

## PERCHING BIRDS

### *Order* PASSERIFORMES

Vol. I., p. 166; Vol. II., p. 122.

THE perching birds form by far the largest avian order and include, at least, two-thirds of all known species of birds. Many of the most familiar birds belong to the order, including the well-known song birds, the thrushes, warblers, finches, wagtails, swallows, tits and a host of others. The families into which the order is divided are by no means well marked and contain certain genera and aberrant species which combine the characters of two or more families. In the present scheme of classification the perching birds are arranged on a balance of characters, and it is generally supposed that the order is young in terms of geological time and that few of the groups or "expression points" have had time to become well differentiated. The trivial name of the order is derived from the fact that the feet, with three toes pointing to the front and one to the rear, are admirably suited for perching.

The many members of the order, for the most part small birds, are linked together by certain structural characters, the most important of which are probably the arrangement of certain tendons in the foot and the character of the bony palate in the skull.

The major divisions within the order are largely based on anatomical characters, a detailed discussion of which is certainly not within the province of a book of the present kind. It is sufficient to say that the organ of voice (*syrinx*) is here very important.

Evolutionists consider that the *Passeriformes* include the most highly developed of all birds. They are, as it were, at the top of the avian tree or, as it can be expressed in another manner, the most remote from the reptile-like ancestors of birds.

The following passerine families occur in the Malay Peninsula: Pittas (*Pittidæ*); Swallows (*Hirundinidæ*); Flycatchers (*Muscicapidæ*); Cuckoo-Shrikes (*Campophagidæ*); Bulbuls (*Pycnonotidæ*); Leaf-Birds (*Ægithinidæ*); Babblers (*Timaliidæ*); Wrens (*Troglodytidæ*); Thrushes and their allies (*Turdidæ*); Warblers (*Sylviidæ*); Shrikes (*Laniidæ*); Tits (*Paridæ*); Nuthatches (*Sittidæ*); Ruby Cheeks (*Chalcoptariidæ*); White-eyes (*Zosteropidæ*); Flower-peckers (*Dicaeidæ*); Sunbirds (*Nectariniidæ*); Wagtails and Pipits (*Motacillidæ*); Finches and Buntings (*Fringillidæ*); Weaver-Finches

(*Ploceidæ*); Starlings (*Sturnidæ*); Tree-Starlings (*Graculidæ*); Fairy Blue Birds (*Irenidæ*); Orioles (*Oriolidæ*); Drongos (*Dicruridæ*); and Crows (*Corvidæ*).

Representatives of all these families are found in the lowlands of the Peninsula with the sole exception of the wrens, which are purely mountain birds in Malaya.

### Family PITTIDÆ

#### Pittas or Ground-Thrushes

Vol. I., p. 167; Vol. II., p. 123.

PITTAS, or ant-thrushes as they are sometimes called, are found in Africa and thence throughout the Oriental Region to Australia and north to China and Japan. They are mostly birds of very brilliant plumage, normally found in deep forest and difficult of observation on account of their terrestrial habits. They are shy in disposition, and when disturbed hasten off through the undergrowth with great speed, trusting largely to their legs as a means of escape. They are plump little birds, generally about thrush-size, with longish legs and very short tails. The nests are large balls of grass and leaves, etc., placed on or near the ground, and the eggs are spotted and heavily marked.

Seven species are found in the Peninsula, all lowland birds.

