BARBETS

Order SCANSORES

Family CAPITONIDÆ

Vol. I., p. 144.

The birds of this family are essentially dwellers in old jungle and, at one time or another, most of the species in the Malayan list, except *Thereiceryx lineatus intermedius* and *Xantholæma hæmacephala indica*, may be found within the altitudinal limits set for this volume, though several are strictly confined to the hills and are here described in full. The key includes all species that have ever been met with above 2500 ft., but the detailed accounts of those of only casual occurrence in the mountains are deferred to Volume IV.

KEY TO THE MALAYAN SPECIES OF BARBETS

ı	No green in plumage;	Calorham hayi, p. 8		fuli	ginosus			
	Plumage mainly gree bristles	. 2						
	Nasal plumes extreme	ely lon	g;	bill,				
2	greenish .	•		•	Psilopogon	pyrolopi	hus, p	• 95
1	Nasal plumes short; bi		3					
	Head and neck dull	l, more	or	less				inter-
3 1	streaked	medius (Vol. I., p. 148)						
,	Head and neck with bri		4					
	Breast, striped .	•	•	•	Xantholæ			cephal a
4 }					indica (V	ol. I., p.	145)	
	Breast, not striped	•	•	•		5		
ر ج	Lower cheeks, bright ye Lower cheeks, not brigh	ellow	•	•		6		
ا ر		7						
	Crown, uniform red		•	•	Chotorhed	a raffle	sii r	afflesii,
6					P∙ 94			
ľ	Crown, banded .	•	•	•	Chotorhea	chrysop	ogon	lætus,
					p. 93			
[ر	Crown, red . Crown, not red .		•			8		
1	Crown, not red .	•				9		
	87							

	Forehead, yellow	•			Chotorhea mystacophanes (male), p. 93
8	Forehead, blue .	•	•		Chotorhea mystacophanes (female), p. 93
i	Forehead, black				10
9	Forehead, yellow				Cyanops henrici, p. 92
1	Forehead, red .				II
		pure red,	a dist	inct	Mczobucco duvauceli duvauceli,
1	black gorget .	•	•	•	p. 94
105	Subocular patch,	red and	yellow,	no	
	marked black go	get .	•	٠	Mezobucco d. stuarti (Vol. I., p. 148)
	Crown, blue .				Cyanops asiatica chersonesus,
ΙΙ					p. 91
	Crown, yellow .				12
Ta	Ear coverts and low	er throat,	Cyanops franklini minor, p. 90		
14	Ear coverts and low	er throat,	blue	•	Cyanops oorti oorti, p. 89

Calorhamphus fuliginosus hayi

The Brown Barbet

Bucco hayi, J. E. Gray, Zool. Misc., 1831, p. 31 (Malacca). Calorhampus lathami, Marshall, Mon. Capit., 1871, p. 179, pl. 72.

Calorhampus hayi, Sharpe, P.Z.S., 1888, p. 281; Shelley, Cat. Birds, Brit. Mus., xix., 1891, p. 50; Blanford, Faun. Brit. Ind., Birds, iii., 1895, p. 83. Calorhamphus fuliginosus hayi, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), iv., 1927, p. 103.

Malay Name.—Unknown.

Description.—Adult.—Sexes alike. General colour above, dark brown; the head darker, with bristly, black shining shafts to the feathers of the forehead, but with no bristles at the gape as in other barbets. The feathers of the back and mantle with obsolete paler edgings. Primaries, on their inner aspect, with pale yellowish white borders to their inner webs towards the base; under wing coverts, smoky, with paler edges; lores, ear coverts and sides of the head, dark brown, suffused with brick-red, brighter on the lower cheeks. Chin and throat, whitish, with a strong, brick-red wash, the tips of the feathers paler; flanks and thighs behind, dark olive-brown; rest of under surface, dirty brownish white, with a faint yellow wash.

Immature.—The secondary wing coverts broadly tipped with brick-red; the head, paler brown; the throat less suffused with reddish, and the under parts generally more whitish, with a strong wash of sulphur-yellow on the middle of the belly.

