrangemen
	24.42±	dark-brown line granules, disperse throughout the filament	absent	oval	The second second	appress, unequal hastate coronal	annular	
0,234	0.383 15.70± 0.338				Scale Index (width / length)			
	3.300				1.	25		

Suborder

Microchiroptera

Table 42

Superfamily

Rhinolophoidea

Family

Rhinolophidae

Genus

Rhinolophus

Species

Rhinolophus pearsoni

		Filament Structure					Scale Structure	T-
(mm.)	Width (pm)	Pigment Distribution	Medulla	Cross-section	Length (μm.) X±SD		Form	Arrangemen
	24.50±	dark-brown fine granules,	absent	ovai	25.01± 0.406	100	slightly divergent, equal hastate coronal	allernate
0.201	15.69±					index / length)		
			L = 1		1,	00		

Suborder Superfamily Microchiroptera Rhinolophoidea

Family Genus Rhinolophidae Rhinolophus

Species

Rhinolophus yunanensis

		Filament Structu	re				Scale Structure	
(mm-)	Width (pm.) X±SD	Pignent Distribution	Meckalla	Cross-section	Length (µm.) X±SD	Width (µm.) X±SD	Form	Azrangemen
	25.29±	dark-brown fine granules, disperse throughout the filament	absent	oval	24.80± 0.378	24.22± 0.391	slightly divergent, equal	alternate
	14.50±				Scale index (width / length)			
	0.024				0.	97		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea Hipposideridae

Family Genus

Hipposideros

Species

Hipposideros bicolor

		Filament Structure					Scale Structure	L.
Length (mm.) X±SD	(pm.)	Pigment Distribution	Medulla	Cross-section	(um.)	Width (um.) X±SD	Form	Arrangemen
	22,94±	dark-brown fine granules, dense throughout the shaft	absent	oval	27.90±	25.36± 0.365	appress, equal hastate coronal	annular
0.200	0.300	4				index / length)		
					0.	91		

Suborder

Microchiroptera

Superfamily

Rhinolophoidea

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros ater

		Filament Structure					Scale Structure	
(mm.)	Width (um.) X±SD	Pigment Distribution	Medulla	Cross-Section		Width (µm.) X±SD	Förm	Arrangemen
	21.48±	dark-brown line granules, dense throughout the shaft	absent	oval	0.353 Scale	1000	slightly divergent, equal hastate coronal	alternate
					1.	03		

Table 45

Microchiroptera

Family

Hipposideridae

Genus

<u>Hipposideros</u>

Species

Hipposideros cineraceus

		Filament Structure					Scale Structure	
	Width (pm.)	Pigreent Distribution	Medulia	Cross-section	Length (um.)	Width (µm.)	Form	Arrangement
x̄±so	X±SD				X±SD	X±SD		
7.01±	23.94±	dark-brown fine granules,	absent	oval	25.41±	24.30±	slightly divergent, unequal	aiternate
0.292	0.372	dense throughout the shaft			0.445	0.359	hastate coronal	100.00
			M			Index length)		
				1111	0.9	95		

Suborder

Microchiroptera

Table 47

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros halophyllus

		Filament Structu	re				Scale Structure	
(mmr)	Width (µm.) X±SD	Distribution	Medulla	Cross-section	(pm.)	Width (µm.) X±SD	Form	Arrangement
6.02± 0.258	D. 7	dark-brown fine granules, dense throughout the shaft	absent	oval	38.01± 0.327	100	appress, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.	78		

Suborder

Microchiroptera

Table 48

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros galeritus

		Filament Structur	.6			,	Scale Structure	
Length	Width	Figment			Length	Width		
(mm.)	(pm.)	Distribution	Medulia	Cross-section	(zen.)	(µm.)	Form	Arrangemen
X±SD	x±50				X±SD	X±SD		
10.00±	28.94±	yellow-brown rough granules,	absent	oval	38.11±	28.52±	slightly divergent, equal	alternate
0.277	0.418	disperse throughout the filament			0.359	0.481	hastate coronal	
0.211			1			index		
					(Width)	(length)		
					0.	74		1

