FLYCATCHERS

Family Muscicapidæ

Vol. I., p. 177.

NUMERICALLY, this family is almost the richest in species in the Peninsular hills, being excelled only by the babblers, and I have found it necessary to refer to no less than twenty-five species in this volume.

Of these, however, but few can be stated with certainty to be peculiar to Malaya, occurring, as a rule, either in the mountains of Tenasserim, Sumatra or Borneo, but a very considerable proportion are most strictly confined to the higher hills, never being found below 2500 ft. A certain number are migratory, and are either birds of passage or regular winter residents; comparatively few have a very wide range in altitude, and it is probably correct to state that no one of the resident lowland birds is ever found, as a common or habitual resident, above 4000 ft.

In so large a list, the compilation of a workable key has been a matter of considerable difficulty, and it has not been possible to include in it any immature plumages except those of the paradise flycatcher. If it is borne in mind that young flycatchers are always mottled or spotted above, and often more or less streaked as well as mottled below, no great difficulty should be found in assigning young birds to their proper position. It should be remembered that many warblers and flycatchers have characters in common. If small greenish or yellowish birds come to hand that do not fit into the present key, reference should be made to that provided for the first-mentioned family, the *Sylviidæ*.

KEY TO THE SPECIES HERE DESCRIBED

	With pure black and white only in				
	plumage	2			
	With some green or yellow in				
	plumage	3			
	With blue in plumage	4			
I	ı ⟨ With no blue; colours various, always				
	chestnut	18			
	With no blue; colours neutral,				
	white, grey, blackish or dull				
	brown, never bright	27			
	125				

-	Size largest, head crested; tail)	
	greatly exceeding the wing;	Terpsiphone paradisi affinis
	middle pair of feathers much	(male, adult), p. 146
	elongated	· · ·
	Size moderate, head not crested;	
2 {	tail slightly exceeding the wing;	
	middle pair of feathers not	
	elongated	Rhipidura albicollis atrata, p. 145
	Size small, tail, square, shorter)	
1	than the wing	westermanni (male), p. 142
	Upper and under surface uniform,	_ · · · · · · · · · · · · · · · · · · ·
	pale yellow beneath	p. 143
3 {		
	coloured; head and neck, bluish	Culicicapa ceylonensis antioxantha,
l	grey J	p. 147
	Plumage blue, white and black only	5
4	Plumage with other tints also .	12
۔	Base of tail, white	6
5	Base of tail, not white	7
	Belly, pure white, sharply defined	Cyanoptila cyanomelana cumatilis
	from breast, or separated from it	(male), p. 144
6	by a black line	•
	Belly, greyish, grading into blue	Cyornis concreta concreta (male),
	breast	p. 131
7 -	Plumage with much gloss, shining.	8
,	Plumage with little if any gloss .	9
	Plumage, a shining, dark ultra-	7. 7
		Niltava grandis decipiens (male),
0	sides of neck; beneath, black	p. 137
8		77
		Hypothymis azurea prophata (male),
	on sides of neck; a black patch	p. 144
	on nape and a black gorget	
	Plumage, a more or less uniform dull greyish blue; flank feathers	Drymophila velata cacsia (female),
	elongated	p. 146
9	Plumage not greyish blue, flank	
	feathers not specially elongated.	10
		Hypothymis azurea prophata
10	brown	(female), p. 144
10	Plumage above, brighter, uniform	11
	General colour, verditer - blue,	Stoporala thalassina thalassoides,
	feathers with lighter tips	p. 148
II		T = 1.
	blue; feathers without lighter	
	tips	Cyornis unicolor harterti, p. 135
	•	1 20

(Tail and inner secondaries, bright)	Drymophila pyrhoptera pyrhoptera
l	chestnut	(male), p. 146
12	Tail, blackish, white at base; size,	Dendrobiastes hyperythra malayana
12	small, wing less than 2.5	(male), p. 141
l	Tail and inner secondaries not	
(bright chestnut; no white in tail	13
	With no white at all in plumage .	14
13{	With some white in plumage .	17
ſ	Blue in plumage above, dull .	16
14	Blue in plumage above, shining	
14	ultramarine; breast and belly,	
(orange or chestnut	15
(Larger, wing, 3'1 in.; throat, bluish)	Cyornis vivida sumatrana (male),
7.5	black	p. 132
15	Smaller, wing 1'9 in.; throat as the	Nitidula hodgsoni sondaica (male),
1	breast and belly	p. 135
	Head only washed with blue; bright`	Niltava grandis decipiens (female),
	blue patches on sides of neck;	p. 137
16	below, dark ochreous brown	p. 13/
	General plumage, above and below,	Drymophila velata caesia (male),
	dull blue; a maroon patch on	p. 146
	breast	
	Larger, wing, 3 in. or over; rump	
T /7	and angle of wing, shining blue	(male), p. 134
17	Smaller, wing, 2.8 in. or under; rump	Cyornis whitei cæruleifrons (male),
	and angle of wing, duller blue) p. 133
	Tail considerably longer than wing;	Terpsiphone paradisi affinis (male
	head, crested, shining black;	immature, and female), p. 146
18	1	J.
	Tail shorter than wing; head not	
	crested	19
	A very clearly defined white fore-	
1.0	neck, margined with black	
19	White forcheck not clearly defined,	
	not margined with black .	20
	A more or less conspicuous white	
20		21
	No white wing bar	23
	Above, black, or black mixed with	ı
21	grey	22
	Above, brownish	Poliomyias mugimaki (female),
		p. 139
22	Rufous of under surface deeper	
	continued over belly .	. Poliomyias mugimaki (male), p. 139
	Rufous of under surface paler	
	belly, white	. Oreicola dumetoria muelleri, p. 139

Very small, wing less than 2 in under surface whitish, tinged wit	
pale yellow Larger, but wing less than 2.4 in breast, ochraceous buff) -
23 Larger, wing more than 2 5 in.; under surface not tinged with yellow no white plastron on breast	
Largest, wing more than 3.3 in. under surface rusty with a whit	;) Course concreta concreta (female)
chestnut	ar) Drymophila pyrhoptera pyrhoptera ∫ (female), p. 146
Wings and tail, not bright clear chestnut	. 25
brighter rusty above Bill not so broad or flattened; dull	. Hemichelidon ferruginea, p. 129 er
of throat and breast brighter	. 26 1s) Cyornis whitei cæruleifrons (female), p. 133
Larger, wing more than 2.9 in rufous of throat and breast dull	.; Cyornis rubeculoides glaucicomans er∫ (female), p. 134 p, Muscicapula melanoleuca wester-
clay-brown Head and mantle not clear grey	∫ manni (female), p. 142 . 28
Bill, broad and flattened; smaller Bill not so broad and flattened larger	
General colour above, darker, with more distinct collar on foreneck General colour above, paler,	a) Hemichelidon sibirica, subspp., p. 129
distinct collar on foreneck Throat whitish, a collar on for	. Alseonax latirostris latirostris, p. 130 re-) Rhinomyias umbratilis infuscata,
neck; rictal bristles very strong Throat not distinct from breas rictal bristles not so strong	
	e; Cyanoptila cyanomelana cumatilis at (female), p. 144
A yellowish white patch in mide of foreneck; under tail cover	lle) Cyornis vivida sumatrana (female).
No yellowish white patch in mide of foreneck; under tail cover not so strongly ochraceous	TO VOITE MEDICOLO TO TOUT OF UN CICITATOL.

