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Appendix

Table 1

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Cynopterus
Species Cynopterus brachyotis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.00± 0.270	45.70± 0.340	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	oval	25.40± 0.348	48.30± 0.428	divergent, entire coronal	annular
				M:C	Scale Index (width / length)			
				1:1	1.90			

Table 2

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Cynopterus
Species Cynopterus sphinx

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
5.01± 0.273	38.10± 0.287	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	oval	25.40± 0.356	35.60± 0.375	divergent, entire coronal	annular
				M:C	Scale Index (width / length)			
				1:1	1.40			

Table 3

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Cynopterus
Species Cynopterus horsfieldi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.02± 0.293	38.11± 0.335	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	oval	25.40± 0.334	37.20± 0.391	divergent, entire coronal	annular
				M:C	Scale Index (width / length)			
				1:1	1.46			

Table 4

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Chironax
Species Chironax melanocephalus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.03± 0.351	30.49± 0.353	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	round	29.80± 0.398	30.50± 0.446	divergent, entire coronal	annular
				M:C	Scale Index (width / length)			
				1:1	1.02			

Table 5

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Balionycteris
Species Balionycteris maculata

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.03± 0.249	42.50± 0.384	red-brown fine granules, disperse throughout the shaft, clump of pigment granules at base of each medullary vacuole	uniserial ladder	round	20.30± 0.412	45.70± 0.304	appress, repand coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	2.25			

Table 6

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Sphaerias
Species Sphaerias blanfordi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.96± 0.262	35.43± 0.331	dark-brown fine granules, disperse throughout the filament, clump of pigment granules at base of each medullary vacuole	uniserial ladder	round	22.80± 0.405	32.50± 0.489	divergent, unequal hastate	alternate
				M:C	Scale Index (width / length)			
				1:1	1.42			

Table 7

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Megaerops
Species Megaerops niphanae

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.332	28.39± 0.389	dark-brown fine granules, disperse throughout the shaft, clump of granules at base of each medullary vacuole	uniserial ladder	round	25.40± 0.387	29.30± 0.424	divergent, unequal hastate	alternate
				M:C	Scale index (width / length)			
				1:1	1.15			

Table 8

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Megaerops
Species Megaerops ecaudatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.03± 0.284	15.42± 0.325	dark-brown fine granules, disperse throughout the filament clump of granules at base of each medullary vacuole	uniserial ladder	round	20.30± 0.424	15.40± 0.475	divergent, unequal hastate	annular
				M:C	Scale index (width / length)			
				1:1	0.75			

Table 9

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Rousettus
Species Rousettus amplexicaudatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.99± 0.339	38.69± 0.357	dark-brown fine granules, disperse throughout the shaft, clump of granules at base of each medullary vacuole	uniserial ladder	oval	40.60± 0.299	39.90± 0.362	divergent, unequal hastate	annular
				M:C	Scale index (width / length)			
				1:1	0.98			

Table 10

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Rousettus
Species Rousettus leschenaulti

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.00± 0.261	56.40± 0.385	dark-brown fine granules, disperse throughout the shaft, clump of granules at base of each medullary vacuole	uniserial ladder	round	30.50± 0.308	58.90± 0.257	divergent, broad lobate coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.93			

Table 11

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Pteropus
Species Pteropus lylei

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
12.02± 0.267	120.31± 0.296	dark-brown fine granules, dense throughout the shaft	fragmental	oval	50.80± 0.287	113.50± 0.228	appress, irregular mosaic with smooth margin, distant	
				M:C	Scale Index (width / length)			
				1:1	2.23			

Table 12

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Pteropus
Species Pteropus hypomelanus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.01± 0.324	139.69± 0.392	dark-brown fine granules, dense throughout the shaft	fragmental	round	45.70± 0.295	144.80± 0.265	appress, irregular mosaic with smooth margin, distant	
				M:C	Scale Index (width / length)			
				1:1	3.16			

Table 13

Suborder Megachiroptera
Family Pteropodidae
Subfamily Pteropodinae
Genus Pteropus
Species Pteropus vampyrus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.99± 0.301	99.06± 0.325	red-brown fine granules, dense throughout the shaft	fragmental	round	38.10± 0.364	101.60± 0.247	appress, irregular mosaic with smooth margin, distant	
				M:C	Scale Index (width / length)			
				1:1	2.66			

