

CUCKOOS

Order COCCYGES

Vol. I., p. 132.

THIS order is not very well represented in the mountains of the Malay Peninsula by resident species which are not also common in the lowland jungle ; in the south of the Peninsula, indeed, only two species can be said not to come under this category, while one other is far commoner at moderate elevations.

There are, on the other hand, two or three species belonging to the migratory section of the family which are known to spend the winter at high elevations, or at any rate to make use of the hills as a temporary halting-place on their journeys farther east and south.

Information is much desired as to the species of these winter visitors, and the duration of their stay. They should be specially looked for in October and November, and again in March and April. The key includes all species that have been recorded from the montane region, but only those birds that are regular inhabitants of, or very frequent visitors to, the zone as defined are described in detail in this volume.

KEY TO THE MONTANE SPECIES OF CUCKOOS

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|---|--|--|
| 1 | Claw of hind toe greatly elongated,
eyelid with strong lashes | <i>Centropus sinensis bubutus</i> , p. 77 |
| | Claw of hind toe not greatly elongated,
eyelids normal | 2 |
| 2 | Tail greatly exceeding wing in length ;
sides of face bare, brightly coloured | 3 |
| | Tail not greatly exceeding wing in
length ; sides of face feathered | 6 |
| 3 | Bill, red ; under surface rufous or pearl-
grey | } <i>Zanclostomus javanicus pallidus</i> ,
p. 77 |
| | Bill, sea-green, under surface dark grey
or chestnut | 4 |
| 4 | Tail tipped with dark chestnut | } <i>Phœnicophaius curvirostris ery-</i>
<i>thrognathus</i> , p. 78 |
| | Tail tipped with white | 5 |

- | | | | |
|---|---|--|---|
| 5 | { | Larger, belly dark grey | <i>Rhopodytes tristis longicaudatus</i> , |
| | | | p. 79 |
| 6 | { | Smaller, belly maroon-red | <i>Rhopodytes sumatranus</i> , p. 80 |
| | | Plumage mainly black | <i>Surniculus lugubris</i> (?) <i>dicruroides</i> , |
| | | | p. 81 |
| 7 | { | Plumage not mainly black | 7 |
| | | Under surface without either longi-
tudinal stripes or cross-barrings in
adults | <i>Cacomantis merulinus threnodes</i> , |
| | | | p. 82 |
| 8 | { | Under surface with either longitudinal
stripes or cross-barrings | 8 |
| | | Size smaller, wing less than 6.3 in. | 9 |
| 9 | { | Size larger, wing more than 7.3 in. | <i>Hierococcyx bocki</i> , p. 83 |
| | | Longitudinally striped from chin to
vent, middle tail feathers with
regular cross-bars | <i>Hierococcyx nanus</i> , p. 82 |
| | | Belly with regular bars; middle tail
feathers in adults uniform, or nearly
so | <i>Cuculus intermedius musicus</i> , p. 85 |

Centropus sinensis bubulus

The Southern Coucal, Crow-Pheasant or Lark-heeled Cuckoo

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Head and neck all round, lower back, tail and under surface, black, with a greenish or purplish lustre. Wings, mantle and upper back, bright chestnut-bay. Total length, about 20 in. Crow-pheasants in the Malay Peninsula are found usually in waste ground or in stretches of country overgrown with coarse lalang grass (*Imperatora koenigi*). They are not therefore met with on the hills, which are covered with primary jungle. The species has, however, occurred at Ginting Bidei, Selangor, where there is a patch of coarse grass, the site of a former bungalow.

Zanclostomus javanicus pallidus

The Malayan Red-billed Malkoha

Zanclostomus javanicus pallidus, Robinson and Kloss, *Journ. Fed. Malay States Mus.*, x., 1921, p. 203 (Kedah Peak).

Zanclostomus javanicus (part), Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 380; Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 230; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 178; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iv., 1927, p. 175.

Malay Name.—Chënok api or kadok api.

Description.—*Adult.*—Sexes alike. Deep ashy grey above, paler on the

head, deepening on the wings and tail, which have an oily green gloss becoming steely blue towards the end of the tail, which is tipped with white; inner webs of primaries, dark; edge of wing, pale grey; inner aspect of quills, grey, inner webs edged with pearl-grey; under wing coverts and axillaries the same; tail with obscure cross-rays visible only in certain lights; lores and lower cheeks, pale rusty; ear coverts, grey. Beneath, throat and upper breast, rusty, lighter on the throat; abdomen and flanks, pearl-grey. Vent and under tail coverts, chestnut rufous; thighs, pale grey in front, rufous behind.