Microchiroptera

Table 49

Family Genus Hipposideridae Hipposideros

Species

Hipposideros lylei

		Filament Structure					Scale Structure	
	Width (pm.) X±SD		Medulla	Cross-section	1/5 4 5 5 5	Width (um.) X±SD	Form	Arrangement
		dark-brown rough granules, disperse throughout the shaft	absent	ovai	38.10±	24.31 <u>±</u>	appress, unequal hastate	alternate
9.1						index length)		
					0.6	53		

Suborder

Microchiroptera

Table 50

Table 51

Family

Hipposideridae Hipposideros

Genus Species

Hipposideros armiger

		Filament Structure					Scale Structure	
Length	Width	Pigment			Length	Width		
(mm.)	(pms.)	Distribution	Medulfa	Cross-section	(um.)	(µm.)	Form	Arrangemen
x±8D	X±SD				X±SD	X±SD		
7.00±	29.18±	dark-brown tine granules,	absent	oval	33.04±	28.10±	appress, unequal hastate	annular
0.293	0.475	disperse throughout the shaft			0.391	0.415	coronal	
					Scale	index		
					(width	/ length)		
					0.	85		

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros turpis

S. S. S. S. S. S. S.	Pigment			Length	Width		
(pmL) (450	Distribution	Medulia	Cross-section		(µm.) X±SD	Form	Arrangemen
		absent	oval	35.68±	23.52± 0.392	appress, unequal hastate	alternate
5	.39±	£SD   dark-brown rough granules,	tSD   39± dark-brown rough granules, absent	LSD	X±SD X±SD X±SD X±SD 39± dark-brown rough granules, absent oval 35.68± 377 disperse throughout the shaft 0.415	LSD X±SD x	X±SD X±SD X±SD X±SD X±SD X±SD X±SD X±SD

Table 53

Table 54

Suborder

Microchiroptera

Family Genus Hipposideridae Hipposideros

Species

Hipposideros lekaguli

		Filament Structure				,	Scale Structure	
	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section		Width (um.) X±SD	Form	Arrangemen
		dark-brown tine granules,	absent	oval	38.10± 0.344	1000	slightly divergent, unequal hastate coronal	alternate
	the filament				index length)			

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros larvatus

		Filament Structure	lando de la companio					
ength	Width	Pigment			Length	Width		
(mm.)	(pro.)	Distribution	Medulia	Cross-section	(pm.)	(µm.)	Form	Arrangemen
	⊼±so				X <sub>2</sub> SD	X±SD		
12.99±	25.46±	red-brown fine granules,	absent	oval	43.24±	26.09±	slightly divergent, unequal	alternate
0.283	Unit 600	disperse throughout the shall			0,378	0.364	hastate coronal	
0.263						Index / length)		
					0.	60		

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Hipposideros

Species

Hipposideros diadema

		Filament Structure					Scale Structure	<del> </del>
(mm.)	Width (pml) X±SD	Pignent Distribution	Medulfa	Cross-section	A VINE S	Width (um.) X±SD	Form	Arrangemen
	27.34±	yellow-brown fine granules, form densed-band throughout the shaft	absent	oval	0.296 Scale	0.485 Index (length)	slightly divergent, equal hastate coronal	annular

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Coelops

Species

Coelops frithi

		Filament Structur	e			le se se se	Scale Structure	
(mm.)	Width (pmL) X±SD	Distribution	Medulia	Cross-section	(/mr.)	Width (um.) X±SD	Form	Arrangemer
8.01± 3	32.27±	dark-brown rough granules, form densed-band at the upper	absent	oval	1		slightly divergent, equal hastate coronal	annular
	0,090	part of scale				index / length)		
					0.	69		

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Coelops

Species

Coelops robinsoni

	Width (pm.)	Pigment Distribution	Medulfa	Cross-section		(µm.)	Form	Arrangemen
x̄±so	X±50					X±SD	and the second section is a second section of	
	0.243 0.379 dark-brown rough gr. part of scale		absent	oval	45.72± 0.369		slightly divergent, unequal hastate coronal	allernate
0,243						index / length)		
						/ length)		

Suborder

Microchiroptera

Family

Hipposideridae

Genus

Aselliscus

Species

Aselliscus stoliczkanus

	201.2	Filament Structure	9				Scale Structure	NAME OF TAXABLE PARTY.
(mm-)	Width (pra.) X±SD	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemen
6.04± 2	28.46±	dark-brown rough granules, form densed-band at the upper	absent	oval	35.57± 0.424	1	slightly divergent, unequal hastate coronal	alternate
0.312	0.000	part of scale			(width	Index / length)		