Hemichelidon ferruginea

The Ferruginous Flycatcher

Vol. I., p. 190.

This flycatcher has been sufficiently described already, and is readily recognized by its sandy rufous rump and tail, dark head, white chin and throat, and by the very broad bill, yellowish white on the basal half.

It is only a winter visitor to the hills of the Malay Peninsula, but is widely distributed, occurring along the main range from Gunong Kerbau to Selangor (Fraser's Hill and Ginting Bidei), and also on the Larut Hills, where Butler noted it at 3500 ft. Waterstradt is stated to have obtained it on Gunong Tahan between 2000 and 5000 ft., in July, which, if the date is really correct, would tend to show that the species is a resident in the Malay Peninsula.

Hemichelidon sibirica sibirica

The Sooty Flycatcher

Muscicapa sibirica, Gmel., Syst. Nat. i., 1767, p. 936 (ex Pennant, Siberia); Hemichelidon sibirica, Sharpe, Cat. Birds, Brit. Mus. iv., 1879, p. 120 (part); Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 18.

Description.—Adult.—Sexes alike. Above, a not very dark sooty brown, centres of the feathers of the head, darker; lores and face mottled, white and brown; a narrow white ring round the eye; ear coverts and cheeks, greyish brown; primaries and tail feathers, dark brown, the former margined internally with pinkish buff, axillaries and under wing coverts, smoky, tipped with pinkish buff; greater wing coverts and secondaries edged with the same. Below, a patch of clear white on the throat; breast and upper flanks, smoky brown, heavily, but variably, streaked with white; flanks and belly, white; thighs, dusky; under tail coverts, white, with larger or smaller dusky centres.

Immature.—Generally darker above than the adults, in some cases almost black, the upper surface with numerous fine hair-streaks of white or buffy white, and with the feathers edged with white; buffy edging to secondaries and greater upper wing coverts broader and more distinct. Beneath, always with the white patch on the throat, but the rest of the under surface heavily marked with irregular bars and edgings of black, grey and whitish, the middle of the belly whitish.

Soft Parts.—Iris, dark; bill, black; the basal half of the lower mandible, vellowish; feet, black.

Dimensions.—Total length, 5 to 5'5 in.; wing, 3 to 3'3 in.; tail, 2'2 to 2'4 in.; tarsus, 0'5 to 0'55 in.; bill from gape, 0'55 to 0'6 in.; culmen, 0'35 in.

Range in the Malay Peninsula.—Throughout the Peninsula from the northern border, but not definitely recorded from south of Malacca. Common on the coasts and islands of the Straits of Malacca during migration.

Extralimital Range.—Breeding in Siberia and Japan; wintering in China, westwards through Borneo to the Malay Peninsula and Siam.

vol. II.—I

Nidification.—Is not known to breed in the Malay Peninsula or Borneo, though birds so young have been obtained in October and November, that it is difficult to believe they have undergone the migration from China. The nests of allied forms are compact cups of moss, usually placed high in branches. Eggs of this race from Lake Baikal are somewhat oval, slightly glossy, in ground-colour a very light green, densely and evenly mottled with reddish brown. Dimensions o'7 by o'5 in. Eggs of the three Indian forms are very similar, but the average dimensions given by Baker for the Himalayan race, H. s. gulmargi, are considerably smaller, o'63 by o'48 in.

Habits.—Our knowledge of this species in the Malay Peninsula is not exact, but the evidence tends to show that it is not a permanent resident, though, as noted above, very young birds have been obtained. It is fairly common on the islands and coasts of the Straits of Malacca in late autumn, from October to the end of November, and again in spring as late as the middle of April, and it has also been noted on the mountains in November and December, and up to February. The habits are those of all small flycatchers, but with us it is a shy and very silent bird, keeping to scrub and the edges of forest clearings.

Note.—It is by no means certain that the birds found in the Malay Peninsula are strictly identical with those breeding in Siberia and Japan, to which the name H. s. sibirica properly applies, and they are perhaps slightly darker, above and below, than that race. On the other hand, by far the greater number of the visitors to the Malay Peninsula are distinctly larger, with a clear white throat and paler margins to the inner webs of the primaries than the Indian and Burmese bird, H. s. fuliginosa, of which form, however, a few stragglers reach the north of the Peninsula. Some birds from the Malay Peninsula, and from Labuan and Borneo, agree with the somewhat briefly described Hemichelidon sibirica incerta, from North China.

Alseonax lativostris lativostris

The Sumatran Brown Flycatcher

Vol. I., p. 191.

Of about the same size as the preceding, but dull brownish grey above; white beneath, the breast rather more ashy; tail rather shorter than in *Hemichelidon*, and general build rather more thick-set.

Of precisely the same habits and distribution as the two preceding species. Common on Kedah Peak, Penang Hill, the Larut Hills, Gunong Kledang, near Ipoh, and the whole of the main range south to Selangor. Information as to the dates on which this bird arrives and departs from the Malay Peninsula is much desired. It is possible that a few pairs remain throughout the year and breed in the mountains.

¹ La Touche, Handbook Birds East China, ii., 1925, p. 159.

Cyornis concreta concreta

The Malaysian White-tailed Blue Flycatcher

PLATE 10 (upper figure, male; lower left, female; lower right, immature male)

Muscicapa concreta, Muell., in Van der Hoeven's Tijd. Nat. Gesch. en Phys., ii., 1835, p. 351 (West Sumatra).

Stoparola concreta, Sharpe, Cat. Birds, Brit. Mus., iv., 1879, p. 437. Niltava leucoprocta, Sharpe (nec Tweedd.), P.Z.S., 1888, p. 272.

Cyornis concretus, Hartert, Nov. Zool., ix., 1902, p. 549; Ogilvie-Grant, Journ. Fed. Malay States Mus., iii., 1908, p. 37.

Description.—Bill hooked, with a marked subterminal notch on upper mandible, line of tomia arched.

Adult male.—Above, deep blue; the crown, brighter; forehead and lores, black; ear coverts and sides of face, washed with blue; primaries and wing coverts, blackish, the quills edged with blue on the outer webs, inner aspect of wing, blackish, axillaries, bluish grey, under wing coverts, greyish black, with darker edges, those near the edge of the wing blue; tail, blackish, washed with blue, with the bases of the four outer pairs of feathers white, increasing inwardly, more extensive on inner webs. Beneath, chin, throat and breast, dull blue; lower breast, abdomen and under tail coverts, hoary white; the flanks streaked with grey, the feathers white at the bases; thighs, deep blue.