Immature.—Like the adult, but the wing coverts with paler edges.

Soft Parts.—Iris, brown or dark; orbital skin small; bill, coral-red; feet, slaty green or plumbeous.

Dimensions.—Total length, 17 to 19 in.; wing, 5·8 to 6·2 in.; tail, 10 to 11 in.; tarsus, 1·3 to 1·5 in.; bill from gape, 1·6 to 1·7 in.; culmen, 1·2 in.

Range in the Malay Peninsula.—Throughout its length. Records from Junk Zeylon, Penang and Singapore are all open to suspicion, and require verification.

Extralimital Range.—North into Tenasserim as far as Tavoy; South-West Siam. The typical bird from Java is rather darker, and may be regarded as distinct. The forms from Sumatra and Borneo, though as yet unnamed, differ somewhat from the Malay Peninsular and Javan birds.

Nidification.—Baker describes the nest and eggs taken by the late Major Moulton, near Kuchong, Sarawak, in March. The former was "a flimsy affair of grass blades and twigs placed in a thick bush in scrub jungle." The eggs were broad ellipses, dirty-white, with a calcareous deposit on the shell, measuring 1·18 by 0·93 in. and 1·12 by 0·9 in.

Habits.—Widely spread throughout the Peninsula, this species is much more of a hill bird than the other Malkoha cuckoos, and is frequently found as high as 4000 or even 5000 ft., though in the north of the Peninsula it is more numerous at lower elevations than in the south. It is very common on Kedah Peak and on Gunong Tahan—less so on the damper mountains of the main range; it is especially fond of bamboo jungle, and the drier forests in general, and climbs about the stems and branches in an awkward clumsy manner, like the other cuckoos of the group. The food is mainly insectivorous—caterpillars, stick-insects and the like—and the note, which is not often heard, is a curious clicking sound.

Phœnicophaius curvirostris erythrognathus

The Malay Chestnut-breasted Malkoha

Amongst the other local Malkohas this species can be immediately recognized by its green bill, bordered with red at the base, deep chestnut under surface and metallic green tail, with broad chestnut tip. Iris usually bluish in the male, red or orange in the female.

Perhaps the commonest of its group in low-country jungle and scrub, and

in the north of the Peninsula in orchards and gardens, but of only accidental occurrence on the mountains to the south, being recorded from Bukit Kutu, Selangor, at rather over 3000 ft. It is also common on the hills of Negri Sembilan, and at elevations up to 2500 ft. in the Patani States.

The bird will be described in full in a later volume.

Rhopodytes tristis longicaudatus

The Large Malayan Green-billed Malkoha

Phœnicophœus longicaudatus, Blyth, *Journ. Asiat. Soc. Bengal*, x., 1841, p. 923 (Moulmein).

Rhopodytes tristis (part), Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 386; Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 179; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 178.

Rhopodytes tristis longicaudatus, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iv., 1927, p. 179; Herbert, *Journ. Nat. Hist. Soc. Siam.*, vi., 1926, p. 304.

Malay Names.—Burong chēnok besar; burong kēra; burong sanok; nok ban rok (*Siamese*).

Description.—*Adult.*—Sexes alike. Head and hind neck, ashy grey, the forehead and superciliaries, whitish, with black shafts to the feathers; mantle, black, and wing coverts darker grey with a strong gloss of metallic oily green; wings, brighter metallic green; under wing coverts and axillaries, dark grey. Tail like the wings, but brighter above, the feathers with white tips of about 0·75 in. running somewhat diagonally across the feathers on the outer ones; under surface of tail, blackish, with a steely blue sheen. Lores, black. Under surface, dark grey, paler on the throat, very lightly lined on the breast with dark shaft stripes, but with no fuscous yellow tint on breast; abdomen, under tail coverts and thighs, rather darker, more uniform grey.

Immature birds.—Are extremely like the adults; the white on the forehead is not so marked and in life the naked orbits are duller red.

Soft Parts.—Iris, hazel or brown, sometimes crimson; orbital skin, rugose, lake-red to dull or deep crimson; bill, apple-green, the nostrils sometimes red; feet, plumbeous or greenish lead, the toes sometimes sooty or brownish.