Table 14

Suborder Megachiroptera
Family Pteropodidae
Subfamily Macroglossinae
Genus Macroglossus
Species Macroglossus sobrinus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.02± 0.261	31.20± 0.331	dark-brown fine granules, disperse throughout the filament	uniserial ladder	round	30.50± 0.352	30.50± 0.424	slightly divergent, repand coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.00			

Table 15

Suborder Megachiroptera
Family Pteropodidae
Subfamily Macroglossinae
Genus Macroglossus
Species Macroglossus minimus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.99± 0.286	32.29± 0.355	yellow-brown fine granules, disperse throughout the filament	uniserial ladder	round	30.50± 0.371	33.40± 0.459	slightly divergent, repand coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.09			

Table 16

Suborder Megachiroptera
Family Pteropodidae
Subfamily Macroglossinae
Genus Eonycteris
Species Eonycteris spelaea

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.98± 0.261	30.50± 0.373	dark-brown fine granules, dense throughout the filament	absent	oval	25.30± 0.415	29.40± 0.487	divergent, oblique broad lobate	alternate
					Scale Index (width / length)			
					1.16			

Table 17

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Rhinopomatidae
Genus Rhinopoma
Species Rhinopoma microphyllum

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.245	30.51± 0.313	dark-brown fine granules, disperse throughout the shaft	absent	oval	38.10± 0.304	30.50± 0.310	divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.80			

Table 18

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Emballonuridae
Subfamily Emballonurinae
Genus Emballonura
Species Emballonura monticola

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.250	20.30± 0.349	yellow-brown fine granules, disperse throughout the filament	absent	oval	25.40± 0.328	20.30± 0.350	divergent, dentate coronal	alternate
					Scale Index (width / length)			
					0.80			

Table 19

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Emballonuridae
Subfamily Emballonurinae
Genus Saccolaimus
Species Saccolaimus saccolaimus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.99± 0.240	21.29± 0.386	dark-brown fine granules, disperse throughout the filament	absent	oval	38.10± 0.359	22.90± 0.368	divaricate, denticulate coronal	alternate
					Scale Index (width / length)			
					0.60			

Table 20

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Emballonuridae
Subfamily Emballonurinae
Genus Taphozous
Species Taphozous longimanus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.282	34.20± 0.331	dark-brown fine granules, form cross-banding throughout the filament	absent	oval	38.10± 0.416	33.40± 0.395	divaricate, dentate coronal	alternate
					Scale Index (width / length)			
					0.87			

Table 21

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Emballonuridae
Subfamily Emballonurinae
Genus Taphozous
Species Taphozous melanopogon

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.00± 0.284	25.30± 0.342	yellow-brown fine granules, form cross-banding throughout the filament	absent	oval	25.40± 0.305	26.80± 0.401	divergent, dentate coronal	annular
					Scale Index (width / length)			
					1.05			

Table 22

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Emballonuridae
Subfamily Emballonurinae
Genus Taphozous
Species Taphozous theobaldi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
5.01± 0.248	25.79± 0.392	yellow-brown fine granules, form cross-banding throughout the shaft	absent	oval	25.41± 0.362	27.23± 0.387	divergent, dentate coronal	alternate
					Scale Index (width / length)			
					1.07			

Table 23

Suborder Microchiroptera
Superfamily Emballonuroidea
Family Craseonycteridae
Genus Craseonycteris
Species Craseonycteris thonglongyai

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.00± 0.263	33.51± 0.332	dark-brown fine granules, disperse throughout the filament	uniserial ladder	round	25.38± 0.336	32.72± 0.354	divergent, unequal hastate coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.28			

Table 24

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Nycteridae
Genus Nycteris
Species Nycteris tragata

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.00± 0.267	34.11± 0.384	dark-brown fine granules, disperse throughout the shaft	absent	round	25.44± 0.285	33.89± 0.399	appress, unequal hastate coronal	annular
					Scale Index (width / length)			
					1.33			

Table 25

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Megadermatidae
Genus Megaderma
Species Megaderma lyra