Adult female.—Different from the male. Above, a rich ferruginous brown, bases of the rump feathers, white; quills, dark brown, the primaries edged with ferruginous, and the whole of the outer webs of the secondaries the same; tail, a duller brown, the outer feathers with white bases as in the male, but less extensive; lores, a ring round the eye and the chin, buffy; throat and chest, ferruginous buff; a triangular gorget on throat, pure silky white; belly and under tail coverts, white; flanks and thighs, fuscous brown, the latter darker.

Soft Parts.—Iris, light brown to dark hazel; bill, black; feet, greyish black or "light grey; soles of the feet, flesh-colour" (*Wray*). *Immature*: "tip of bill, yellowish brown; feet, pinkish slate" (*Jacobson*).

Dimensions.—Total length, about 7 in.; wing, 3.4 to 3.6 in.; tail, 3 to 3.3 in.; tarsus, 0.85 to 0.9 in.; bill from gape, 0.95 to 1 in.; culmen, 0.75 to 0.8 in.

Range in the Malay Peninsula.—Widely distributed from Kedah Peak, south to Gunong Tampin, in Negri Sembilan; Pahang.

Extralimital Range.—Sumatra. Closely allied races are found from Assam to North Tenasserim and in Tonkin, and a rather more distinct form occurs widely distributed in Borneo.

Nidification.—Not recorded. A rather doubtful nest of the northern bird, *C. c. cyanea*, from Assam is described by Baker as a deep cup, made almost entirely of moss, which had been placed in a hollow in a rocky bank in deep forest. The single egg was a pale yellow-grey stone-colour, freckled all over with innumerable tiny specks of reddish brown. It measured 0 '96 by 0 '71 in.

Habits.—This flycatcher, though it has an extensive range in the Malay

Peninsula, is nowhere common. It is found at elevations of from 500 to 600 ft. to well over 5000 ft., but is most numerous in the intermediate zone. It is an inhabitant of dense jungle, whence it emerges but little, living on the lower branches of big trees, and searching the leaves and branches for insects. It is much more sluggish and inactive than most flycatchers, though it does catch its food on the wing and never descends to the ground. Like Baker, I have noticed that the male, when perching, frequently expands its tail laterally to show the white bases of the feathers. The brown female, for some unexplained reason, is very much less numerous, or perhaps much shyer than the male, and is much scarcer in collections. The bird has a low, whistling song, on three notes, in addition to the ordinary twitter.

The male bird figured is from Ginting Bidei, Selangor, shot on 21st September; the female from Bukit Tangga, Negri Sembilan, 23rd January, and the immature male—in default of suitable specimens from the Malay Peninsula—from Rimbo Pengadang, Bencoolen Residency, West Sumatra, collected by Mr E. Jacobson on 13th June 1916.

Cyornis vivida sumatrana The Malaysian Blue-and-Orange Flycatcher

Niltava sumatrana, Salvad., Ann. Mus. Civ. Gen., xiv., 1879, p. 201 (Singalang, West Sumatra); Robinson, Journ. Fed. Malay States Mus., v., 1913, p. 25.

Cyornis peninsularis, Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 163 (Telôm, Cameron's Highlands, 3500 ft.).

Niltava vivida sumatrana, Robinson and Kloss, Journ. Fed. Malay States Mus., xi., 1924, p. 271, pl. 9 (male, female).

Description.—Adult male.—Lores and a narrow frontal band, velvety black; crown, rump, upper tail coverts, and a patch behind the ear coverts, shining cobalt-blue; mantle, back and wing coverts, very dark purplish blue; primaries and secondaries, black, externally edged with purplish blue on their outer webs; inner aspect of wing, dusky, the inner webs of the inner primaries and the secondaries edged with rufous buff towards the base, more clearly defined on the innermost; under wing coverts and axillaries, chestnut; tail feathers, black, the outer webs, purplish blue; ear coverts, ocular region and throat, black, with a purplish wash, more defined on the line separating the throat from the breast, which, with the rest of the under surface, including the under tail coverts, is ochraceous orange-chestnut.

Adult female.—Lores, facial and periocular region, finely speckled with rufous and black; crown and nape, greyish, the feathers of the former with darker edges, presenting a scaly appearance; back, mantle and rump, brownish ochraceous, more yellowish on the rump, the upper tail coverts, dull chestnut-brown. Wing coverts, dull brown, edged with ochraceous; primaries and secondaries, blackish brown, all except the outer primary broadly edged with yellowish brown; axillaries, greyish buff, edge of wing and under wing coverts, pale yellowish buff; tail feathers, dull chestnut-brown. Beneath,

throat, greyish brown; breast, belly and flanks, greyish, the feathers of the breast in the centre edged with ochraceous buff and with a clear whitish yellow patch in the centre of the belly; under tail coverts, pale chestnut-buff; thighs, ochraceous.

Soft Parts.—Iris, hazel; bill, black; feet, blackish brown or greenish or greyish brown, with the soles yellow.

Dimensions.—Total length, 5.5 to 6 in.; wing, 3.1 to 3.3 in.; tail, 2.7 to 3 in.; tarsus, 0.65 to 0.7 in.; bill from gape, 0.6 to 0.65 in.; culmen, 0.55 in.

Range in the Malay Peninsula.—Known only from three specimens: a male and a female from Cameron's Highlands, collected on 28th November 1908, and a male from Gunong Kerbau, 5000 ft., collected February-March 1913.

Extralimital Range.—Very abundant on certain of the high Sumatran mountains. The typical form was described from Formosa, and a slightly larger race is found on the mountains of North Tenasserim, the Shan States and parts of Yunnan, and also in Assam.

Nidification.—Unknown.

Habits.—The three known Peninsular specimens were all secured by Dyaks, who stated that they were obtained in the scrubby, zerophytic zone—which is of limited extent on Cameron's Highlands, but more extensive on Gunong Kerbau. On Korinchi Peak, in West Sumatra, Mr Kloss and myself found the same bird extraordinarily abundant, from an altitude of 7300 ft. to the limit of vegetation, at nearly 11,000 ft. There it frequented the heathy country, overgrown with *Vaccinium*, rhododendron and big groundsels, and had the ordinary habits of the family. It was very tame and confiding, like many high-mountain birds, and was seen usually in pairs. The note was a clear whistle, but the bird was not at all noisy.

It is hoped that, during the development of Cameron's Highlands, further specimens of this—almost the rarest of Malayan birds—may be obtained. It should be looked for on the peak that has been named, Gunong Terbakar, and on and near the site of the meteorological station on Rhododendron Hill.