Dimensions.—Total length, 19 to 24 in.; wing, 5·75 to 6·5 in.; tail, 14 to 17·5 in.; tarsus, 1·45 to 1·6 in.; bill from gape, 1·55 to 1·7 in.; culmen, 1·2 to 1·3 in.

Range in the Malay Peninsula.—From the southern boundary to northern Selangor; only at high elevations in the southern part of its range; island of Koh Samui in the Bandon Bight.

Extralimital Range.—The greater part of Burma and Tenasserim, the whole of Siam and French Indo-China and Pulau Condor. The form from Hainan, *R. t. hainanus*, is only doubtfully distinct. Other races occur in the Himalayas and Bengal, while the race inhabiting Sumatra, though markedly distinct, probably stands in subspecific relationship only to the continental birds.

Nidification.—Not known from the Malay Peninsula. In Central Siam

Herbert (*loc. cit.*) states that the bird breeds in secondary jungle from the beginning of April to the middle of August, though generally in May. The nest is placed in a small tree, about eight feet from the ground, and consists of a small thin platform of sticks which looks most inadequate for the size of the bird. The nest is always lined with a few fresh green leaves, replaced at intervals. Three eggs are laid, or sometimes two; they are cylindrical ovals, with both ends alike, pure white when laid, and without gloss, but, as time goes on, become stained, and glazed with the staining. The shell, though smooth to the touch, looks somewhat chalky, and is frequently rather pimply. The measurements average 1.29 by 1.01 in.

Habits.—In the north of the Peninsula this Malkoha is common in the low country, usually in secondary jungle, especially where there is much bamboo, but frequently in gardens and orchards and at the edge of the paddy-fields. In the Federated Malay States it is, however, found only at some considerable elevation in the mountains, and is usually met with among bamboos and rotan. On Cameron's Highlands and on Fraser's Hill it is fairly numerous in such situations, but is hardly known from other localities and does not occur at all in districts south of Selangor. The habits are those of all Malkohas. The birds are found in pairs among the lower branches of trees and in creepers, climbing more like a squirrel than a bird, and flying very awkwardly and slowly. I have never seen them on the ground, nor have I ever heard them utter any sound, though Baker says they have a soft chuckling note. The food seems to be almost entirely insectivorous, chiefly grasshoppers and stick-insects, though some authorities state that the bird is partly frugivorous.

Rhopodytes sumatranus

The Rufous-bellied Malkoha

Cuculus sumatranus, Raffles, *Trans. Linn. Soc.*, xiii., 1822, p. 287 (Sumatra).

Rhopodytes sumatranus, Kelham, *Ibis*, 1881, p. 393; Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 391; Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 233; Hartert, *Nov. Zool.*, ix., 1902, p. 545; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 178; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iv., 1927, p. 180.

Malay Name.—Burong chěnok kechil.

Description.—*Adult.*—Sexes alike. Head and neck, dark grey, the forehead with dark shafts to the feathers, passing gradually into the colour of the upper parts, including wings and tail, which is oily metallic green, with steely blue reflections most pronounced on wings and end of tail, which has narrow white tips; lores, a patch in front of the eye, and a very narrow, superciliary stripe, black; beneath, dark grey, paler on the chin and throat, middle of the belly, dark maroon, becoming more chestnut on the vent and under tail coverts; thighs, deep greyish black.

Immature.—Not very different from the adult; mantle and wing coverts with rusty brown edges.

Soft Parts.—Iris, blue, inner ring, white or pearl; orbital skin, dark orange, posterior portion, crimson; bill, sea-green; feet, lead-colour, soles, yellow.

Dimensions.—Total length, 15 to 17 in.; wing, 5·8 to 6·2 in.; tail, 8 to 9 in.; tarsus, 1·4 in.; bill from gape, 1·5 to 1·6 in.; culmen, 1·3 in.

Range in the Malay Peninsula.—The whole length of the Malay Peninsula and Singapore, but not recorded from any of the other islands except possibly Junk Zeylon.

Extralimital Range.—As far north as Mergui in Tenasserim, Sumatra and Borneo, but not Java as recorded by Shelley.

Nidification.—Quite unknown.

Habits.—In the Malay Peninsula almost entirely confined to dense, rather damp jungle, though I once shot a pair in quite open country on the coast of Peninsular Siam; but of very wide range in altitude, being occasionally found in the mangrove swamps and as high as 4000 ft. on Gunong Tahan, though attaining lesser elevations on the main range and in Larut. Not very common anywhere.