#### KEY TO THE MALAYAN PITTAS

- |   |   |  |  |
|---|---|--|--|
| 1 | { | Partridge-size: back, blue; crown, black (male); back and crown, brown; breast unbarred (female) . | <i>Pitta cærulea cærulea</i> , p. 195    |
|   |   | Thrush-size: colours never as above  | 2  |
| 2 | { | Crown, bright red . . . . .  | <i>Pitta granatina coccinea</i> , p. 199 |
|   |   | Crown, bright blue . . . . .   | <i>Pitta gurneyi</i> (male), p. 202      |
|   |   | Crown, black, bordered with fiery orange . . . . .   | <i>Pitta guajana irena</i> , p. 200      |
| 3 | { | Crown, brownish (pale buff to deep chestnut) . . . . .   | 3  |
|   |   | Back, pale brown . . . . .   | <i>Pitta gurneyi</i> (female), p. 202    |
| 4 | { | Back, green . . . . .  | 4  |
|   |   | Breast, green . . . . .  | <i>Pitta sordida cucullata</i> , p. 199  |
| 5 | { | Breast, tawny-buff . . . . .   | 5  |
|   |   | Bill larger (about 1.5 in. from gape); no marked coronal patch; chin, white . . . . .              | <i>Pitta megarhyncha</i> , p. 197        |
| 5 | { | Bill smaller (about 1.3 in. from gape); a broad, median coronal stripe; chin, black . . . . .      | <i>Pitta moluccensis</i> , p. 196        |

*Pitta cærulea cærulea*

## The Giant Pitta

*Myiothera cærulea* Raffles, *Trans. Linn. Soc.*, xiii., 1822, p. 301 (Sumatra).

*Pitta cærulea*, Sclater, *Cat. Birds, Brit. Mus.*, xiv., 1888, p. 416; Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 390.

*Pitta cærulea cærulea*, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 220; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 447.

**Malay Name.**—Burong pachat (generic).

**Description.**—A very large species with the bulk of a partridge. Male, bright blue above, fulvous below; crown, black. Female, brown with a blue tail.

*Adult male.*—Forehead, fore part of the crown, lores, ear coverts, sides of neck, and a broad supercilium extending as far back as the mantle, buffy grey, the feathers narrowly edged with black, most noticeably on the top of the head, where there are also subterminal and other concealed black bands on the feathers, the whole with a faint olive sheen. Chin and throat, whitish buff, the lower throat washed with rich brownish buff. Crown and nape, black, the nape sending off a narrow black collar round the neck, which continues, though broken, across the lower throat where the feathers are tipped with brownish buff. A broad black line runs back from the eye but does not meet the black collar. Remaining upper parts, including wing coverts, inner secondaries and tail, bright, pale, glistening blue. Primary coverts and remaining wing quills, dull black, tipped with blue, increasingly inwards. The outer webs of the secondaries mostly blue. Under parts, buff, richest on the abdomen, dullest on the breast; the breast, especially on the sides, washed with olive, sometimes only noticeable in certain lights. Under tail coverts sometimes tinged with blue. Under wing coverts mostly black; axillaries mostly buff; edge of wing, mixed black and buff.

*Adult female.*—Quite different. Crown, buff, the feathers narrowly margined with black; mantle, back and scapulars, chestnut-brown, turning to brown, with a tinge of olive, on the wings. Rump, upper tail coverts and tail, blue. Under parts as in the male, but richer buff and without the olive wash on the breast.

*Immature.*—Head all round and hinder neck, yellowish buff fading to white on the throat, the feathers on the top of the head narrowly edged with blackish. Tail quills, and wing quills externally, blue. Remaining upper parts, dull brownish black. Breast, brownish black, becoming browner on the abdomen and turning to buff on the centre of the abdomen, and with narrow buff fringes to many of the feathers of the darker parts.

**Soft Parts.**—*Male*: iris, grey; bill, black; feet, pale grey-brown. *Female*: iris, dark hazel; bill, black, whitish horn at base and tip; feet, dull lavender (*Robinson and Kloss*).

**Dimensions.**—Total length, about 10.4 to 11 in.; tail, 2.3 to 2.6 in.; wing, 5.8 to 6.1 in.; tarsus, 2.15 to 2.3 in.; bill from gape, 1.6 in.

**Range in the Malay Peninsula.**—From the northern limit at the Isthmus of Kra down the Peninsula as far south as Malacca.