Soft Parts.—Male: iris, pale red, brown, chestnut or chocolate; bill, black; feet, orange-vermilion, claws, black. Female and immature: bill, pale brown; iris, duller brown.

Dimensions.—Total length, about 7 in.; wing, 3'2 to 3'5 in.; tail. 2 to 2'2 in.; tarsus, 0'9 to 1 in.; bill from gape, 1'2 in.; culmen, 0'8 to 0'85 in. There is no material difference in size between the sexes.

Range in the Malay Peninsula.—Throughout the whole length of the Peninsula; Junk Zeylon and Pulau Lontar Islands, and probably Penang. Also in Singapore and islands in the vicinity.

Extralimital Range.—Extends north for a short distance into Southern Tenasserim, Sumatra. Represented in Borneo by the darker and richer coloured typical race, C. f. fuliginosus (Temm.).

Nidification.—Mr W. A. T. Kellow found several nests near Simpang Taiping, Perak, in February, in deep jungle. The nest holes were excavated in quite small trees and stumps, usually on the banks of streams. Mr Baker describes the eggs as pure soft white, the texture very fine and fairly close, but never glossy and hard. In shape, generally long, rather pointed ovals. Average dimensions, 1'03 by 0'79 in.

Habits.—This dingy little barbet is perhaps the commonest of the family in the Malay Peninsula, and is found everywhere—from the swampy, freshwater jungles near the coast up to about 3500 ft. on all the ranges, though it is by far the most abundant at moderate elevations up to 2000 ft. It is semisocial in its habits, and is met with in small parties of four or five, usually amongst the lower vegetation. Davison says it eats insects quite as much as fruit and berries, and I have often noted that its plumage is daubed with some sticky material, with the heads of ants or soldier-termites adherent to it, as with the bay woodpecker, *Micropternus*. Davison says that the note is a low, soft whistle. I have not heard it utter any note at all, certainly not the anvil-like one of other barbets.

Hume's suggestion (Stray Feath., viii., 1879, p. 150) that this bird is not really a barbet is worthy of investigation. The shape of the bill, the lack of rictal bristles, and the type of coloration, certainly remove it from the vicinity of other Oriental species, as do also the gregarious habit and the diet, but it cannot, I think, be allied to the honey guides (Indicatoridæ), as put forward by Hume.

Cyanops oorti oorti

Mueller's Barbet

PLATE 3 (right-hand figure)

Bucco oorti, Sal. Muell., Nat. Gesch. en Phys., ii., 1835, p. 341, pl. viii., fig. 4 (1835).

Megalæma oorti, Marshall, Mon. Capit., 1871, p. 59, pl. 27; Sharpe, P.Z.S., 1887, p. 442.

Cyanops oorti, Shelley, Cat. Birds, Brit. Mus., xix., 1891, p. 71.

Malay Name.—Burong takor bukit or tanau bukit.

Description.—Sexes alike. General colour above and below, including tail and external aspect of wings, bright grass-green. Primaries, blackish, edged with yellowish white on the inner web, this edging broadening towards

the base; under wing coverts and axillaries, pale yellowish; tail, beneath, bluish. Forehead, lores, a patch on the nape, and a spot on each side of the neck, scarlet; a broad black eyebrow, and a narrower black line from the gape; crown, pale straw-yellow; chin and upper throat, bright yellow; region behind the eye, the ear coverts, and the lower throat below the yellow, and around head between the scarlet spots, bright blue, verging on pale cobalt.

Immature.—The bright colours on the head very much duller; the forehead more orange; the red patch on the nape, and the spots on the side of the throat, only slightly indicated or absent. Crown and throat very much paler yellow.

Soft Parts.—Adult: iris, chestnut or chocolate, sometimes darker; orbital skin, dirty sage-green; bill, black, pale at base; feet, plumbeous green. *Immature*: iris, light hazel; bill, blackish horn, blotched with yellowish; feet, greenish lead.

Dimensions.—Total length, about 7.5 to 8 in.; wing, 3.5 to 3.8 in.; tail, 2.5 to 2.9 in.; tarsus, 0.9 in.; bill from gape, 1.15 in.; culmen, 0.85 in.