Generally found in undergrowth and on low trees and creepers, almost always in pairs, climbing about in a very awkward manner, and taking to flight with great reluctance; when forced to do so, they plane into the nearest tree, with the tail elevated to a slight angle above the back. The diet is a mixed one, of berries, seeds, grasshoppers and caterpillars. The bird is a very silent one, and I have never heard it utter a sound. Davison says it has a peculiar cat-like chuckle, like that of *R. t. longicaudatus*.

Surniculus lugubris (?) *dicruroides*

The Indian Black Drongo-Cuckoo

Pseudornis dicruroides, Hodgs., *Journ. Asiat. Soc. Bengal.* viii., 1839, p. 136, pl. (Nepal).

Surniculus lugubris, Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 176.

Surniculus lugubris dicruroides, Stresemann, *Nov. Zool.*, xx., 1913, p. 341; Robinson, *Journ. Fed. Malay States Mus.*, vii., 1917, p. 156; Kloss, *Ibis*, 1918, p. 97; Stuart Baker, *Nov. Zool.*, xxvi., 1919, p. 294; id. *Faun. Brit. Ind., Birds* (2nd ed.), iv., 1927, p. 165; Robinson, *Birds Malay Penins.*, i., 1927, p. 142.

Surniculus lugubris massorhinus, Oberholser, *Journ. Wash. Acad. Sci.*, 14, 1924, p. 300 (Siak River, East Sumatra).

Malay Name.—None distinct from the small black drongos or king-crows.

Description.—Except in size, this race differs from the lowland form, which has already been described, only in being a rather greyer, more slaty black beneath.

Soft Parts.—As in *S. l. brachyurus*.

Dimensions.—The present bird is larger than *S. l. brachyurus*; wing never less than 5·2 in., sometimes as much as 5·6 in. Other dimensions relatively greater and the tail rather more forked.

Range in the Malay Peninsula.—Along the coasts in winter, certainly as far south as Klang in Selangor ; throughout the northern part of the Peninsula and breeding in the higher mountains in the south.

Extralimital Range.—The Himalayas, east to Assam, south to Manipur, the Shan States and Tenasserim ; French Indo-China, South China and Hainan. In winter on the east coast of Sumatra, the Natuna Islands and Java (?).

Nidification.—Nestlings have been found on Fraser's Hill, Semangko Pass, on 24th February, in the nest of a flycatcher (*Cryptolopha butleri*), attended by both the foster-parents.

Habits.—Similar to those of the smaller low-country bird ; the present race has been recorded from high elevations, in the southern part of the Malay Peninsula, only on a single occasion, as noted above, but is apparently numerous on Kao Ram, in Peninsular Siam, between 2000 and 3000 ft., where Mr Pendlebury collected several specimens at the end of February 1922.

Note.—There is much to be learned about the races of this common cuckoo and their distribution ; it would appear that there are two forms, a larger and a smaller one, of which the latter, differing slightly according to locality in the various land masses of Malaya, is sedentary, while the larger form seems to be a very wandering bird. It is to be hoped, therefore, that persons interested in birds in the Malay Peninsula will take careful notes—if possible accompanied by skins—of the dates when and localities in which this species is observed, more especially in the higher hills. It is quite possible that the breeding birds in the mountains of the Peninsula represent a different race from that which is so common on the islands of the Straits of Malacca, but only a considerable series of specimens can settle the point.

Cacomantis merulinus threnodes

The Brain-fever Bird

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Length about 8·5 in. ; tail longer than wing ; head, neck and throat, grey ; back, mantle and wings, bronzy brown ; under surface, pale rusty ; tail feathers blackish, tipped with white, all except the central pair obliquely barred with white.

Only occasionally met with on the lower slopes of the hills, but never on the higher mountains.

Hierococcyx nanus

The Small Hawk-Cuckoo

Hierococcyx nanus, Hume, *Stray. Feath.*, v., 1877, p. 490 (Bankasun, South Tenasserim) ; Müller, *Orn. Ins. Salanga*, p. 53 ; id. *Journ. für Orn.*, 1882, p. 405 ; Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 238 ; Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 215 ; Stuart Baker, *Faun. Brit. Ind., Birds*, (2nd ed.), iv., 1927, p. 153.

Hierococcyx fugax nanus, Stuart Baker, *Journ. Nat. Hist. Soc. Siam*, iii., 1919, p. 438.

Malay Name.—The name for cuckoos of this genus, also given to the female of *Eudynamis*, is sewah tēkukor or, more doubtfully, lang malam.