Cyornis whitei cæruleifrons

Baker's Blue Flycatcher

Cyornis magnirostris cæruleifrons, Stuart Baker, Bull. Brit. Orn. Club, xxxix., 1918, p. 8 (Klong Bang Lai, Peninsular Siam).

Cyornis tickelli (?), Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 18; Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 187.

Cyornis banyumas cæruleifrons, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), ii., 1924, p. 233.

Description.—Adult male.—Upper surface, including the wing coverts, dark blue, without much gloss on the angle of the wing; forehead and a line over the eye, bright blue; lores, a very narrow line round the bill, sides of the head and sometimes the extreme point of the chin, black, occasionally with a suggestion of blue. Primaries and secondaries, dark brown, edged with blue on the outer webs; inner aspect of wing, lead-colour, the inner

webs of the quills lighter towards the base; under wing coverts and axillaries, pale ferruginous; tail, dark blue above, dark lead-colour beneath. Beneath, throat and breast, deep ferruginous, with a patch of dark blue on each side of the breast; flanks, a light ferruginous; thighs, blackish or dark fuscous; middle of the belly and under tail coverts, pure white.

Adult female.—Upper surface, brown, rather greyer on the head, more rufescent on the rump and upper tail coverts; primaries, brown, with much paler brown margins to the outer webs; under wing coverts and axillaries, pale buff; tail, rufescent brown, darker at the tip; lores and feathers round the eye, albescent; ear coverts, brown, as the back. Beneath, chin, throat and breast, bright ferruginous; flanks, more brownish; middle of the belly and under tail coverts, white; thighs, brown.

Immature.—Like the female, but the upper surface with pale buff shaft stripes, broadening at the tips; wing coverts edged with pale buff; under surface with the feathers edged with black, giving a mottled effect. Males in juvenile plumage acquire the blue on the tail and rump first, before the head and wing coverts.

Soft Parts.—Iris, dark or dark brown; bill, black, dark horn in females; feet, purplish, dull purplish grey or brownish fleshy tinged with blue.

Dimensions.—Total length, 6 in.; wing, 2.7 to 2.9 in.; tail, 2.2 to 2.6 in.; tarsus, 0.7 to 0.75 in.; bill from gape, 0.65 in.; culmen, 0.5 in.

Range in the Malay Peninsula.—From the northern limit to Southern Selangor.

Extralimital Range.—North to Central Tenasserim and probably in parts of Siam. The typical form has a wide range from East Assam, through Burma to Tonkin. Another race occurs in Borneo.

Nidification.—Unknown. The breeding season commences about March, as young birds, hardly able to fly, have been obtained in April and May at Ginting Bidei, Selangor.

Habits.—The altitudinal range of this flycatcher is submontane; except in the extreme north of the Peninsula, it has not been noted below about 1500 ft., in the Batang Padang Valley, on the road to Cameron's Highlands. It is common on the ranges between Selangor and Pahang, near Kuala Lumpur, and has also been obtained near Fraser's Hill, above the Semangko Pass. It is, however, a very local bird. There is nothing special to record about its habits. It lives in old jungle, usually where there is much bamboo, coming out on to the edges of paths and clearings, and catching insects on the wing after the usual fashion of the family. I have not heard any song, or indeed any note, except the usual twitter.

Cyornis rubeculoides glaucicomans

Bangs's Blue Flycatcher

A rather larger bird than the preceding. Male with the rump and angle of the wing shining cobalt-blue; forehead, broadly pale blue; below, chin,

black, the rufous of the breast running up into a point. Female much as in C. w. cæruleifrons, but the ferruginous colour of the under surface paler.

Malayan specimens of this bird from Peninsular Siam were described by Kloss and myself under the name *Cyornis anak*, but we have recently come to the independent opinion that in all probability our birds represent the abovementioned form (described from Western China by Mr Outram Bangs) in winter quarters; through the courtesy of Mr Bangs I have been able to examine the type and others from Yunnan, and have little doubt that our conclusions are correct.

Mr Seimund has recently (December 1927) obtained a male from Gunong Kledang, 2600 ft., and I have also before me a female from Gunong Kerbau, 5000 ft., collected on 21st March, that is either this bird or a form as yet undescribed. Additional dated specimens of all species of the genus, from heights of 3000 ft. upwards, are urgently required. The present bird will be described and figured in the final volume of this work, but in the meantime attention is drawn to it.

Cyornis unicolor harterti

The Malaysian Pale Blue Flycatcher

The male a uniform pale blue, much duller beneath and brighter, almost cobalt-blue, on the head. Female, a greyish olive-brown above; the edges of the primaries and the tail ferruginous chestnut; beneath, dull greyish, tinged with brown, the throat not materially lighter than the breast, the under tail coverts tinged with ochraceous.

This species should not be confused with *Stoporala thalassina thalassinoides*, in which the male is strongly verditer, not sky-blue, and which has a much narrower bill, and less conspicuous bristles at the gape.

A not very common bird, found usually in heavy jungle at moderate elevations; it is fairly abundant on the lower Selangor hills between Kuala Lumpur and Bentong, and has also been met with at about 3000 ft. on Gunong Tahan. Full description is deferred to Volume IV.

Nitidula hodgsoni sondaica The Malaysian Pygmy Blue Flycatcher

Nitidula hodgsoni sondaica, Robinson and Kloss, Journ. Fed. Malay States Mus., xi., 1923, p. 54 (Korinchi Peak, West Sumatra).

Nitidula hodgsoni, Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 18; Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 187.

Description.—Adult male.—Lores and a narrow frontal line, black; ear coverts, black, strongly washed with blue; rest of upper surface, bright cerulean blue; primaries, secondaries and tail feathers, black, broadly edged with dark blue. Beneath, pale ochraceous orange, darker on throat and breast; paler on belly; the whole under surface with a very silky appearance.

Adult female.—Pale clay-brown above, the feathers of the head with

darker edges, giving a slightly streaked appearance; rump, a warmer brown; primaries and tail feathers, brown, with lighter edges; lores, white; cheeks and ear coverts, pale brown. Beneath, yellowish white, browner on the breast, pale buffy on the flanks.

Soft Parts.—Male: iris, hazel; bill, black; feet, bluish lilac, pale lead or lavender. Female: iris, hazel; bill, black, slate or pale horn at base; feet, mauve or pale blue slate.

Dimensions.—Male: total length, 3'9 in.; wing, 1'9 in.; tail, 1'5 in.; tarsus, 0'55 in.; bill from gape, 0'4 in.; culmen, 0'28 in. Female: wing, 1'8 in.; tail, 1'35 in.; tarsus, 0'6 in.; bill from gape, 0'35 in.; culmen, 0'26 in.

Range in the Malay Peninsula.—At present known only from Butler's male specimen, obtained near the Cottage, Taiping Hills, in February 1898; two males from above the Semangko Pass, in February 1908, and a female from the middle slopes of Gunong Tahan, in June 1911.

Extralimital Range.—Mountains of Sumatra and Borneo.