Range in the Malay Peninsula.—The Peninsular main range, from North Perak to Southern Selangor; the Larut range and Gunong Tahan.

Extralimital Range.—The mountains of Sumatra. A closely allied race is found in the mountains of French Indo-China, C. o. annamensis (Robinson and Kloss).

Nidification.—Nothing whatever is on record; the nesting habits and the eggs are not likely to differ in any material respect from those of *C. franklini*.

Habits.—Strictly confined to the mountains, where it does not occur much below 3300 ft. or much above 4800 to 5000 ft.

The bird figured is a male from the hills above the Semangko Pass, Selangor-Pahang border, 18th April 1910.

Cyanops franklini minor

The Malay Golden-throated Barbet

PLATE 3 (left-hand figure)

Cyanops franklini minor, Kloss and Chasen, Bull. Brit. Orn. Club, xlvi.. 1926, p. 57 (Gunong Ijau, Perak).

Cyanops ramsayi (part), Sharpe, P.Z.S., 1887, p. 442; Shelley, Cat. Birds, Brit. Mus., xix., 1891, p. 70.

Malay Name.—As in other species of the genus.

Description.—Adult.—Sexes alike. General colour above and below, grass-green, more yellowish below; back, mantle and rump with shining tips; external aspect of wing, dark green; primaries, blackish, the outer ones faintly edged with blue on the outer webs; lesser wing coverts at angle of the wing, deep blue; inner aspect of wing, slaty, the primaries edged with whitish on the inner webs; the under wing coverts and axillaries, whitish yellow. Tail, dark green above, bluish beneath. Lores and a patch in front of eye, black, passing into a broad stripe behind the eye of coarsely streaked silver-grey and black, which becomes a large, uniform black patch on each side of a scarlet

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occipital spot; area below the eye, silvery; ear coverts the same. A narrow frontal band, orange-crimson; the crown, bright yellow. An orange spot at base of mandible; chin and upper throat, pale yellow, passing into silvery on the lower throat, which is separated from the green of the chest by a narrow, blackish blue line running up to the ear coverts.

Immature.—Generally duller, especially the crown and occiput; orange spot at base of mandible absent; silvery stripes on side of head less clear, and the ear coverts mingled with greenish; silvery grey on the lower throat almost absent, and the pale yellow of the chin and upper throat much duller; the bases of the feathers dull blackish, giving a mottled effect.

Soft Parts.—Iris, dark hazel or reddish chestnut; bill, black, the base of both mandibles, bluish grey; feet, plumbeous green.

Dimensions.—Total length, 7'7 to 8'5 in.; wing, 3'6 to 3'8 in.; tail, 2'5 to 2'8 in.; tarsus, o'q in.; bill from gape, 1'2 in.; culmen, o'85 in.

Range in the Malay Peninsula.—Identical with that of C. o. oorti.

Extralimital Range.—The present subspecies is peculiar to the mountains of the Malay Peninsula. Other forms occur in the Himalayas, in Tenasserim and the Shan States, in Tonkin and the mountains of South Annam. The Malay bird differs from the Tenasserim race, *C. f. ramsayi*, in its rather smaller size, and the coarser black-and-grey streaking of the postocular stripe.

Nidification.—Unknown, but certain to resemble closely those of the allied species.

Habits.—This species, which is the Malay representative of a continental species that does not extend to the islands of the Malay Archipelago, occupies precisely similar country to C. o. oorti, but extends to greater heights, having been met with at 5800 ft. on the Selangor mountains, and at similar elevations on the Padang on Gunong Tahan, amongst the stunted vegetation in the gullies. It is a noisy bird, and in districts where it is common its note, "tuk-tukh-tuk tuk, tuk," is constantly heard at all times of the day, one bird answering another across the valleys. It is, however, singularly elusive and hard to locate among the branches. The call is uttered with the bill pointing almost vertically upwards, though when silent the bird sits with its head hunched on its shoulders. The food is fruits and berries, often of considerable size, swallowed whole.

The bird figured is a male from Gunong Mengkuang Lebar, 4800 ft., Selangor, 27th January 1913.