Table 56

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis muricola

ength	Width	Pigment	Medulla	Cross-section	Length (µm.)	Width	Form	Arrangemen
200	(pmL) X±SD	Distribution				X±SD		
6.04±		dark-brown rough granules, dense throughout the shalt	absent	oval	58.44± 0.333	14.11	slightly divergent, unequal hastate coronal	alternate
	0,430					Index / length)		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis siligorensis

		Filament Structur	e				Scale Structure	In a common of
(mm.)	Width (pm.) X±SO	Pigment Distribution	Medulia	Cross-section		Width (um.) X±SD	Form	Arrangemen
7.17± 3	38.08±	dark-brown rough granules, dense throughout the shaft	absent	oval	30.50±		appress, unequal hastate coronal	annular
	0.415				(width	index length)		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis annectans

		Filament Structure					Scale Structure	
(mm.)	Width (µm.) X±SD	Pigment Distribution	Medulla	Cross-section		Width (um.) X±SD	Form	Arrangement
	30.54±	dark-brown rough granules, form densed-band throughout	absent	ovai	50.83± 0.265		divergent, unequal hastate coronal	aiternate
	the shall				(width	index (length)		

Table 60

Table 62

Table 63

Suborder

Microchiroptera Vespertilionidae

Family Genus

Myotis

Species

Myotis rosseti

		Filament Structure				Teresa de Cara	Scale Structure	
	Width (pml) X±SD	Distribution	Medulia	Cross-section	Length (um.) X±SD	(um.)		Arrangemen
5.06± 25.4	25.42±	dark-brown rough granules, form densed-band throughout	absent	oval	25.44± 0.414		divergent, equal hastate coronal	spiral
	the shaft		index / length)					
					1.	09		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis horsfieldi

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SD	Distribution	Medula	Cross-section	1100000000	Width (um.) X±SD	Form	Arrangemen
9.07±	48.14±	dark-brown rough granules, form densed-band throughout	absent	oval	45.74± 0.428	Bulleti	slightly divergent,unequal hastate coronal	alternate
	the shalt			Scale Index (width / length)				

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis hasseltii

		Filament Structure					Scale Structure	
(mm-)	Width (pre.) X±SD		Medulla	Cross-section	1.0	Width (um.) X±SD	Form	Arrangement
7.08± 0.273	45.14±	dark-brown rough granules, form densed-band throughout	absent	ovai	63.46± 0.273	10.00	divergent, unequal hastate coronal	annular
	the filament				Scale Index (width / length) 0.69			

Table 65

Table 66

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Myotis

Species

Myotis chinensis

		Filament Structure		1		THE STATE OF	Scale Structure	
Length	Width	Pigment			Length	Width		
(mm.)		Distribution	Medulia	Cross-section	(pm.)	(µm.)	Form	Arrangemen
	X±SD				X±SD	X±SD		
8.03±		dark-brown rough granules,	absent	oval	35.11±	22.03±	divergent, unequal hastate	annular
0.299	0.423				0.316	0.392	coronal	
0.299	the shall				Scale Index (width/length)			-
					0.	62		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus coromandra

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SD	Distribution	Medulla	Cross-section	(µm.)	Width (um.) X±SD	Form	Arrangemen
	38.16±	dark-brown line granules.  form densed-band throughout	absent	oval			divergent, unequal hastate coronal	annular
0.301		the filament			(width	index (length)		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus tenuis

		Filament Structure		I range to the second	040363		Scale Structure	
Length	Width	Pigment			Length	Width		
	(pmL)	Distribution	Medulia	Cross-section	(pur.)	(µm.)	Form	Arrangemen
	X±SD				X±SD			
		dark-brown rough granules,	absent	oval	38.10±	45.12±	divergent, equal hastate	opposite
0.361	0.000	and the second second			0.426	0.416	coronal	
0.361		the shaft			Scale Index (width / length)			
	0.2.5				1.	18		