Nidification.—Both of Himalayan and Malayan races unknown.

Habits.—There is very little on record of the habits of this minute but very beautiful little flycatcher. The Semangko specimens were obtained among creepers growing on trees on the edge of a landslip. The female from Gunong Tahan was shot in a tamarisk-like bush, *Baeckia frutescens*. Those obtained on Korinchi Peak, Sumatra, were shot by our Dyaks on fairly lofty trees. Of this bird, from the Larut Hills, Butler notes: "This specimen was moving about in a big bunch of a parasitic plant growing upon a thick bough, once or twice it fluttered out and captured a small insect in true flycatcher style, and once I saw it hover for a second or two something like a honey-sucker."

More information about this interesting little bird—almost the smallest of its tribe—and especially with regard to its nesting habits, is much desired.

Anthipes solitaria malayana The Malayan White-gorgeted Flycatcher

Digenea malayana, Sharpe, P.Z.S., 1888, p. 247 (Mountains of Larut, Perak); Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 18; Ogilvie-Grant, Journ. Fed. Malay States Mus., iii., 1908, p. 37.

Anthipes malayana, Sharpe, P.Z.S., 1888, pp. 247, 272; Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 188.

Description.—Adult.—Olive-brown above, more rufescent on the rump, upper tail coverts and tail. Forehead, sides of the head and lores and a stripe over the eye, bright orange-rufous; ear coverts and lower cheeks, duller and browner. Beneath, chin and throat, pure white, separated from the cheeks and lower parts by a narrow black line; middle of the breast, flanks, and under tail coverts, rufescent brown, rather brighter than the upper parts; middle of the belly, whitish.

Immature.—Streaked and mottled above; irregularly squamated below. **Soft Parts.**—Iris, rich brown; bill, horn; feet, pale purplish flesh. **Dimensions.**—Total length, 4.5 to 5 in.; wing, 2.6 to 2.8 in.; tail, 1.75

to 2 in.; tarsus, 0'75 to 0'85 in.; bill from gape, 0'55 to 0'6 in.; culmen, 0'45 to 0'5 in.

Range in the Malay Peninsula.—From North Perak to Southern Selangor and in Pahang. Confined to the mountains and peculiar to the Malay Peninsula.

Extralimital Range.—Very closely allied races occur in Tenasserim, the Himalayas, Annam and Sumatra.

Nidification.—Unknown. The Himalayan race, A. solitaria monileger, breeds in April, May and June, building cup-shaped nests of grass, mixed with dried moss, and placed in banks. The eggs are pure white in ground-colour, speckled with brownish red, principally in a zone round the larger end, and measure 0.74 by 0.54 in. The nests of the Assamese race, A solitaria leucops, are rather different, being globular, roughly put together affairs of grass, bamboo leaves, and a few other dead leaves lined with the finest grass stems, and placed on banks or occasionally in bushes. The eggs are very similar to those of A. s. monileger, the ground-colour varying from pure white to pale pink. Average dimensions, 0.71 by 0.51 in.

Habits.—This flycatcher is fairly common on the Larut Hills, along the main range of the Peninsula, and on Gunong Tahan, and is rarely, if ever, found below 3000 ft., being commonest at over 4000 ft. to the summits of the mountains. It is rather different in habits from other flycatchers, being essentially a bird of the low scrub and undergrowth, often indeed descending to the ground. Its favourite habitat is in damp and gloomy gullies and by the sides of streams, where it is usually found in pairs, perching on twigs near the ground. Flight is weak and fluttering, and the note a very feeble chirp, Butler states that the note is a sharp little squeak. Like Muscicapula m. westermanni, this species displays, by lowering the wings and fluffing out the white feathers of the throat and upper breast.

Note.—On the mountains of Bandon, Peninsular Siam, and at lower elevations in the neighbouring province of Nakon Sri Tammarat, an allied race is found, differing only in the narrower and less-defined black line edging the gorget, and in the duller rufous sides of the head. This is Anthipes solitaria submonileger, Hume, originally discovered by W. Davison on Muleyit, in Central Tenasserim, and since discovered on other mountains in that province. A series almost inseparable from this race has been obtained also on the mountains of South Annam.

Niltava grandis decipiens

The Malaysian Niltava

PLATE II (lower figure, adult male; middle, female; upper, immature male)

Niltava decipiens, Salvad., Ann. Mus. Civ. Gen. (2), xii., 1892, p. 49 (Sumatra); Ogilvie-Grant, Fascic. Malay., Zool., iii., 1906, p. 94; id. Journ. Fed. Malay States Mus., iii., 1908, p. 37.

¹ Stray Feathers, v., 1877, p. 105.

Niltava grandis (nec Hodgs.), Sharpe, P.Z.S., 1886, p. 351; id.: op. cit., 1887, p. 436; id. op. cit., 1888, p. 272; Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 19.

Niltava grandis decipiens, Hartert, Nov. Zool., ix., 1902, p. 551; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), ii., 1924, p. 258.

Malay Name.—Burong kubor padi (?) 1 (Winstedt).

Description.—Adult male.—Nostrils, almost concealed by dense plumes; rictal bristles strong; forehead, sides of the head, neck and ear coverts, glossy black; crown, nape, rump, upper tail coverts and coverts along inner edge of the wing, shining cobalt-blue; a patch on each side of the neck more cerulean blue; wing coverts, back and scapulars, dark purplish blue; primaries and secondaries, brownish black, edged on the outer webs with dark blue; middle tail feathers, dark purple; the remainder, brownish black, edged with purplish blue. Beneath, deep bluish black, blacker on the throat, more glossed with blue on the breast; the flank feathers, broadly ash-grey at their bases.

Adult female.—Lores, sides of the head and ear coverts, ashy brown, with pale shaft streaks; crown and nape, ashy, with a strong blue wash; a patch of lilac-blue on each side of the neck; rest of the upper surface, external aspect of wings and tail, a rich, rusty brown, greyer and duller on the mantle; under aspect of wing, brownish, the quills edged with buff on their inner margins; the under wing coverts and axillaries yellowish buff; below, chin and throat, yellowish buff; remainder, a warm olive-brown greyish on the flanks, the under tail coverts more rusty.

Immature.—Above, dark, striped and flecked with rusty brown, broadening on the shafts, and with dull black subterminal bars to the feathers of the mantle. Beneath, a rich chestnut-red, obscurely mottled with fine black edges to the feathers. The change to the plumage of the adult male is very irregular, and many birds seem to acquire the primaries and tail feathers of the adult male before any of the juvenile body plumage is moulted.

Soft Parts.—Iris, hazel; bill, black in the male, horny in the female; feet, purplish black in the male, lavender-brown in the female.

Dimensions.—Total length, 7.5 to 8 in.; wing, 3.6 to 4 in.; tail, 3.4 to 3.6 in.; tarsus, 0.8 to 0.85 in.; bill from gape, 0.75 in.; culmen, 0.55 to 0.6 in.