Cyanops asiatica chersonesus

The Peninsular Blue-throated Barbet

Cyanops asiatica chersonesus, Kloss and Chasen, Bull. Brit. Orn. Club., xlviii., 1927, p. 46 (Nakawn Sritammarat, Peninsular Siam).

Cyanops davisoni (nec Hume), Robinson, Journ. Fed. Malay States Mus., v., 1915, p. 94.

Description.—Adult.—Sexes alike. General colour, above and below, green, as in C. oorti. Lores and a frontal band, a small patch on the back

of the head and a small spot on each side of the throat, crimson-red, darker on the forehead; a broad band across the crown, and a patch on each side of the occipital red spot, greenish verditer-blue, the feathers blackish at the base; a broad short black streak behind the eye; sides of the face, cheeks, chin and throat, bright pale blue.

Immature.—Patch at back of head smaller and much duller red; spots of red on the sides of the throat absent; median band on crown much more streaked with blackish; blue of throat, duller; the chin, whitish.

Soft Parts.—Iris, chestnut-brown; bill, blackish lead; the base of the upper mandible and the lower mandible beneath, whitish horn (in skin); feet, greenish lead.

Dimensions.—Total length, 8.75 to 9.25 in.; wing, 3.8 to 4.1 in.; tail, 2.7 to 2.9 in.; tarsus, 0.95 in.; bill from gape, 1.3 to 1.45 in.; culmen, 0.95 in.

Range in the Malay Peninsula.—The hills of Bandon, Nakon Sri Tammarat, and Trang in Peninsular Siam. At present not known from other localities.

Extralimital Range.—Three other races are known: the typical form, C. asiatica asiatica from the Western Himalayas to the Shan States and Burma; C. a. davisoni from Tenasserim and Western Siam, and a rather doubtful form, C. a. laurentei, from Yunnan, and possibly Tonkin.

Nidification.—Unknown, but certain to be identical with that of other species of *Cyanops*.

Habits.—So far as is known at present this barbet is confined to the higher hills of Peninsular Siam, probably not below 3000 ft. I obtained it on Kao Nawng, in Bandon, at well over 3000 ft., on low trees, in very thick but rather low jungle. Captain Pendlebury secured several specimens in similar situations on Kao Luang between 3000 ft. and the summit of the mountain (5800 ft.), while Mr Herbert's Dyak collectors obtained a pair of immature birds on the mountains near Tung Song; no others are known. The race is the southern outlier of a continental species, and is not likely to be obtained in the British portion of the Peninsula. Its habits will not differ materially from those of its near relatives, some of which are said to eat grubs and centipedes, as well as fruit and berries.

Cyanops henrici

The Yellow-crowned Barbet

On the lower surface this barbet closely resembles the preceding. It can, however, at once be recognized by its broad, golden yellow forehead, which is carried backwards on each side of the green crown. The hind neck has a narrow collar of scarlet, and the bill is entirely black in adult birds.

This barbet is a low-country bird, occurring from Penang, south to Johore, and occasionally ascends the hills to about 2300 ft. It has been found at Ginting Simpah and Ginting Bidei on the Selangor-Pahang boundary, and also on Bukit Tangga, Bukit Lantai and Bukit Tampin in Negri Sembilan. It is not, properly speaking, a member of the montane fauna, and will therefore be dealt with later.

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Chotorhea mystacophanes

The Gaudy Barbet

In this species the sexes are markedly different. The male is distinguished by its deep crimson throat, succeeded by a bluish black patch, with a crimson spot on either side. The forehead is yellow or orange-yellow, and the crown red. The remaining plumage is green. The female has the chin and throat pale yellow, some of the feathers near the bill tinged with crimson. A small spot of red at the base of the bill in front of the eye. Frontal band, greenish blue, and a triangular patch of crimson on the crown, otherwise as in the male. The altitudinal range of this species is precisely that of *C. henrici*, but its general distribution is rather different, as it does not occur south of Malacca, while it is very much commoner in the north of the Peninsula. I found it exceedingly abundant on Bukit Besar, in the Patani States, at a height of about 2500 ft.