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.245	37.41± 0.405	dark-brown fine granules, disperse throughout the shaft	uniserial ladder	oval	25.38± 0.308	36.32± 0.477	slightly divergent, unequal hastate coronal with pointed peak	alternate
				M:C	Scale Index (width / length)			
				1:1	1.43			

Table 26

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Megadermatidae
Genus Megaderma
Species Megaderma spasma

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.00± 0.262	35.49± 0.357	dark-brown fine granules, disperse throughout the filament	uniserial ladder	oval	30.48± 0.415	34.93± 0.412	slightly divergent, unequal hastate coronal	alternate
				M:C	Scale Index (width / length)			
				1:1	1.14			

Table 27

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus malayanus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.241	25.40± 0.369 13.49± 0.312	yellow-brown fine granules, disperse throughout the filament	absent	oval	30.47± 0.348	24.88± 0.382	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.81			

Table 28

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus affinis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
6.01± 0.228	23.80± 0.365 13.51± 0.341	dark-brown fine granules, disperse throughout the filament	absent	oval	25.40± 0.357	23.34± 0.370	appress, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.91			

Table 29

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus robinsoni

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
9.00± 0.245	20.11± 0.386 11.49± 0.289	dark-brown fine granules, disperse throughout the filament	absent	oval	27.91± 0.386	20.30± 0.388	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.72			

Table 30

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus stheno

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
6.99± 0.258	20.92± 0.365 11.88± 0.326	yellow-brown fine granules, disperse throughout the shaft	absent	oval	30.50± 0.412	20.46± 0.375	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.67			

Table 31

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus thomasi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.248	20.30± 0.376 10.18± 0.341	dark-brown fine granules, disperse throughout the filament	absent	oval	25.00± 0.405	20.41± 0.354	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length) 0.81			

Table 32

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus lepidus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.253	20.40± 0.407 11.52± 0.342	dark-brown fine granules, disperse throughout the shaft	absent	oval	25.04± 0.399	20.80± 0.398	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length) 0.83			

Table 33

Suborder Microchiroptera
Superfamily Rhinolophoidae
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus acuminatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.253	22.41± 0.376 13.12± 0.347	dark-brown fine granules, disperse throughout the shaft	absent	oval	25.02± 0.392	23.48± 0.401	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length) 0.94			

Table 34

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus pusillus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.01± 0.267	22.90± 0.391 12.88± 0.384	red-brown fine granules, disperse throughout the shaft	absent	oval	20.50± 0.424	22.51± 0.377	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length) 1.09			

Table 35

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus macrotis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.00± 0.285	23.90± 0.356 14.21± 0.304	dark-brown fine granules, disperse throughout the filament	absent	oval	20.54± 0.385	23.50± 0.386	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length) 1.14			

Table 36

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus coelophyllus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.00± 0.285	22.51± 0.368 11.93± 0.327	yellow-brown fine granules, disperse throughout the shaft	absent	oval	20.30± 0.374	21.29± 0.373	appress, unequal hastate coronal	annular
					Scale Index (width / length) 1.04			

Table 37

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus shameli

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.00± 0.279	24.30± 0.327 14.92± 0.343	dark-brown fine granules, disperse throughout the shaft	absent	oval	25.40± 0.331	25.41± 0.354	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.00			

Table 38

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus marshalli

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.01± 0.288	25.81± 0.360 15.40± 0.345	yellow-brown fine granules, disperse throughout the filament	absent	oval	17.81± 0.452	25.37± 0.375	appress, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.42			

Table 39

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus paradoxolophus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.99± 0.292	23.40± 0.316 15.93± 0.325	dark-brown fine granules, disperse throughout the filament	absent	oval	25.44± 0.414	23.10± 0.394	appress, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.91			

Table 40

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus trifoliatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.01± 0.286	22.39± 0.311 13.87± 0.298	dark-brown fine granules, disperse throughout the filament	absent	oval	25.42± 0.370	21.20± 0.305	appress, equal hastate coronal	annular
					Scale Index (width / length)			
					0.83			