Range in the Malay Peninsula.—From North Perak to Southern Selangor, and in Pahang.

Extralimital Range.—The bird found in Tenasserim (Muleyit) and North Siam possibly belongs to this small form, but the material available is not adequate to definitely decide the point. Sumatra. The genus is not found in the other Indo-Malayan islands.

Nidification.—Unknown. The Himalayan race breeds from April to July, and makes a somewhat bulky, cup-shaped nest of moss, lined with roots, and placed on the ground on banks, among rocks, or in old tree stumps. Four

¹ This name is, I think, little more than a wild shot by Dr Winstedt's Malay informant. Burong kubor is sometimes used for various species of pittas, and padi (lit. rice) when used in connexion with birds is a diminutive. It cannot be too often repeated that, from the nature of the case, species confined to the higher mountains, which in times past were rarely if ever visited by Malays, have no real names in the vernacular.

eggs usually are laid, cream or yellowish in ground-colour, very finely and evenly freckled with pinkish brown, occasionally more coarsely spotted. Average dimensions are 0.97 by 0.69 in. (Baker).

Habits.—This flycatcher has the normal range of our mountain birds—e.g. from Northern Perak, along the main range as far as Southern Selangor, the Larut Hills, Gunong Tahan and Gunong Benom, in Pahang, where, however, the species is by no means common. It is found in pairs or singly, usually among brushwood, and on the branches of small trees, and does not come into open ground. Quite frequently it descends to the ground, and hops about in shady places, sometimes elevating and expanding its tail like a fantail flycatcher. Its food is mixed, and fruit certainly enters largely into its diet, as has been noted by Jacobson also in Sumatra. On Cameron's Highlands it has been observed eating the raspberries that are abundant in abandoned Sakai clearings, and on the hills above Taiping it has also taken to the fruit of Lantana, and possibly helps to disperse this noxious introduced weed. Butler states that it is a good songster, but I am not personally acquainted with any note.

The adult male figured, about two-thirds natural size, is from Gunong Ijau, Larut Hills, shot on 17th April; the adult female from Gunong Mengkuang Lebar, Selangor, 23rd March, and the immature male from Lubok Tamang (Telôm) Cameron's Highlands, 8th June.

Oreicola dumetoria muelleri The Malaysian Short-tailed Flycatcher

Black above, a short stripe from behind the eye, a long stripe on the wing, and the base of the tail, white; beneath, chin, throat and breast, rusty; belly and under tail coverts, white. Immature birds are dark brown above, the wing coverts and stripe on the wing rusty brown. Total length, about 4.5 in. A jungle-living bird about which very little is known. It has been obtained in some numbers at Ginting Bidei, in Selangor, in October, and above the Semangko Pass in February, and Waterstradt sent a single bird from Gunong Tahan, dated August. The species is known from the mountains of Borneo and Sumatra, with very close relatives in Java and the Lesser Sunda Islands.

Poliomyias mugimaki The Black-and-Orange Flycatcher

Muscicapa mugimaki, Temm., Pl. Col., 1835, pl. 577, fig. 2 (Japan), Hartert, Vög. Palaarkt., Faun., i., 1907, p. 492.

Siphia erythaca, Blyth, Journ. Asiat. Soc. Bengal, xvi., 1847, p. 126.

Poliomyias luteola, Sharpe, Cat. Birds, Brit. Mus., iv., 1879, p. 201; Oates and Reid, Cat. Birds' Eggs, Brit. Mus., iii., 1903, p. 262; Ogilvie-Grant, Fascic. Malay., Zool., iii., 1906, p. 94; Robinson, Journ. Fed. Malay States Mus., ii. 1909, p. 188; id. and Kloss, op. cit., vi., 1916, p. 227.

Description.—Adult male.—Upper surface, including the sides of the head, deep black, the bases of the feathers grey, and in less mature specimens the

tips also; a patch behind the eye, pure white; primary coverts, primaries and secondaries, blackish brown, the innermost of the latter with broad white edges; lesser upper wing coverts, black, the median and greater series white, forming a bar on the wing; inner aspect of quills, pale brown, the inner webs with pale margins; under wing coverts, white, mottled with greyish towards the edge of the wing, axillaries, pale orange; tail feathers, blackish, all but the centre pair with broad white bases, decreasing in extent towards the outermost; under surface, deep orange, becoming paler on the flanks; centre of the abdomen and under tail coverts, white; thighs, greyish.

Adult female.—Upper surface, light olive-brown, paler on the rump; median and greater wing coverts, brown, with white tips, forming a double bar on the wing, the upper one often obscure; primaries and secondaries, pale brown, with lighter edges to the outer webs, those of the inner secondaries white and broader; tail feathers, darker brown than in the male, narrowly white on the bases of the outer webs of all but the centre pair; lores, whitish with dusky tips, a narrow white ring round the eye; ear coverts, olive, with lighter shaft stripes; under surface, as in the male adult, but not so deep in colour.

Immature male.—Like the adult female, but paler yellowish buff, less orange beneath, and with little or no white on the base of the tail; wing bars very conspicuous.

Soft Parts.—Adult male: iris, black; bill, black, slate on lower mandible, yellow at base; feet, yellowish brown. *Immature males and females*: iris, dark or hazel; bill, horn, pink beneath; feet, brownish, the soles yellowish.

Dimensions.—Total length, 5 to 5.5 in.; wing, 2.8 to 3 in.; tail, 2.1 to 2.3 in.; tarsus, 0.6 to 0.65 in.; bill from gape, 0.55 to 0.6 in.; culmen, 0.5 in.

Range in the Malay Peninsula.—From Peninsular Siam south to Malacca during the winter months. Common in the Langkawi group.

Extralimital Range.—Breeding in East Siberia from the Amur to Lake Baikal; also in Korea, Japan and East China, and wintering in Borneo, Java, Sumatra and the Moluccas.

Nidification.—The species does not breed in Malaya. The nest is the usual deep cup of the family, and the clutch consists of from four to eight eggs, which are bright olive-green with reddish brown spots and freckles; size about o'7 by o'5 in.

Habits.—This is a winter resident in the Malay Peninsula, appearing in large numbers on the coasts and islands in October and November, and then proceeding to the high mountains, where it is by no means uncommon, until the end of March. The species has been obtained on most high hills, on which collections have been made in the winter months, with the exception of the Larut Hills, though seeing that it is found on Kedah Peak it will almost certainly occur. It stays in the Straits as late as the end of April, as we have obtained an immature bird on the 21st of that month on Pulau Butang, one of the Adang group to seaward of Pulau Langkawi. There is nothing special to note as regards its habits, which are those of the smaller flycatchers in general. It frequents the undergrowth and low trees, usually

singly, and with us is a very silent bird, giving utterance to an occasional low twitter.