**Extralimital Range.**—On the Burmese side of the Peninsula north to Mt Nwalabo near Tavoy, but on the Siamese side only known from as far north as Maprit. Sumatra. Another subspecies in Borneo differs only in that the female is slightly richer brown on the under parts, crown and hind neck and the black on the crown consists of black edgings to the feathers instead of black bars.

**Nidification.**—Unknown. A half-grown nestling was obtained in Perlis early in November.

**Habits.**—Very little information is available about this large pitta. Like its relatives it is, of course, purely a ground-bird, frequenting the thick lowland forests. It seems to prefer the low, inland, evergreen, rather swampy jungles. Judging from the few specimens obtained in recent years, it is either very rare in most parts of its range or difficult to secure on account of its shy, retiring habits. Trade skins of "Malacca" make are not rare in collections, but in our experience the bird is very rare in the Malay States and commoner in Peninsular Siam—that is, nearer the northern limit of its range. Specimens have actually been obtained at Tasan, Chumporn, at the Isthmus of Kra; in the interior of the Siamese state of Trang, where it seems not uncommon; in the small Malay state of Perlis lying to the north of and adjacent to Kedah; in the coastal province of Larut, Perak; near the Krau river in Western Pahang, and by Davison's collectors in Malacca territory. Dyak collectors attached to the Malayan museums have described it as much like other pittas in its habits, but more likely to fly. Davison writes: "They are extremely shy, and not at all like the other *Pittas*. Directly they catch sight of you they rise, flying low but rapidly, and not alighting under 200 or 300 yards, when, of course, in the dense forest, where alone they occur, all trace of them is lost. They doubtless must call, but I have never heard their note to distinguish it. My specimens had fed entirely on large black ants."

One of our specimens collected at Tasan was eating a small snake when shot. As in the case of some other pittas, there is a suggestion of local movement, or partial migration, about this species although it is clear that the bird breeds in Perlis. Some birds, at least, may go to and fro on the monsoons, going north in the spring and south in the autumn. Davison believed that some specimens he obtained in the extreme south of Tenasserim in March had only just arrived in the district. Occasionally this pitta is caught in traps set for ground-mammals.

### *Pitta moluccensis*

#### The Lesser Blue-winged Pitta

Vol. I., p. 167, pl. 14.

The sexes are alike. Top of the head, pale brown with a black patch on the crown; sides of the head and the nape, black; back, green; rump and wing coverts, bright glistening blue; throat, white; under parts, tawny-buff

with the centre of the abdomen and under tail coverts bright red. A large white patch on the wing quills. Chin, black.

Total length, about 8 in.; wing, 4.8 in.; bill from gape about 1.3 in.

This pitta has been found nesting in Peninsular Siam, but it is probably only a winter visitor to the southern parts of the Malay Peninsula. In the autumn it arrives in great numbers from the north, and from October onwards it is very common as a bird of passage on the small islands in the Straits of Malacca. On the mainland it turns up in low-country forest of most kinds, and specimens have also been collected in secondary growth and in large gardens.

### *Pitta megarhyncha*

#### The Larger Blue-winged Pitta

*Pitta megarhyncha* Schlegel, *Vog. Ned. Ind.*, 1863, *Pitta*, p. xi., pl. 4, fig. 2 (Banka); Sclater, *Cat. Birds, Brit. Mus.*, xiv., 1888, p. 421; Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 393; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), ii., 1890, p. 285, footnote; Oates, *Cat. Birds' Eggs, Brit. Mus.*, iii., 1903, p. 226; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 221; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 452.

**Malay Name.**—Burong pachat (generic).

**Description.**—Extremely like the lesser blue-winged pitta (*Pitta moluccensis*) described in Vol. I., p. 167, but the bill much larger. The upper parts slightly darker and less bright green. Top of the head darker and the coronal stripe absent or obsolete. The point of the chin is white, not black.