Table 41

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus luctus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.00± 0.234	24.42± 0.385 15.70± 0.338	dark-brown fine granules, disperse throughout the filament	absent	oval	20.30± 0.424	25.41± 0.418	appress, unequal hastate coronal	annular
					Scale Index (width / length)			
					1.25			

Table 42

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus pearsoni

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
11.01± 0.281	24.50± 0.385 15.69± 0.317	dark-brown fine granules, disperse throughout the filament	absent	oval	25.01± 0.406	25.00± 0.379	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					1.00			

Table 43

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Rhinolophidae
Genus Rhinolophus
Species Rhinolophus yunanensis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.00± 0.287	25.29± 0.301 14.50± 0.324	dark-brown fine granules, disperse throughout the filament	absent	oval	24.80± 0.378	24.22± 0.391	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.97			

Table 44

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Hipposideridae
Genus Hipposideros
Species Hipposideros bicolor

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.288	22.94± 0.363	dark-brown fine granules, dense throughout the shaft	absent	oval	27.90± 0.374	25.36± 0.365	appress, equal hastate coronal	annular
					Scale Index (width / length)			
					0.91			

Table 45

Suborder Microchiroptera
Superfamily Rhinolophoidea
Family Hipposideridae
Genus Hipposideros
Species Hipposideros ater

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.245	21.48± 0.295	dark-brown fine granules, dense throughout the shaft	absent	oval	25.43± 0.353	26.30± 0.301	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					1.03			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros cineraceus

Table 46

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.01± 0.292	23.94± 0.372	dark-brown fine granules, dense throughout the shaft	absent	oval	25.41± 0.445	24.30± 0.359	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.95			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros halophyllus

Table 47

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.02± 0.258	27.94± 0.420	dark-brown fine granules, dense throughout the shaft	absent	oval	38.01± 0.327	29.83± 0.438	appress, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.78			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros galeritus

Table 48

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.00± 0.277	28.94± 0.418	yellow-brown rough granules, disperse throughout the filament	absent	oval	38.11± 0.359	28.52± 0.481	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.74			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros lylei

Table 49

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.02± 0.256	24.94± 0.389	dark-brown rough granules, disperse throughout the shaft	absent	oval	38.10± 0.380	24.31± 0.477	appress, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.63			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros armiger

Table 50

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.293	29.18± 0.475	dark-brown fine granules, disperse throughout the shaft	absent	oval	33.04± 0.391	28.10± 0.415	appress, unequal hastate coronal	annular
					Scale Index (width / length)			
					0.85			

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros turpis

Table 51

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.280	25.39± 0.377	dark-brown rough granules, disperse throughout the shaft	absent	oval	35.68± 0.415	23.52± 0.392	appress, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.65			

Table 52

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros lekaguli

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.00± 0.300	20.31± 0.317	dark-brown fine granules, form densed-band throughout the filament	absent	oval	38.10± 0.344	22.23± 0.365	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.58			

Table 53

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros larvatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
12.99± 0.283	26.46± 0.353	red-brown fine granules, disperse throughout the shaft	absent	oval	43.24± 0.378	26.09± 0.364	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.60			

Table 54

Suborder Microchiroptera
Family Hipposideridae
Genus Hipposideros
Species Hipposideros diadema

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.00± 0.293	27.34± 0.445	yellow-brown fine granules, form densed-band throughout the shaft	absent	oval	63.48± 0.296	28.31± 0.485	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					0.44			

Table 55

Suborder Microchiroptera
Family Hipposideridae
Genus Coelops
Species Coelops frithi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.270	32.27± 0.393	dark-brown rough granules, form densed-band at the upper part of scale	absent	oval	45.11± 0.315	31.38± 0.324	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					0.69			

Table 56

Suborder Microchiroptera
Family Hipposideridae
Genus Coelops
Species Coelops robinsoni

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.243	27.39± 0.379	dark-brown rough granules, form densed-band at the upper part of scale	absent	oval	45.72± 0.369	28.64± 0.380	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.62			

Table 57

Suborder Microchiroptera
Family Hipposideridae
Genus Aselliscus
Species Aselliscus stoliczkanus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
6.04± 0.312	28.46± 0.350	dark-brown rough granules, form densed-band at the upper part of scale	absent	oval	35.57± 0.424	27.51± 0.366	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.77			