Description.—*Adult.*—Sexes alike. Crown, dark grey, separated from the mantle and back by an ill-defined collar of rufous and black, the rufous more in evidence on the sides of the neck; upper parts, earthy brown, the feathers with dark edges, except on the rump, where they are whitish, and with a suggestion of paler cross-bars, more pronounced on the wing coverts. Primaries, dark brown, with pale rufous bars on the outer webs, except towards the tip, and with broader bars, becoming whitish on the margin on the inner webs; on the inner aspect, these bars become broad wedges, nearly confluent on the margins; under wing coverts and axillaries, pale creamy fawn. Tail, greyish brown, with five bars of blackish, becoming successively broader towards the tip, their lower margins concave, a narrow, dirty-white tip; tail, beneath, barred with black and pale fawn, the latter broader; a whitish loreal spot; feathers round the eye, blackish grey, continued downwards as a broad stripe bordering the throat; beneath the eye, a broad greyish white spot surrounded by dark grey. Under surface, whitish, with broad, blackish brown shaft stripes very clearly defined; under tail coverts very lightly striped.

Immature.—The crown, browner, not so grey and less defined from the back; the lores more mottled and with indications of a white superciliary stripe.

Soft Parts.—Iris, very dark brown; orbital skin and gape, pale chrome; upper mandible, black, lower, greenish slate; feet, yellow, claws, wax-yellow.

Dimensions.—Total length, about 11 in.; wing, 5'6 to 6 in.; tail, 5'9 to 6'3 in.; tarsus, 0'8 in.; bill from gape, 1'25 in.; culmen, 0'75 to 0'8 in.

Range in the Malay Peninsula.—Known only from a very few specimens from the Island of Junk Zeylon; the foot of Kedah Peak in December; Ginting Bidei, Selangor, in September; and the Krau river, Western Pahang, in October.

Extralimital Range.—Tenasserim to the extreme south, including the mountains of Muleyit and Nwalabo; South-West Siam and the mountains of North-West Borneo—birds from which island seem to differ in no way from Tenasserim and Malay Peninsular specimens.

Nidification.—Quite unknown.

Habits.—Little is known. The bird from Kedah was shot in secondary forest, the other Malayan birds in dense jungle. Of Bornean birds Everett and Hose state that the note is "*kang koh*"—birds having been shot uttering this call.

Hierococcyx bocki

Wardlaw Ramsay's Hawk-Cuckoo

Hierococcyx bocki, Wardlaw Ramsay, *Ibis*, 1886, pp. 157-160 (West Sumatra); Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 234; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 177.

Hierococcyx fugax, Sharpe, *P.Z.S.*, 1887, p. 442 (?).

Malay Name.—*Cf.* under *Hierococcyx nanus*.

Description.—*Adult.*—Head above, dark grey; rest of upper surface, including wing coverts, dark brown, the tail coverts with lighter tips; quills, brown, with wedge-shaped bars on inner webs not reaching the shaft. Tail, brown above, with dark bars with paler terminal edgings, the subterminal dark bar very broad; inferior aspect, white, with black bars. Beneath, chin and throat, dark grey; fore breast, rufous chestnut; rest of under surface, white, with regular dark, bronzy brown bars, the bars faintly edged with rufous; flanks tinged with rufous; under tail coverts, pure white.

Immature.—An immature bird (that from Mengkuang Lebar) differs from the adult in having the upper surface, except the head, more brownish; the mantle and wing coverts with fairly pronounced pale bars; below, with the point of the chin greyish black; throat and upper breast, whitish, with black shaft stripes, the feathers only lightly edged with rufous brown; rest of the under surface strongly cross-banded with white and blackish brown, the dark bars more dusky on the flanks.

Soft Parts.—“Bill, yellow at base, greenish yellow at tip; culmen, dark brown; feet, yellow; iris, dark brown” (*Whitehead*).

Dimensions.—Total length, about 12·5 in.; wing, 7·3 to 7·6 in.; tail, 7 to 7·5 in.; tarsus, 0·9 in.; bill from gape, 1·1 in.; culmen, 0·82 in.

Range in the Malay Peninsula.—Probably fairly widely distributed on the higher mountains, but at present known from only two specimens—one collected by Mr L. Wray on the Larut Hills and another by Mr E. Seimund, a not very adult male, shot on 27th March 1907 on Gunong Mengkuang Lebar, Selangor, at a height of 4800 ft.

Extralimital Range.—Mountains of West Sumatra and Kina Balu, North-West Borneo, at about 4000 ft.