This is a short-tailed, long-legged ground-bird, with the upper parts green, the under parts pale fawn, the rump and wing coverts bright blue, and the centre of the abdomen and under tail coverts bright red.

**Adult.**—Sexes alike. Top of the head, dull brown; a thin, indistinct, blackish stripe runs down the centre of the crown but is occasionally absent; supercilium and the edge of the hind part of the crown narrowly buff. Lores, sides of the head and nape, black, the black area forming a continuous band encircling the top of the head. Chin, throat and sides of the neck, white, tinged with buff on the neck. Centre of the abdomen, lower flanks and under tail coverts, crimson; remainder of under parts, ochreous buff, washed with brown on the sides of the breast and flanks. Mantle, back and scapulars, dark oily green; rump, bright shining blue; upper tail coverts and tail, black, the tail tipped with peacock-blue. Lesser wing coverts, bright shining blue; bastard wing and primary coverts, black; greater wing coverts, green, tinged with blue at the tips; primaries, black, with a median patch of white increasing in size inwards; secondaries, black, edged with blue-green on the outer webs; inner secondaries, dark oily green on the exposed portions. Edge of wing, under wing coverts and axillaries, black.

**Immature.**—General appearance as in the adult but much duller. Wing coverts green, not bright blue; top of the head spotted with buff.

**Soft Parts.**—Iris, brown; edge of eyelids, black; bill, black; feet, fleshy to pale grey.

**Dimensions.**—Total length, 7.9 to 8.8 in.; tail, 1.5 to 1.6 in.; wing, 4.6 to 4.75 in.; tarsus, 1.4 to 1.5 in.; bill from gape, 1.45 to 1.6 in.

**Range in the Malay Peninsula.**—The west coast of the Peninsula from north to south, including the islands of Junk Zeylon, Terutau, Langkawi, Singapore and the islets near Singapore. No formal record from the east coast.

**Extralimital Range.**—Sumatra; the islands of the Rhio Archipelago and Banka.

**Nidification.**—This pitta breeds in the mangroves lining the shores of creeks on Singapore Island and of the tiny islands near Singapore, including Pulau Ubin in the Straits of Johore. I have seen eggs in the middle of May and juveniles at the beginning of June.

A nest found by one of my collectors on 13th May on Pulau Ayer Merbau, near Singapore, was described as a ball-like nest of grass on the ground in thick secondary forest backing the mangrove. It contained three eggs, slightly glossy and rounded ovals in shape, one of which measures 1.25 by 0.95 in. Colour, dull white, faintly creamy, with underlying lilac-grey spots and copious, evenly distributed surface-markings of pale brown, small blotches and short irregular lines, and darker brown small spots. Two of the eggs were broken, but they were certainly rounder and smaller than that described above. The species is also known to breed on Junk Zeylon, where Darling obtained an oviduct egg on 17th April.

**Habits.**—According to my experience this pitta is invariably associated with the mangrove belt, and I have no record of its occurrence on the east coast of the Peninsula, where much of the coast is sandy. It is by no means a common bird and is always very local in distribution. There is a small resident population in the mangroves lining the Straits of Johore and it is not uncommon on the small islands near Singapore. It also occurs on the main island of Singapore, although the development of the Naval Base and other warlike projects has destroyed much country eminently suited to its requirements. The favourite haunts are the mangrove-lined banks and adjacent mud-flats of the tiny, tidal creeks running inland from the open sea or larger creeks. Here the birds may be seen alone, in pairs, or in widely scattered family parties actually on the mud, or perched on the aerial roots of the *Rhizophora* a foot or so above the mud, as one pushes down the narrow waterway in a flat-bottomed boat. They are very shy and when disturbed escape by a series of leaps, or long hops, through the maze of mangrove roots. I have no evidence suggesting that this pitta is partially migratory in the Malay Peninsula, and it has never been taken with other species of the genus in the migratory stream that winds south down the Straits of Malacca in autumn. On the other hand, Hume and Davison regarded it, with *P. moluccensis*, as a rare "seasonal" visitor to the southern and central parts of Tenasserim, where Davison records that it frequents "most commonly thin tree jungle, where there is not much underwood, and the mangrove swamps,

but they [*i.e.* the present species and *P. moluccensis*] also occur abundantly in gardens and plantations. They both have a fine clear double note, which may constantly be heard in the morning and evening wherever they occur. They are decidedly noisy and often call all day, and on moonlight nights a great part of the night also."