Table 58

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis muricola

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.04± 0.362	38.14± 0.458	dark-brown rough granules, dense throughout the shaft	absent	oval	58.44± 0.333	45.67± 0.415	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.78			

Table 59

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis siligorensis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.17± 0.344	38.08± 0.414	dark-brown rough granules, dense throughout the shaft	absent	oval	30.50± 0.287	38.01± 0.420	appress, unequal hastate coronal	annular
					Scale Index (width / length)			
					1.24			

Table 60

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis annectans

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.08± 0.314	30.54± 0.365	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	50.83± 0.265	35.56± 0.419	divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.70			

Table 61

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis rosseti

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
5.06± 0.310	25.42± 0.370	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	25.44± 0.414	27.86± 0.399	divergent, equal hastate coronal	spiral
					Scale Index (width / length)			
					1.09			

Table 62

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis horsfieldi

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
9.07± 0.245	48.14± 0.425	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	45.74± 0.428	47.19± 0.438	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.03			

Table 63

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis hasseltii

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
7.08± 0.273	45.14± 0.360	dark-brown rough granules, form densed-band throughout the filament	absent	oval	63.46± 0.273	44.23± 0.387	divergent, unequal hastate coronal	annular
					Scale Index (width / length)			
					0.69			

Table 64

Suborder Microchiroptera
Family Vespertilionidae
Genus Myotis
Species Myotis chinensis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.03± 0.299	17.73± 0.423	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	35.11± 0.316	22.03± 0.392	divergent, unequal hastate coronal	annular
					Scale Index (width / length)			
					0.62			

Table 65

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus coromandra

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.00± 0.301	38.16± 0.413 18.46± 0.286	dark-brown fine granules, form densed-band throughout the filament	absent	oval	58.44± 0.312	38.53± 0.435	divergent, unequal hastate coronal	annular
					Scale Index (width / length)			
					0.65			

Table 66

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus tenuis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.03± 0.361	45.56± 0.376 17.29± 0.249	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	38.10± 0.426	45.12± 0.416	divergent, equal hastate coronal	opposite
					Scale Index (width / length)			
					1.18			

Table 67

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus mimus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
5.12± 0.267	38.06± 0.437 15.11± 0.284	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	58.40± 0.298	43.12± 0.420	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.73			

Table 68

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus cadornae

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.03± 0.356	38.21± 0.363 23.42± 0.326	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	25.43± 0.425	35.63± 0.354	slightly divergent, unequal hastate coronal	annular
					Scale Index (width / length)			
					1.40			

Table 69

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus javanicus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
4.00± 0.357	50.65± 0.303 24.49± 0.339	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	25.33± 0.409	53.30± 0.385	appress, repand coronal mix with slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					2.10			

Table 70

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus pulveratus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.03± 0.378	54.31± 0.432 27.12± 0.352	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	22.10± 0.457	53.14± 0.391 Scale Index (width / length) 2.40	slightly divergent, unequal hastate coronal	alternate

Table 71

Suborder Microchiroptera
Family Vespertilionidae
Genus Pipistrellus
Species Pipistrellus circumdatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.92± 0.276	37.83± 0.429 17.52± 0.335	dark-brown fine granules, form densed-band throughout the shaft	absent	oval	25.36± 0.351	37.84± 0.470 Scale Index (width / length) 1.49	slightly divergent, equal hastate coronal	annular

Table 72

Suborder Microchiroptera
Family Vespertilionidae
Genus Glischropus
Species Glischropus tylophus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.06± 0.286	30.52± 0.342	dark-brown rough granules, dense throughout the shaft	absent	oval	55.94± 0.294	33.05± 0.405 Scale Index (width / length) 0.59	divergent, equal hastate coronal	annular

Suborder Microchiroptera
Family Vespertilionidae
Genus Eptesicus
Species Eptesicus serotinus

Table 73

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
4.98± 0.291	46.75± 0.403	dark-brown rough granules, dense throughout the shaft	absent	oval	38.10± 0.285	49.15± 0.412	divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					1.29			