Table 68

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus mimus

	Filament Structure						Scale Structure	la consequence
	Width (am.) X+SD	Pignent Distribution	Medulla	Cross-section	Length (um.) X±SD		Form	Arrangemer
	-	dark-brown rough granules, form densed-band throughout the shall	absent	ent oval		slightly divergent, unequal hastate coronal	alternate	
	15.11± 0.284				Scale Index (width / length) 0.73			

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus cadornae

	Filament Structure						Scale Structure	
Length	Width	Pigment			Length	Width		
	(pm.)	Distribution	Medulla	Cross-section		(µm.) X±SD	Form	Arrangemer
K±SD 6.03± 0.356	38.21±	dark-brown rough granules, form densed-band throughout the shaft	absent	oval		35.63±	slightly divergent, unequal	annular
	11. 11				Scale Index (width / length)			
	21125				1.	40		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus javanicus

		Filament Structure					Scale Structure	1
Length (mm.) X±SD		Pigment Distribution	Medulia	Cross-section		Width (um.) X±SD	Form	Arrangemen
	50.65±	dark-brown rough granules, form densed-band throughout	absent	oval	25.33±	53.30± 0.385	appress, repand coronal mix with slightly divergent.	annular
0.357		the shall			Scale Index (width / length)		equal hastate coronal	
	0.502				2.	10		

Table 71

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus pulveratus

		Filament Structure		NAMES OF THE OWNERS OF THE OWNER, WHEN THE OWN	10000000	8888888		
ength (mm.) X±SD	(pm.)	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD		Form	Arrangemer
7.03±	54.31±	dark-brown rough granules, torm densed-band throughout	absent	oval	22.10±		slightly divergent, unequal hastate coronal	alternate
		the shall			Scale Index (width / length)			

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Pipistrellus

Species

Pipistrellus circumdatus

		Filament Structure					Scale Structure	
(mm+)	Width (pm.) X±SD	Pignent Distribution	Medulla	Cross-section	(pen.)	Width (µm.) X±SD	Form	Arrangemer
1000	37.83±	dark-brown fine granules, form densed-band throughout	absent	oval	25.36±	1	slightly divergent, equal hastate coronal	annular
		1,52± the shaft			Scale Index (width / length)			
					1.	49		1

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Glischropus

Species

Glischropus tylophus

	Filament Structure						Scale Structure	1
Length (mm.) X±SD		Pignent Distribution	Medulia	Cross-section	10000000	Width (µm.) X±SD	Form	Arrangemen
	30.52±	dark-brown rough granules, dense throughout the shaft	absent	ovai	55.94± 0.294	33.05± 0.405	drvergent, equal hastate coronal	annular
	0.542	derise mosq.			(width	findex / length)		

Suborder Microchiroptera Vespertilionidae Family

Eptesicus Genus

Eptesicus serotinus Species

(mm.) (p		. 2.7 4.7 6.7 6.7.4 7.7 7.7 7.2 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7			Length	Width		
	pm.)	Distribution	Medulia	Cross-section	(pm.)	(µm.)	Form	Arrangemen
X±SD X±	±SD				X±SD	X±SD		
4.98± 46.	5.75±	dark-brown rough granules,	absent	ovai	38.10±	49.15±	divergent, equal hastate	annular
0.291 0.	.403	dense throughout the shaft			0.285	0.412	coronal	1
					Scale	index		1
	- 1				(width)	(length)		

Microchiroptera Suborder

Vespertilionidae Family

Genus Eptesicus

Eptesicus demissus Species

		Filament Structure					Scale Structure	
	Width (pm.)	Pigment Distribution	Medulla	Cross-section	Length (µm.)	Width (µm.)	Form	Arrangement
χ̃±αο	⊼±SD				X±SD	X±SD		
3.95±	53.36±	dark-brown rough granules,	absent	oval	38.13±	55.95±	slightly divergent, equal	annular
0.284	0.415	dense throughout the shaft			0.311	0.428	hastate coronal	
						index / length)		
					1.	46		

Microchiroptera Suborder Family Vespertilionidae

Eptesicus Genus

Eptesicus pachyotis Species

		Filament Structure					Scale Structure	,
(mm.)	Width (pmL) X±SD	Pigment Distribution	Medulla	Cross-section		Width (µm.)  X±SD	Form	Arrangemen
	38.14±		absent	ovai	50.83±	45.67± 0.473	slightly divergent, unequal	alternate
					Scale Index (width / length)			
					0.	90		