*Pitta sordida cucullata*

**The Green-breasted Pitta**

Vol. I., p. 169.

The sexes are alike. Top of the head, chestnut-brown; remainder of the head and neck, black; rump, bright blue; abdomen and under tail coverts, bright red; tail, black, tipped with blue; wing quills, black, patched with white; remainder of the plumage, green.

Total length, about 7 in.; wing, 4.4 in.

This pitta is not quite so common in the Malay Peninsula as *Pitta moluccensis*, and it is more addicted to the heavy forest, being found far less frequently in open country. As in the case of *P. moluccensis*, large numbers of birds occur as migrants in the winter, but there also seems to be a resident population although the nest has not yet been found locally.

*Pitta granatina coccinea*

**The Red-headed Pitta**

*Pitta coccinea* Eyton, *Proc. Zool. Soc.*, 1839, p. 104 (Malacca); Sclater, *Cat. Birds, Brit. Mus.*, xiv., 1888, p. 431; Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 394.

*Pitta granatina coccinea*, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 220; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 454.

**Malay Name.**—Burong pachat (generic).

**Description.**—Crown and abdomen, crimson; upper parts, blue; breast, purple.

**Adult.**—Sexes alike. Forehead, lores, sides of the head and a band above the eye, velvety black; crown, bright crimson; a bright blue stripe on either side of the hinder crown; chin and upper throat, rufous, the feathers margined with black; lower throat, fore neck and sides of neck, dull black, the feathers tipped with purple; breast, dark purple, the bases of the feathers black, the feathers on the lower breast tipped with crimson. Abdomen, flanks and under tail coverts, crimson, darker than the crown; thighs, blackish, spotted with crimson. Upper parts, including tail and exposed parts of the folded wing, dark purplish blue indistinctly streaked on the mantle and back with brighter purple; a broad band of pale bright blue across the wing coverts; primaries and concealed parts of the other wing quills, black, the innermost primaries faintly blue at the tips; edge of wing, dark blue; under wing coverts, black.

*Immature*.—I have seen no very young birds, but according to Mr Stuart Baker the *nestling* is "all brown, the crown rufescent, and the lores, supercilium and sides of the head, blackish; the under parts are like the crown, paling on the abdomen, vent and under tail coverts to pinkish brown; the visible portions of the wings and tail are suffused with dull, dark blue."

**Soft Parts**.—Iris, brown; bill, black; feet, grey. According to Davison, a young bird had the gape and spots on the bases and at the tips of both mandibles, orange-vermilion. These spots are not present in the adult.

**Dimensions**.—Total length, about 7 in.; tail, 1.4 to 1.5 in.; wing, 3.5 to 3.6 in.; tarsus, 1.5 to 1.6 in.; bill from gape, 1.05 to 1.2 in.

**Range in the Malay Peninsula**.—Both sides of the Peninsula from Parit, in Perak, south to Johore. Singapore Island.

**Extralimital Range**.—The species has been recorded from Mt Nwalabo at about the latitude of Tavoy in Tenasserim, but it remains unknown from Peninsular Siam. There is, therefore, a large gap in the known range. Sumatra. The typical race is Bornean.