Dendrobiastes hyperythra malayana The Small Malayan Rufous-breasted Flycatcher

Muscicapula malayana, Ogilvie-Grant, Bull. Brit. Orn. Club, xix., 1906, p. 10 (Gunong Tahan, Pahang, 5300 ft.), id. Journ. Fed. Malay States Mus., iii., 1908, p. 38.

Muscicapula hyperythra (nec Blyth), Sharpe, P.Z.S., 1888, p. 270; id. Hartert, Nov. Zool., ix., 1902, p. 552.

Dendrobiastes hyperythra malayana, Stresemann, Nov. Zool., xix., 1912, p. 331.

Cyornis hyperythra malayana, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), ii., 1924, p. 219.

Description.—Adult male.—Above, dark slaty blue; forehead, lores, ear coverts and sides of the head, black; a broad white stripe from the nostril to behind the eye; quills, brownish, the primaries with pale edges to the outer webs; the secondaries darker, bluish grey on the outer webs; inner aspect dusky, axillaries and under wing coverts, dark grey, the latter with buffy tips; tail, blackish, the feathers with bluish grey edges, white at the bases, the amount varying, sometimes absent from the middle pair. Beneath, chin, black; rest of under surface, rusty rufous, paler on the throat, middle of the belly and under tail coverts; flanks, olive-brown; thighs, blackish brown.

Adult female.—Olive-brown above, often strongly tinged with greyish; forehead, lores, sides of face and superciliary stripe, buffy; ear coverts, dark brown. Wings and tail, brown, the feathers strongly edged with ferruginous, the under wing coverts and axillaries with very marked rich buff tips. Beneath, ochraceous buff, varying greatly in depth of tint; the flanks, darker brown; the throat, middle of the belly and under tail coverts more whitish.

Immature.—More or less like the adult female, but the upper surface regularly streaked with rufous buff, these streaks narrowing with age; beneath, ochraceous buff, squamated with blackish edges to the feathers, broadest on the breast.

Note.—There is great variation in birds of this species from the same locality; some females are very greyish above, approaching, but not equalling, the form described as *Dendrobiastes hyperythrus mjöbergi*, Hartert, from Mount Poi, Sarawak, 5300 ft.

Soft Parts.—Iris, hazel; bill, black, browner in the female; feet, slaty purplish or lilac in the male, pink or pale flesh in the female.

Dimensions.—Total length, about 5 '3 in.; wing, 2 '2 to 2 '4 in.; tail, 1 '5 in.; tarsus, 0 '75; bill from gape, 0 '5 in.; culmen, 0 '35 to 0 '4 in.

Range in the Malay Peninsula.—From Gunong Kerbau in Central Perak to Gunong Mengkuang Lebar, in Selangor, and in Pahang.

Extralimital Range.—Birds from Tenasserim, the mountains of Sumatra and of North Borneo are, for the present, regarded as identical with this form. Very many races have been described, ranging from the Himalayas to Indo-

China, Formosa and Hainan, the Philippine Islands and those of the Malayan Archipelago east to Celebes, Timor and the Moluccas.

Nidification.—Unknown. The Himalayan bird (*D. h. hyperythra*) breeds from April to June, and makes a small cup-like nest of green moss, lined with moss and rhizomorphs, placed in a bank or among boulders, or in a hole in a tree stump. The clutch is four or five in number, and the ground-colour of the eggs from pale yellowish grey to a fairly deep pinkish red. The markings are very fine freckles of reddish brown, uniformly distributed or, sometimes, confined to a ring at the larger end. Average dimensions are given as 0 '69 by 0 '54 in.

Habits.—On the mountains of the main range and on Gunong Tahan and Gunong Benom, in Pahang, but not, so far as is known, on the Larut Hills, this bird is more or less confined to the zerophytic zones, and is not common below 5000 ft. It is found usually in pairs, but sometimes in small flocks, amongst low and heathy vegetation and in shrubs clothing the sides of gullies and steep slopes. Its habits are more those of the smaller babblers and tits, and it rarely flies out from a perch to capture insects on the wing as do the other smaller members of the family. Its usual note is quite a low twitter, and it does not seem to possess anything of a song like that of *Muscicapula m. westermanni*.

Muscicapula melanoleuca westermanni The Malay Little Pied Flycatcher

Muscicapula westermanni, Sharpe, P.Z.S., 1888, p. 270 (Gunong Ulu, Batang Padang, Perak); Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 19; Ogilvie-Grant, Journ. Fed. Malay States Mus., iii., 1908, p. 38, Oates and Reid, Cat. Birds' Eggs, Brit. Mus., iii., 1903, p. 264, pl. 7, fig. 20.

Muscicapula melanoleuca westermanni, Hartert, Nov. Zool., ix., 1902, p. 551. Cyornis melanoleuca westermanni (part), Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), ii., 1924, p. 224.

Description.—Adult male. —A superciliary stripe broadening posteriorly and almost meeting on the nape, white; greater inner wing coverts and edges of the inner secondaries, white, forming a bar on the wing; primaries and secondaries, brownish black, narrowly edged with white on their inner webs; axillaries and under wing coverts, white; tail, black, the basal portion of all but the centre pair of feathers, white; whole upper plumage and sides of the head, glossy black; the whole under surface, white, the bases of the feathers of the breast blackish, of the flanks greyish, the feathers of the throat slightly lengthened.

Adult female.—Above, bluish grey, rather darker on the crown; primaries and tail feathers, brownish rufescent, the latter with no white at the base; rump and upper tail coverts strongly tinged with clay-brown, quite distinct from the back; beneath, greyish white, the breast a deeper grey; feathers of the abdomen and flanks with dark bases.

Immature male.—Streaked and mottled above like all young flycatchers, with buff spots and centres to the feathers; below, a duller white, with blackish edges to the feathers, giving a squamated appearance; tips of the wing coverts and edges of the secondaries, buff; tail as in the adult.

Immature female.—Differs from the adult as does the immature male.

Soft Parts.—Iris, dark or hazel; bill, black; feet, black, often with a purplish tinge.

Dimensions.—Total length, 3'7 to 4 in.; wing, 2'1 to 2'3 in.; tail, 1'6 to 1'7 in.; tarsus, 0'6 in.; bill from gape, 0'45 to 0'5 in.; culmen, 0'35 in.

Range in the Malay Peninsula.—From the northern border south to Selangor, but only at high elevations; Pahang.

Extralimital Range.—The Malay Peninsular form occurs on Muleyit, in Tenasserim, and in Borneo and Sumatra, and closely allied if not identical races are found in Java and the Lesser Sunda Islands, in Celebes and in certain of the Philippines. The typical race, *M. m. melanoleuca*, is found in the Himalayas, east to Assam, and other forms have also been discriminated from the Indo-Chinese countries. The males, over an immense range of country, are identical, and the racial characters are to be found only in the females, which are always less numerous in collections than the males.