Suborder Microchiroptera
Family Vespertilionidae
Genus Eptesicus
Species Eptesicus demissus

Table 74

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.95± 0.284	53.36± 0.415	dark-brown rough granules, dense throughout the shaft	absent	oval	38.13± 0.311	55.95± 0.428	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					1.46			

Suborder Microchiroptera
Family Vespertilionidae
Genus Eptesicus
Species Eptesicus pachyotis

Table 75

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.07± 0.328	38.14± 0.442	dark-brown rough granules, dense throughout the shaft	absent	oval	50.83± 0.302	45.67± 0.473	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.90			

Suborder Microchiroptera
Family Vespertilionidae
Genus Ia
Species Ia io

Table 76

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
11.07± 0.294	59.84± 0.417	dark-brown fine granules, form densed-band throughout the shaft	absent	oval	30.50± 0.425	59.92± 0.387	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.96			

Suborder Microchiroptera
Family Vespertilionidae
Genus Hesperoptenus
Species Hesperoptenus blanfordi

Table 77

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.03± 0.292	25.40± 0.412	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	50.11± 0.418	23.82± 0.395	divergent, entire coronal	annular
					Scale Index (width / length)			
					0.47			

Suborder Microchiroptera
Family Vespertilionidae
Genus Hesperoptenus
Species Hesperoptenus tickelli

Table 78

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.03± 0.323	30.47± 0.424	dark-brown rough granules, dense throughout the shaft	absent	oval	40.64± 0.412	33.05± 0.452	divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.81			

Table 79

Suborder Microchiroptera
Family Vespertilionidae
Genus Nyctalus
Species Nyctalus noctula

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.02± 0.287	50.79± 0.459	dark-brown rough granules, dense throughout the shaft	absent	oval	63.50± 0.284	48.26± 0.482	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.76			

Table 80

Suborder Microchiroptera
Family Vespertilionidae
Genus Tylonycteris
Species Tylonycteris pachypus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
3.02± 0.241	33.09± 0.487	dark-brown rough granules, dense throughout the shaft	absent	oval	25.40± 0.427	38.12± 0.479	appress, unequal hastate coronal	annular
					Scale Index (width / length)			
					1.50			

Table 81

Suborder Microchiroptera
Family Vespertilionidae
Genus Tylonycteris
Species Tylonycteris robustula

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
5.04± 0.270	50.39± 0.425	dark-brown rough granules, form densed-band throughout the filament	absent	oval	49.89 0.339	50.21± 0.431	slightly divergent, repand coronal	alternate
					Scale Index (width / length)			
					1.01			

Suborder Microchiroptera
Family Vespertilionidae
Genus Scotomanes
Species Scotomanes ornatus

Table 82

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.03 0.273	38.09± 0.483	dark-brown rough granules, disperse throughout the shaft	absent	oval	55.91± 0.324	40.60± 0.470	divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					0.72			

Suborder Microchiroptera
Family Vespertilionidae
Genus Scotophilus
Species Scotophilus kuhli

Table 83

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.04± 0.262	45.74± 0.300	yellow-brown rough granules, dense throughout the shaft	absent	oval	66.00± 0.247	43.23± 0.376	divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.65			

Suborder Microchiroptera
Family Vespertilionidae
Genus Miniopterus
Species Miniopterus macrodens

Table 84

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.04± 0.356	34.87± 0.354 11.86± 0.206	dark-brown fine granules, dense throughout the shaft	absent	oval	38.10± 0.361	35.22± 0.385	slightly divergent, equal hastate coronal	opposite
					Scale Index (width / length)			
					0.92			

Table 85

Suborder Microchiroptera
Family Vespertilionidae
Genus Miniopterus
Species Miniopterus haradai

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
10.95± 0.359	38.13± 0.423 25.20± 0.315	dark-brown fine granules, dense throughout the shaft	absent	oval	48.31± 0.360	40.64± 0.488	slightly divergent, equal hastate coronal	opposite
					Scale Index (width / length)			
					0.84			

Table 86

Suborder Microchiroptera
Family Vespertilionidae
Genus Miniopterus
Species Miniopterus medius