**Nidification**.—Unknown.

**Habits**.—This beautiful pitta is a not uncommon resident in the low-country, swamp jungle of inland localities, and a fair number of specimens have been obtained in all the Federated Malay States, Malacca and Johore. Davison also got it in Singapore Island, where I feel almost certain that it is now extinct. It seems never to ascend the hills and also to dislike the drier areas of low-country jungle. Nevertheless, no specimen has yet been taken in mangrove.

### *Pitta guajana irena*

#### The Banded Pitta

PLATE 8

*Pitta irena* Temminck, *Pl. Col.*, text opposite pl. 591, 1836 (Sumatra).

*Eucichla boschi*, Sclater, *Cat. Birds, Brit. Mus.*, xiv., 1888, p. 447.

*Eucichla cyanura irena*, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 223.

**Malay Name**.—Burong pachat (generic).

**Description**.—Upper parts, brown; tail, blue; nape, bright orange; throat, white; the male has the remaining under parts dark blue, banded with orange on the sides of the breast; in the female the under parts are narrowly banded with pale brown and black.

*Adult male*.—Forehead and crown, black, the coronal patch thus formed completely surrounded by the broad united superciliaries, which are rich yellow before and above the eye and deep orange on the nape. Lores, sides of the head and a collar across the hind neck, black, forming another unbroken band. Mantle, back, scapulars and rump, chestnut-brown; upper tail coverts and tail, blue, the concealed parts of the tail quills blackish. Chin and throat, white, the throat tinged with yellow on the edges, which colour is prolonged as a deep yellow band on the sides of the neck; remaining under parts, dark purplish blue with a small crescentic black patch on the fore neck; breast



narrowly barred with black, the bars margined with pale orange on the sides of the breast. A concealed patch of silky white, or yellowish-white, feathers on the lower flanks. Thighs, dirty white with dusky bars. Wings, black, washed with brown on the lesser coverts, and the inner secondaries chestnut-brown on the exposed portions: a broad, white, longitudinal band running down the wing is formed by the tips of the major coverts, which are broadly white, and by narrow patches of white on the ends of the outer webs of the outer secondaries. Under wing coverts, black with white patches; two outer primaries with a small white patch at the extreme base, underneath.

*Adult female*.—Like the male, but the supercilium in front of the eye buff not yellow, and the breast, flanks and abdomen not blue, but narrowly and evenly barred with brownish black and whitish buff, the bars slightly heavier on the breast. Under tail coverts, dull blue. Some females are washed with orange on the sides of the breast.

*Immature*.—A juvenile female has the tail blue but is otherwise without bright colours in the plumage. Throat, whitish; under parts, dull brown, spotted on the breast and streaked elsewhere with buff. Wing quills, smoky black; white wing markings as in the adult. Crown, brownish black, spotted with buff. Nape band buff, the feathers with dusky fringes. Remaining upper parts dull brown with obsolete paler shaft stripes. Judging from a changing male, there is a juvenile plumage which is much like that of the adult female, but in it I cannot be certain of the exact appearance of the under parts. Older birds, but still immature, of both sexes have the black coronal patch indistinctly spotted with brown, and in the case of males the fore part of the supercilium is buff as in adult females.

**Soft Parts**.—Iris, dark grey to brown; bill, black; feet, grey to lavender.

**Dimensions**.—Total length, about 8.3 in.; tail, 2.2 to 2.4 in.; wing, 3.9 to 4.1 in.; tarsus, 1.55 in.; bill from gape, 1.15 in.

**Range in the Malay Peninsula**.—Both sides of the Peninsula from the northern limit at the Isthmus of Kra south to Malacca territory and Pahang. No actual records from Selangor, Negri Sembilan, Johore, Kelantan, Trengganu or any of the coastal islands.

**Extralimital Range**.—Sumatra. The typical race is found in East Java and Bali. Other subspecies inhabit West Java and Borneo. The species is almost certain to turn up in the extreme south of Tenasserim.