Chotorhea chrysopogon lætus

The Malayan Gold-whiskered Barbet

Chotorhea chrysopogon lætus, Robinson and Kloss, Journ. Fed. Malay States Mus., viii., part 2, 1918, p. 141 (Negri Sembilan); id. Journ. Nat. Hist. Soc. Siam, v., 1922, p. 160.

Megalæma chrysopogon, Marshall, Mon. Capit., 1871, p. 39, pl. 18; Kelham, Ibis, 1881, p. 389.

Chotorhea chrysopogon, Shelley, Cat. Birds, Brit. Mus., xix., 1891, p. 57.

Malay Name.—Takor besar.

Description.—Sexes alike. Rictal bristles strong; nasal ones directed forwards, rather more than half the length of the bill; a group of stiff bristles at the point of the chin.

General colour green, the feathers of the back and mantle with brighter edges; tail, darker green, tinged with blue below; upper wing coverts, dark green, without pale edges; primaries, blackish, narrowly edged with green on the outer webs, these edgings becoming yellowish towards the tips. Inner aspect of the quills, dusky, with pale yellowish edges to the inner margins; the under wing coverts, axillaries, and the edge of the wing, pale smoky, washed with green; lores and region of the nostrils, crimson; a broad, hoary brown band between the eyes carried backwards as a dark brown stripe over the eyes. A large dark red patch on the hinder crown and nape, the feathers with pale blue edges and tips, producing a chequered effect. Ear coverts, brown, a streak from base of upper mandible behind the eye, paler brown; a large patch on the jaw, bright chrome-yellow, sometimes washed with orange posteriorly. Chin and throat, pale hoary brown, washed with pale violet, becoming deeper on the lower throat. Rest of the under surface, yellowish green; the thighs, brighter green, with broad grey bases to the feathers.

Immature.—Young birds, though generally duller, have the brown band

on the forehead tinged with pale yellow, and the violet wash on the throat more pronounced.

Soft Parts.—Iris, hazel; orbital skin, blackish; bill, black; the base of both mandibles, slaty grey; feet, olive-green.

Dimensions.—Total length, 10.5 to 11 in.; wing, 4.9 to 5.2 in.; tail, 3.3 to 3.5 in.; tarsus, 1.2 to 1.3 in.; bill from gape, 2.1 in.; culmen, 1.7 in.

Range in the Malay Peninsula.—From Trang and Bandon in Peninsular Siam to the southern extremity. Doubtfully on any of the islands.

Extralimital Range.—The typical form, confined to Sumatra, has the patches on the jaw paler yellow. The Bornean bird, *Ch. ch. chrysopsis* (Goffin), is rather smaller, has a brighter frontal band, and darker ear coverts.

Nidification.—Judging from the dates on which young birds, hardly able to fly, have been obtained, the breeding season in Perak is about April, but no other details are available.

Habits.—The altitudinal distribution of this bird is practically the same as that of the other jungle barbets that are not restricted to the higher mountains—*i.e.* it attains a maximum altitude of about 3000 ft.—the present species having been obtained on Bukit Kutu, Selangor, and on the hills in Negri Sembilan, and also in Peninsular Siam at about 2000 ft. It is commonest in these submontane regions, but is also found in the swampy jungles on the coast. In the Malay Peninsula it frequents fairly high trees, where it is rather hard to make out, and is usually solitary, though on occasion it may be found in fair numbers on fig-trees in fruit. Its note is a rather deliberate monosyllabic "tok" repeated ad infinitum. Jacobson records a tame specimen which reached the age of nine years, and was very aggressive, attacking ducks and other poultry.

Chotorhea rafflesii rafflesii

The Many-coloured Barbet

Recognizable by its large size; the crown deep red, bordered on each side with blue; lores and ear coverts, black, a small red spot beneath the eye; a large chrome-yellow patch behind the angle of the bill; chin and throat, brilliant cobalt-blue, with a large crimson spot on each side. Rest of the plumage, green. This handsome species, which is normally a low-country bird, spread over the whole Peninsula from Trang in Peninsular Siam to Johore, occasionally reaches an altitude of slightly over 2000 ft. in Selangor, and about the same height in Peninsular Siam. Its full description is deferred to a later volume.