Nidification.—Quite unknown.

Habits.—Of this rare cuckoo, besides the above-mentioned, very few specimens are on record: the original type collected by Carl Bock on Mount Sago, West Sumatra; two rather young females from the Bencoolen Residency, West Sumatra, at about 3500 ft. elevation, in July, by Mr E. Jacobson; and four from Kina Balu, at about 4000 ft., collected by Mr Whitehead in March and April, who remarks that it was evidently the pairing season in March, as they were then very noisy, whistling a good deal in the tops of the trees, especially towards evening.

The species should probably be regarded as the resident form of *Hierococcyx sparveroides*, the large hawk-cuckoo, a breeding bird in the Himalayas, which is not uncommon in Malaya in the winter months, as is also another of the genus, *H. fugax*, and a migratory form thereof, *H. f. niscicolor*, none of which are known from the higher mountains.

*Cuculus intermedius musicus***The Indo-Malayan Cuckoo**

Cuculus musicus, Ljungh, *Konigl. Vet-Akad. Handl.*, xxiv., 1804, p. 309, t. vi. (Batavia, Java).

Cuculus poliocephalus (part), Shelley, *Cat. Birds, Brit. Mus.*, xix., 1891, p. 256; Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 208; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 177.

Cuculus intermedius insulindæ, Hartert, *Vög. Palaarkt. Faun.*, ii., 1912, p. 952.

Malay Name.—Unknown.

Description.—*Adult male.*—Deep steel-grey above, including the outer aspect of the wings, which are a little more brownish; primaries, broadly barred with clear white on the inner webs, except at the tips; the secondaries unbarred, but broadly white at the bases; under wing coverts, buffy white, flecked with black; the axillaries regularly barred with black-and-white; centre pair of tail feathers, dark grey, blacker towards the tip, and with a narrow white tip and discontinuous white markings on the shaft; remaining feathers browner, but with the darker subterminal bar and narrow white tips, with larger, quadrate white spots on the shafts, and with both webs flecked with white—in some cases continuous across the feathers—the white markings outlined with blacker edges. Sides of the head and throat, pale uniform grey; rest of under surface, white, tinged with buff, regularly barred with deep black; lower abdomen, more buffy, as also the under tail coverts, on which the black bars are more irregular.

Adult female.—Lighter grey above, and with the throat and breast more clouded with rufous than in the male.

Immature.—Have the whole upper surface, including the tail, barred with rufous and whitish; the greater upper wing coverts broadly tipped with white. The primaries are barred on both webs, and the barring on the under surface is continued to the chin.

Nestling.—Blackish above, all the feathers with broad white edges; the whole lower surface barred black-and-white; the primaries and tail feathers toothed with rufous buff on the outer webs.

Soft Parts.—Iris, hazel, brown or orange; orbits, sage; eye wattle, chrome or lemon; bill, blackish, greenish yellow at gape and on edges of mandibles; feet, pale chrome or Naples yellow, claws, yellowish horn.

Dimensions.—Total length, 10 to 10.5 in.; wing, 5.5 to 6 in.; tail, 5.6 in.; tarsus, 0.7 in.; bill from gape, 1 in.; culmen, 0.75 in.

Range in the Malay Peninsula.—Not well defined. Mountains of Selangor and Perak (?) and Gunong Tahan in Pahang.

Extralimital Range.—Sumatra, Borneo and Java, east to South Flores.

Nidification.—Unknown. Will very likely be found to lay its eggs in the nests of species of *Cryptolopha*.

Habits.—Very little is known about the habits of this rare cuckoo, either

in the Malay Peninsula or elsewhere. At one time I considered that it was a migratory species with us, but this view is probably erroneous, as quite young specimens have been obtained at the end of July. It is known from Fraser's Hill, and from the high mountains to the north of Gintong Simpah (Gunong Ulu Kali and Mengkuang Lebar).

The note is somewhat like that of the English cuckoo, but harsher and more prolonged, frequently with the addition of two notes on a falling scale—we frequently heard it on Korinchi Peak, in West Sumatra, at heights of over 7000 ft. On Kina Balu, Whitehead found the bird at 9000 ft., and describes the call as exactly like that of a barbet (*Cyanops pulcherrima*).

Note.—It is possible that other species of the genus *Cuculus* may be met with during the winter months in the mountains of the Malay Peninsula, though this is not likely. Their description will be deferred until the final volume of this work.