**Nidification**.—The only record of which I have any knowledge is of a nest found in Bandon, Peninsular Siam:

“A nest was found on our way up Kao Nawng at about 700 feet on 10th June 1913. It was placed in a small sapling about six or seven feet above the ground and consisted of a globular mass of dead leaves and fibre about the size of a man's head. It contained three eggs. They are broad, blunt ovals in shape, moderately glossy, white and thickly spotted, especially towards the broader end, with dark purplish-brown spots and streaks, some of the markings being beneath the surface of the shell” (*Robinson*). The average size of these eggs is 0.99 by 0.83 in. A juvenile from Pahang is dated November.

**Habits**.—This pitta is much commoner in the northern parts of its range

than in the south, where it has only been found in any numbers in the western parts of Pahang. From the Malay States we only know of it from Perlis, one or two localities in Upper Perak and Larut; and from Malacca territory, where Davison's collectors secured specimens. It is specifically recorded from Mt Ophir. It is a bird of the low-country forests in the vicinity of limestone hills. It avoids the swamps. No specimen in the Malayan museums has been taken far from the limestone hills, on which certain snails associated with the limestone attract the pittas. Ridley has noticed that piles of snail-shells broken by the birds can be seen round the limestone rocks in the haunts of this species. In Peninsular Siam it is local in distribution though very common wherever it occurs, and in Bandon it ascends the hill, Kao Nawng, to over 2000 ft.

The birds figured in the plate are a male from Upper Perak, and a female from the Krau river, Western Pahang.

*Pitta gurneyi*

**Gurney's Pitta**

*Pitta Gurneyi* Hume, *Stray Feathers*, iii., 1875, p. 296, pl. 3 (South Tenasserim); Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 395; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 457.

*Eucichla gurneyi*, Sclater, *Cat. Birds, Brit. Mus.*, xiv., 1888, p. 448; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 222; Herbert, *Journ. Siam Soc., Nat. Hist. Suppl.*, vi., 1924, p. 298.

**Malay Name.**—Burong pachat (generic).

**Description.**—Upper parts, brown; crown and tail, blue; under parts, yellow and black. Females are narrowly barred with buff and black on the under surface and have the crown yellowish brown.

*Adult male.*—Hinder crown and nape, on which the feathers are lengthened into a distinct crest, bright blue surrounded by a velvety-black area including the forehead, fore part of the crown, lores, sides of the head and a collar round the hind neck. Mantle, back, rump and scapulars, pale chestnut-brown; upper tail coverts and tail, bright greenish blue, the coverts sometimes mixed with chestnut-brown; concealed parts of the tail quills, black. Point of the chin, blackish; throat, white; upper breast and a broad band down the whole length of the sides of the body, bright yellow, barred with black on the sides of the body; thighs, whitish variegated with dusky; remaining under parts, velvety black; under tail coverts, black tinged with blue at the edges. Wing coverts and inner secondaries, bright chestnut-brown; primary coverts and wing quills, blackish brown, some of the outer secondaries narrowly white on the outer webs; secondaries tinged with brown on the outer webs; under wing coverts, black patched with white; a small patch of white at the extreme base of a few outer primaries, underneath.

*Adult female.*—Like the male above, but the entire top of the head and lores, pale yellowish chestnut; ear coverts streaked with the same colour. No black band across the hind neck. Chin and throat, white; remaining

under parts, narrowly and fairly evenly barred black and pale buff. Under tail coverts, black tinged with blue.

**Soft Parts.**—Iris, brown; bill, black; feet, whitish or brownish flesh (*Robinson and Kloss*).

**Dimensions.**—Total length, 7·7 to 8·35 in.; tail, 1·9 to 2·1 in.; wing, 4 to 4·2 in.; tarsus, 1·4 to 1·6 in.; bill from gape, 1·1 in.