Table 73

Table 74

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Ia

Species

Ia io

		Filament Structure					Scale Structure	
(mm.)	Width (µm.) X±SD	Pigment Distribution	Medulia	Cross-section	Length (um.) X±SD	Width (µm.) X±SD	Form	Arrangemen
	0.417	dark-brown line granules.  form densed-band throughout the shaft	absent	oval	30.50± 0.425		slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.5	96		

Suborder

Microchiroptera

Vespertilionidae

Family Genus

Hesperoptenus

Species

Hesperoptenus blanfordi

		Filament Structure					Scale Structure	
Length	Width	Pigment			Length	Width		
	(pm.) X±SD	Distribution	Medulia	Cross-section		(um.) X±SD	Form	Arrangement
6.03± 0.292		dark-brown rough granules, form densed-band throughout	absent	oval		23.82± 0.395	divergent, entire coronal	annular
	the shaff	the shaft				index (length)		
				0.	47			

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Hesperoptenus

Species

Hesperoptenus tickelli

		Filament Structure	,		Scale Structure				
0455454	Width (pm.) X±SD	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD	Width (µm.) X±SD	Form	Arrangement	
7.03± 0.323		dark-brown rough granules.  dense throughout the shalt	absent	oval	10.3005		divergent, equal hastate coronal	alternate	
						index length)			
					0.	81			

Table 78

Microchiroptera

Family

Vespertilionidae

Genus

Nyctalus

Species

Nyctalus noctula

(mm.)     (μm.)     Distribution     Medulia     Cross-section     (μm.)     (μm.)     Form     Arrangement       X±SD     X±SD     X±SD     X±SD     X±SD     X±SD     X±SD       7.02±     50.79±     dark-brown rough granules.     absent     oval     63.50±     48.26±     sligntly divergent, unequal     alternate       0.287     0.459     dense throughout the shart     Scale Index     Scale Index	tength Width (pm.) (pm.) Distribution Medulfa Cross-section (pm.) (pm.) Form Arrangem X±SD X±SD   7.02± 50.79± dark-brown rough granules. absent oval 53.50± 48.26± slightly divergent, unequal alternation of the state coronal dense throughout the shaft 0.284 0.482 hastate coronal			Filament Structure	Para de la composição		Longth	Midth		
(mm.) (mm.) Distribution Med.sla Cross-section (mm.) (mm.) Distribution X±SD X±SD X±SD X±SD X±SD X±SD X±SD X±SD	(mm.) (mm.) Distribution: Medusa Cross-Section (st.) (	Length	Width	Pigment			Lengui			
X±SD X±SD X±SD X±SD X±SD X±SD X±SD X±SD	X±SD	(mm.)	(om.)	Distribution	Medulia	Cross-section		1000	Form	Astangener
X±SD X±SD 7.02± 50.79± dark-brown rough granules. absent cval 63.50± 48.26± slightly divergent, unequal alternate 0.287 0.459 dense throughout the shart 5.5cale Index.	X±SD: X±SD:  7.02± 50.79± dark-brown rough granules.  0.287 0.459 dense throughout the shaft  3.50± 48.25± slightly divergent, unequal hastate coronal  5.50± 48.25± slightly divergent, unequal hastate coronal	\$ 100 100 100					X±SD	X±SD		
7.02± 50.79± dark-brown rough granules.  0.287 0.459 dense throughout the shalt 0.284 0.482 hastate coronal Scale Index	7.02± 50.79± dark-brown rough granules.  0.287 0.459 dense throughout the shaft 0.284 0.482 hastate coronal Scale Index		_		1.00.11	a sel		7	stigntly divergent, unequal	alternate
0.287 0.459 dense throughout the shart Scale Index	0.287 0.459 dense throughout the shart Scale Index	7.02±	50.79±	dark-brown rough granules.	absent	cval	1			
Scale Index	Scale Index	0.007	0.450	dense throughout the shaft			0.284	0.482	hastate coronal	
	(width / length)	0.287	0.439	dense intogram			138	1.00		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Tylonycteris