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.00± 0.312	45.68± 0.424 21.80± 0.384	dark-brown fine granules, form densed-band throughout the shaft	absent	oval	45.70± 0.416	50.14± 0.475	slightly divergent, unequal hastate coronal	opposite
					Scale Index (width / length)			
					1.09			

Table 87

Suborder Microchiroptera
Family Vespertilionidae
Genus Murina
Species Murina cyclotis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
9.03± 0.277	35.57± 0.362	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	45.75± 0.318	33.00± 0.405	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					0.72			

Table 88

Suborder Microchiroptera
Family Vespertilionidae
Genus Murina
Species Murina huttoni

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.04± 0.298	30.48± 0.351	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	20.31± 0.424	30.50± 0.377	slightly divergent, equal hastate coronal	alternate
					Scale Index (width / length)			
					1.50			

Table 89

Suborder Microchiroptera
Family Vespertilionidae
Genus Harpiocephalus
Species Harpiocephalus harpia

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.08± 0.294	28.82± 0.414	dark-brown fine granules, form densed-band throughout the shaft	absent	oval	35.63± 0.357	25.40± 0.352	divergent, unequal hastate coronal	spiral
					Scale Index (width / length)			
					0.71			

Table 90

Suborder Microchiroptera
Family Vespertilionidae
Genus Kerivoula
Species Kerivoula papillosa

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.04± 0.307	58.66± 0.389	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	66.04± 0.245	58.20± 0.451	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					0.88			

Table 91

Suborder Microchiroptera
Family Vespertilionidae
Genus Kerivoula
Species Kerivoula picta

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
4.96± 0.336	25.44± 0.384	yellow-brown rough granules, dense throughout the filament	absent	oval	25.40± 0.379	30.55± 0.418	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					1.20			

Table 92

Suborder Microchiroptera
Family Vespertilionidae
Genus Kerivoula
Species Kerivoula minuta

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
8.01± 0.285	50.43± 0.423	yellow-brown fine granules, disperse throughout the filament	absent	oval	50.11± 0.308	50.36± 0.420	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					1.00			

Table 93

Suborder Microchiroptera
Family Vespertilionidae
Genus Kerivoula
Species Kerivoula hardwickei

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.04± 0.319	35.58± 0.479	dark-brown rough granules, form densed-band throughout the shaft	absent	oval	38.13± 0.447	37.18± 0.459	slightly divergent, equal hastate coronal	annular
					Scale Index (width / length)			
					0.97			

Table 94

Suborder Microchiroptera
Family Vespertilionidae
Genus Phoniscus
Species Phoniscus atrox

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
7.01± 0.290	36.46± 0.466	dark-brown rough granules, dense throughout the filament	absent	oval	25.42± 0.456	38.10± 0.426	slightly divergent, unequal hastate coronal	alternate
					Scale Index (width / length)			
					1.50			

Table 95

Suborder Microchiroptera
Family Molossidae
Genus Cheiromeles
Species Cheiromeles torquatus

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
5.03± 0.243	35.58± 0.362	dark-brown fine granules, disperse throughout the filament	absent	oval	40.18± 0.277	37.40± 0.375	divergent, denticulate coronal	annular
					Scale Index (width / length)			
					0.93			

Table 96

Suborder Microchiroptera
Family Molossidae
Genus Chaerephon
Species Chaerephon plicata

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (μm.) $\bar{X}\pm SD$	Width (μm.) $\bar{X}\pm SD$	Form	Arrangement
6.05± 0.242	50.40± 0.485	dark-brown fine granules, form cross-banding throughout the filament	absent	oval	48.66± 0.458	49.14± 0.472	divergent, dentate coronal	annular
					Scale Index (width / length)			
					1.01			

Table 97

Suborder Microchiroptera
Family Molossidae
Genus Tadarida
Species Tadarida teniotis

Filament Structure					Scale Structure			
Length (mm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Pigment Distribution	Medulla	Cross-section	Length (µm.) $\bar{X}\pm SD$	Width (µm.) $\bar{X}\pm SD$	Form	Arrangement
7.03± 0.377	40.12± 0.486	dark-brown rough granules, disperse throughout the filament	absent	oval	43.25± 0.312	45.73± 0.458	divergent, dentate coronal	annular
					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.