**Range in the Malay Peninsula.**—Peninsular Siam from the northern limit south to Trang and Junk Zeylon.

**Extralimital Range.**—North to Koh Lak in South-West Siam and rather south of this point on the Tenasserim side of the Peninsula. There are few instances of such distinct species as this striking pitta inhabiting such a limited range on a mainland. The bird, which has no near relatives, is known to occur only in the narrow Tenasserim-Siam Peninsula over a latitude of about three hundred miles. It has not been taken in Perlis.

**Nidification.**—Mr E. G. Herbert's collector found this species nesting at Tung Song, Peninsular Siam, on 9th October. The nest is described by Mr Herbert as "made of dry bamboo-leaves, domed, with an entrance on one side, and placed on the ground at the foot of a bamboo-clump" (fide *Stuart Baker*). The clutch appears to consist of five eggs, which measure about 1 by 0·88 in. The colour is described by Mr Herbert as "creamy white, spotted and speckled more or less evenly over the whole surface with inky purple, which varies in density from almost black to quite a pale shade. There are no angular writings or scratches."

**Habits.**—Messrs Robinson and Kloss found this beautiful pitta the commonest of the genus in the state of Trang, in South Peninsular Siam, but less numerous in its only known island habitat on Junk Zeylon farther to the north. It was also very common in Bandon at Ban Kok Klap, but it did not extend far up the slopes of the neighbouring mountain, Kao Nawng. I have never seen the species in the field and therefore quote Davison's admirable account in full:

"This is apparently only a migratory species in Tenasserim, and occurs, so far as I have observed, only in the southern portion of the province. Laynah was the most northern locality at which I observed it, and Kenong, within the estuary of the Pakchan, but on the Siamese or southern side, the most southern.

"A few specimens begin to make their appearance in the forests round Malewoon and Bankasoon (where my specimens were mostly collected) about the 10th or so of February; but they remain scarce during February, March, and the first two weeks in April. After that they become rather more numerous, and continue so till the end of May, and until the regular monsoon rains have set in, when they rapidly disappear, though even in July a few specimens may be met with. The bird confines itself to the evergreen forests, never, that I am aware, venturing into the open or even into gardens. It is shy and retiring, and on the slightest indication of danger hops rapidly away, managing generally to keep some obstacle intervening between itself and the approaching person. It is by no means a common bird even where it does occur, and it was only by persistently hunting them, and never missing an opportunity of

securing a bird where possible, that I and my people succeeded in getting the number we did.

“ Its habits are like those of other members of the genus, keeping to the ground ; it feeds on snails, worms, slugs and insects of all kinds. When disturbed, unless closely pressed, it seldom flies, but hops rapidly away, until it gains the cover of some tangled cane-brake or other refuge, where it remains, until satisfied that all danger has passed, it emerges again into the more open spots. Favourite resorts are the narrow valleys lying between the hills. These, though densely wooded, contain little or no undergrowth.

“ The note is quite that of *Pitta*, but yet differs notably from that of the other species. When suddenly come upon or otherwise alarmed it utters a peculiar note—a sort of *kir-r-r*. It has a habit of jerking up its tail and dropping its wings slightly as it hops along, which I have never observed in its congeners.

“ As above mentioned, it is almost exclusively a ground-bird, but one evening I shot a male high up in a tree ; it attracted my attention by the peculiar short double note it was uttering, quite unlike its ordinary note, and every time it uttered it, it flapped its wings and jerked up its tail. Usually it is found singly, occasionally a couple together. During the morning and evening they call, and may then be heard answering one another in all directions.

“ They do not breed, I think, within our limits, but go probably to Siam or into the higher portions of the hills dividing Siam from Tenasserim. At any rate, specimens dissected in April, May and June showed no signs of breeding.”

It will be seen from the above account that Davison did not accept this bird as a resident in the southern parts of Tenasserim. I can produce no evidence to show that the bird is migratory in Peninsular Siam. Wherever collectors have met with it, this pitta seemed equally common: at Tasan, in the extreme north, in March ; at Bandon, farther south, in June and July ; and at Trang, in the south, in December and January.