Mezobucco duvauceli duvauceli

The Little Malay Barbet

Vol. I., p. 146, pl. 11 (upper figure).

The smallest of the Malay barbets, recognizable by its blue throat, with a black plastron beneath it, and by the very long nasal bristles, which extend beyond the base of the bill.

Very common in low-country and hilly jungle everywhere, and ranging up the mountains to a height of a little over 3000 ft. On Bukit Kutu, Selangor, and on Maxwell's Hill, Larut Hills, it is very abundant, but it is only found where the jungle trees are lofty and not stunted, and usually on the higher branches of these.

Psilopogon pyrolophus

The Fire-tufted Barbet

PLATE 4 (upper figure, adult; lower, young)

Psilopogon pyrolophus, Sal. Muell., Tijd. Nat. Gesch. en Phys., ii., 1835, p. 339 (Sumatra); Marshall, Mon. Capit., 1870, p. 133, pl. 53; Sharpe, P.Z.S., 1886, p. 352; Shelley, Cat. Birds, Brit. Mus., xix., 1891, p. 98; Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 180.

Malay Name. — Takor akar (= the "Climber Barbet" — probably an improvised name).

Description.—Male.—General colour, above and below, green; primaries, blackish, edged on their outer webs with green, becoming yellowish white towards the tips; inner aspect of wing, dusky; the inner webs of the primaries, yellowish, as also the axillaries and under wing coverts; tail, which is much graduated, dark green above, bluish beneath. Forehead and hind lores, black; long nasal bristles projecting forward for half the length of the bill, black, broadly tipped with dark red; behind the forehead a narrow, transverse band of hoary grey; hinder crown, nape, and a narrow band on the sides of the neck, dull brownish maroon; short silky feathers above and below the eye, pale yellowish; a tuft of elongated feathers behind the eye, pale emerald-green. Sides of the face, cheeks and ear coverts, lavender-grey; base of cheeks and chin, blackish, the latter with short bristles; throat, pale green, succeeded by a broad patch of pale yellow, carried round the sides of the neck behind the ear coverts in a narrowing whitish line; below the vellow throat a patch of blackish, with a maroon tinge; remaining lower surface, pale emerald-green.

Female.—The female differs slightly from the male in having the hind crown more sooty black, with less of a maroon tinge, but this difference is hardly perceptible, except in recently killed birds or in very fresh skins.

Soft Parts.—Iris, chocolate or chestnut, sometimes with a whitish outer ring; orbital skin, very dark olive-green; bill, apple-green, with a median vertical black bar; feet, greenish lead, yellowish green or sage-green, the soles yellowish, the claws black.

Dimensions.—Total length, 10.5 to 11.5 in.; wing, 4.6 to 4.9 in.; tail, 4.1 to 4.3 in.; tarsus, 1.25 in.; bill from gape, 1.4 in.; culmen, 1.2 in.

Note.—The bill of this species is peculiar, being compressed and narrow, the sides very flat, and the base of the upper mandible projecting over the lower as a flattened plate.

Range in the Malay Peninsula.—From the north of Perak to the south of Selangor, along the main range, and on the Larut Hills.

Extralimital Range.—The greater part of Sumatra, usually above an altitude of 3000 ft., but occasionally as low as 1500 ft.

Nidification.—Unknown.

Habits.—A very common species on the mountains of the main range and on the Larut Hills, but not as yet recorded from Gunong Tahan or from Peninsular Siam or the Colony of the Straits Settlements. It is found as low as 2000 ft., and up to about 5000 ft., but is not met with in the zone of stunted vegetation. Usually it occurs in parties of five or six, scrambling among the creepers investing the larger forest trees, with the action of a parrot, using its bill in the process; it feeds largely on the sticky fruit of a pink-flowered creeper belonging to the order Melastomaceæ, with which its plumage is frequently daubed. It is not such a noisy bird as most of its family, the note I have heard being a rather soft whistle, but in addition Jacobson credits it with a grating cry rather like that of one of the larger Cicadas.

The adult bird figured is a male from Gunong Mengkuang Lebar, 4800 ft., Selangor, March 1907; the immature bird is from Western Sumatra.