Species

Tylonycteris pachypus

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SD	Pignent Distribution	Medulia	Cross-section	Length (um.) X±SD	Width (µm.) X±SD	Form	Arrangemen
	33.09±	dark-brown rough granules, dense throughout the shaft	absent	oval	25.40± 0.427		appress, unequal hastate	annular
	0.407					index / length)		
					1.	50		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Tylonycteris

Species

Tylonycteris robustula

		Filament Structure			2000		Scale Structure	
Length (mm.) X±SD	Width (pre.) X±SD	Pigment Distribution	Medulfa	Cross-section	Length (µm.) X±SD		Form	Arrangemen
	50.39± dark-brown rough grant 0.425 form densed-band throt the tilament	dark-brown rough granules,	absent	oval	49.89 0.339	1100	slightly divergent, repand coronal	alternate
					Scale Index (width / length)			1
					1.	01		

Table 79

Table 80

Microchiroptera

Family

Vespertilionidae

Genus

Scotomanes

Species

Scotomanes ornatus

Length	Width	Pigment			Length	Width		
(mm.)	(pm.)	Distribution	Medulla	Cross-section	(/m.)	(µm.)	Form	Arrangemer
X±SD	X±50				x̃±so	X±SD		
8.03	38.09±	dark-brown rough granules,	absent	oval	55.91±	40.60±	divergent, equal hastate	annular
0.273	0.483	disperse throughout the shaft			0.324	0.470	coronal	
					Scale	index		
					(width / length)			1
					0.	72		1

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Scotophilus

Species

Scotophilus kuhli

		Filament Structure			Scale Structure				
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemen	
	COLUMN TO	yellow-brown rough granules, dense throughout the shaft	absent	oval	66.00±		divergent, unequal hastate	alternate	
				-		Index / length)			
					0.	65			

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Miniopterus

Species

Miniopterus macrodens

		Filament Structure			Scale Structure				
(mm-)	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section	(um.)	Width (um.) X±SD	Form	Arrangemen	
8.04± 0.356		dark-brown fine granules, dense throughout the shaft	absent	ovai	38,10± 0.361		slightly divergent, equal hastate coronal	opposite	
	11.88 <sub>±</sub>					index / length)			
					0.	92			

Table 82

Table 83

Microchiroptera

Family

Vespertilionidae

Genus

Miniopterus

Species

Miniopterus haradai

		Filament Structur	e				Scale Structure	
(mm.)	Width (pm.) X±SD	Distribution	Medulfa	Cross-section	A CONTRACTOR	Width (um.) X±SD	Form	Arrangemen
	38.13±		absent	oval	48.31± 0.360			opposite
	25.20± 0.315					index ( length)		
				0.	84			

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Miniopterus

Species

Miniopterus medius

		Filament Structure	•				Scale Structure	
(mm.)	Width (µm.) X±SD	Distribution	Medulla		Length (;m.) X±SD		Form	Arrangener
	45.68±	dark-brown fine granules,	absent	oval	1 1 1 1		slightly divergent, unequal hastate coronal	opposite
	21.80± 0.384	the shaft			110.00	index / length)		
	1				1.	09		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Murina

Species

Murina cyclotis

		Filament Structure					Scale Structure	r
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medula	Cross-section	(µm.)	Width (µm.) X±SD	Form	Arrangement
9.03± 0.277	35.57±	dark-brown rough granules, form densed-band throughout	absent	oval		1000	slightly divergent, equal hastate coronal	alternate
0.211	0.002	the shall			(width	Index Hength)		

Table 85

Table 86

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Murina

Species

Murina huttoni

		Filament Structu	re				Scale Structure	
(mm.)	Width (pre.) X±SD	Pignent Distribution	Medulla	Cross-section	Length (set.) X±SD	(um.)	Form	Arrangemen
	30,48±	dark-brown rough granules, form densed-band throughout	absent	oval	20.31±		slightly divergent, equal hastate coronal	
	the shaft				Scale Index (width / length)			
					1.	50		

Suborder

Microchiroptera

Family

Vespertilionidae Harpiocephalus

Genus Species

Harpiocephalus harpia

Table 89

		Filament Structure					Scale Structure	
	(pm.)	Pignent Distribution	Medulla	Cross-section		Width (um.) X±SD	Förm	Arrangemen
7.08±		dark-brown fine granules, form densed-band throughout the shaft	absent	oval	35.63± 25.40± 0.357 0.352 Scale Index (width / length)		spiral	

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Kerivoula

Species

Kerivoula papillosa

		Filament Structure					Scale Structure		
(mm·)	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section	Length (µm.) X±SD	Width (um.) X±SD	Form	Arrangement	
-		dark-brown rough granules, torm densed-band throughout	absent	oval	56.04± 0.245		slightly divergent, unequal	Arrangemer	alternate
	the shatt			Scale Index (width / length)					
					0.	88		Ì	

Microchiroptera

Family

Vespertilionidae

Genus

Kerivoula

Species

Kerivoula picta

		Filament Structure					Scale Structure	
(mm.)	Width (µm.) X±SD	Distribution	Medulia	Cross-section	E01001011111	Width (µm.) X±SD	Form	Arrangement
		yellow-brown rough granules, dense throughout the filament	absent	oval	25.40± 0.379	1	slightly divergent, equal hastate coronal	annular
					(width	Index (length) 20		

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Kerivoula

Species

Kerivoula minuta

		Filament Structure					Scale Structure	· · · · · · · · · · · · · · · · · · ·
(mm-)	Width (pro.) X±SD	Distribution	Medula	Cross-section	Length (µm.) X±SD	(µm.)	Form	Arrangemen
	50.43±	yellow-brown fine granules,	absent	oval	50.11±		slightly divergent, equal	annular
		91			(width	Index (length)		annular

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Kerivoula

Species

Kerivoula hardwickei

		Filament Structure				Terra sense e con	Scale Structure	Secretaria de la composición dela composición de la composición de la composición dela composición dela composición de la composición dela composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela compos
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medulia	Cross-section	Length (µm.) X±SD		Form	Arrangemen
	35.58±	35.58± dark-brown rough granules.	absent	ovai	38.13±	10.00	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					0.	97		

Table 91

Table 92

Suborder

Microchiroptera

Family

Vespertilionidae

Genus

Phoniscus

Species

Phoniscus atrox

		Filament Structure					Scale Structure	and the second second
(mm.)	Width (pra.) X±SD	Pigment Distribution	Medulla	Cross-section	Length (µm.) X±SD		Form	Arrangemer
	36,46±	dark-brown rough granules,	absent	oval	25.42±	1	slightly divergent, unequal hastate coronal	alternate
	0.460	Gense an oughout the			10000	index (length)		
					t,	50		

Suborder

Microchiroptera

Table 95

Family Genus Molossidae Cheiromeles

Species

Cheiromeles torquatus

		Filament Structur	e				Scale Structure	
(mm.)	Width (pm.)		Medulla	Cross-section	Length (µm.) X±SD		Form	Arrangemer
		dark-brown fine granules, disperse throughout the filament	absent	oval	40.18±	37.40± 0.375	divergent, denticulate coronal	annular
	0.502					index (length)		
					0.	93		1

Suborder

Microchiroptera

Table 96

Family

Molossidae

Genus

Chaerephon

Species

Chaerephon plicata

		Filament Structure					Scale Structure	
(mm.)	Width (pm.) X±SD	Pigment Distribution	Medulla	Cross-section			Form	Arrangemet
	50.40±	dark-brown line granules, form cross-banding throughout the tilament	absent	oval	0.458 Scale (width	49.14± 0.472 Index: / length)	divergent, dentate coronal	annular

Microchiroptera

Table 97

Family Genus Molossidae Tadarida

Species

Tadarida teniotis

		Filament Structure					Scale Structure	Territoria de la compansión de la compan
(mm.)	Width (µm.) X±SD	Pigment Distribution	Medula	Cross-section		Width (µm.)  X±SD	Forei	Arrangemei
7.03± 0.377	California -	dark-brown rough granules, disperse throughout the filament	absent	oval	43.25±		divergent, dentate coronal	annular
	0.500			Scale Index (width / length)				
					1.	05		



## Biography

I am miss Pornpimol Singnoi. I was born on 3 May 1960 in Udornthani. I was educated in Khon Kaen University, where I finished the degree of Bachelor of Science in Biology in 1981. I decided to join with the Veterinary Research and Diagnostic Laboratory Center of Northeast, Khon Kaen as a staff member in the pathological department. In 1985, I decided to persue the Master degree of Science in Biology in Chulalongkorn University, Bangkok.



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