Nidification.—The breeding habits have not been observed in the Malay Peninsula, but judging from the dates on which young birds have been taken the nesting season is May and June. Whitehead obtained a nest on Kina Balu, North Borneo, at the end of March. It was placed in a creeper in big forest at about forty feet from the ground, and was a small pile of moss, deep, and lined with fine white roots. The one egg it contained, now in the British Museum, is oval, nearly devoid of gloss, pale fawn in colour, and measures o 58 by o 49 in.

Habits.—This delightful little flycatcher occurs on Kao Luang, in Peninsular Siam, along the main range of the Peninsula from South Perak to Central Selangor, on the Larut Hills, and on Gunong Tahan and Gunong Benom in Pahang, but is only exceptionally found below about 3500 ft., and then only where there are much higher elevations in the immediate vicinity. On Gunong Tahan it was common almost up to the extreme summit. As elsewhere in its very wide range, it prefers the lower shrubs and bushes, choosing some definite perch, after the manner of the family, to which it returns after catching insects on the wing, but it also occupies itself in searching the bark and leaves after the manner of a tit or nuthatch. The male has a very pleasant little trilling song, during which it fuffs out the feathers of the whole body, and especially the elongated ones on the throat. It is exceedingly tame and confiding, and it is often difficult to get far enough away to secure a specimen without blowing it to pieces. In the Malay Peninsula it may be said to be more especially an inhabitant of the dryer zerophytic zone and not so much of the rain forest. It is frequently a member of the mixed associations of birds, comprising such species as Mesia argentauris, Alcippe peracensis, Stachyridopsis c. chrysops, which travel in troops among the bushes, never staying long in any one spot.

Gerygone modiglianii pectoralis Davison's Flycatcher

General colour above, a pale ashy brown, the lores whitish; tail the same colour above, but darker beneath and towards the tip, with the outer feathers

narrowly tipped with white. Beneath, a pale sulphur-yellow, with an incomplete band across the breast the colour of the back. Total length, about 4 in.

All the very considerable number of this inconspicuous little bird that we have ourselves obtained have been from the coastal districts, generally in or near mangrove forest, but Hartert records one specimen obtained by Waterstradt between 2000 and 5000 ft. on Gunong Tahan. In Sumatra the very closely allied typical form is a mountain bird, but other races are coastal, so that this species is possibly one of an association found alike among the mangroves and on the high mountains, like *Parus c. ambiguus* and *Microtarsus melanoleucus*. The bird will be fully discussed and figured in Volume IV. of this work.

It is open to question whether this bird should be regarded as a member of this family or relegated to the *Sylviidæ* or warblers.

Cyanoptila cyanomelana cumatilis The Blue-and-White Migratory Flycatcher

Male, above, blue, brighter and more turquoise on the head, more verditer on the rest of the upper parts; beneath, throat, breast and flanks, dark verditerblue, separated from the white belly by a black line; bases of tail feathers and under tail coverts, white.

Female, above, brownish, wings and tail more rufescent, bases of the feathers of the head, whitish, a buff ring round the eye; beneath, greyish brown, chin, a patch on the throat, middle of the belly and under tail coverts, white.

Immature males are like the females, but are darker below and have the mantle, rump, wings and tail blue, as in the adult. Length about 6.5 in.

This is purely a migratory bird with us, and has been obtained in some numbers on the coasts and islands of the Straits of Malacca. Mr A. L. Butler also secured three specimens on Bukit Kutu, Selangor, at 3000 ft., and the bird is therefore mentioned here. The species has been divided into three races, with different breeding areas in West and North China and in Japan, but the range of the different races in their winter quarters is not yet thoroughly worked out, as is also the case with the very complicated changes in plumage of the male from immaturity to the full breeding livery. If the nominal races are all really distinct it is probable that the bird named above and the typical race *C. cyanomelana*, which breeds in Japan, may both occur in Malaya in winter as they seem to do in Borneo.

The species will be described in detail and figured in Volume V. of this work.

Hypothymis azurea prophata The Malaysian Black-naped Flycatcher

Vol. I., p. 183.

Male, brilliant cerulean blue, with a patch of short velvety black feathers on the nape; female, a much duller, more dingy blue, without the black nape patch. Total length, a little over 6 in.

This, again, is normally a low-level bird, only straying up the hills, though

it will be seen a good deal on the lower slopes—especially where there is much of the stemless palm, *Eugeissona tristis*—and in bamboo jungle.

Mr Chasen obtained two males near the summit of Penang Hill in December, and Mr Seimund found it on Gunong Kledang in the same month.

Rhipidura albicollis atrata

Salvadori's Fantail Flycatcher

Rhipidura atrata, Salvad., Ann. Mus. Civ. Gen., xiv., 1879, p. 203 (West Sumatra); Hartert, Nov. Zool., ix., 1902, p. 552.

Rhipidura albicollis (nec Vieill.), Sharpe, P.Z.S., 1887, p. 435; Butler, Journ. Straits Branch, Roy. Asiat. Soc., No. 32, 1899, p. 19; Ogilvie-Grant, Fascic. Malay., Zool., iii., 1906, p. 92; id. Journ. Fed. Malay States Mus., iii., 1908, p. 37.

Malay Name.—Merbah gila gunong.

Description.—Adult.—Sexes alike. Crown of head, lores, face and ear coverts, deep black; a white stripe from the nostrils over the eye, the feathers tipped with black; rest of upper surface, grey; wing coverts and wings, sooty brown, inner aspect of wings with the inner margins of the quills slightly paler; the under wing coverts and axillaries, dark grey, tipped with white. Tail feathers, dark grey, all except the central pair broadly tipped with white, the white running some distance up the outer web of the outer pair. Below, extreme chin, black; throat and sides of neck, white, the bases of the feathers, black, succeeded by a narrow band of almost black feathers; rest of under surface, dark iron-grey.

Immature.—Duller and more sooty, both above and below, very finely freckled with a rusty cinnamon; wing coverts very distinctly edged with the same colour.

Soft Parts.—Iris, hazel or brown; bill, black; feet, black or purplish brown.

Dimensions.—Total length, 7 to 7.5 in.; wing, 3.1 to 3.4 in.; tail, 3.9 to 4.2 in.; tarsus, 0.7 to 0.75 in.; bill from gape, 0.7 in.; culmen, 0.55 in.

Range in the Malay Peninsula.—From North Perak to South Selangor; Pahang. Always at high elevations.

Extralimital Range.—High mountains of Sumatra and Borneo.

Nidification.—Nests and eggs of the Malayan form are unknown, but may be expected to differ in no material respect from those of the Himalayan race, which builds small cup-shaped nests of grass and shreds of leaves, covered with cobwebs. Eggs are three or four in number, white or yellowish white in ground-colour, blotched, mostly near the large end, with yellowish brown and pale grey, and averaging o 69 by o 51 in.

Habits.—Widely distributed over all the high mountains, usually only from 3000 ft. upwards, but occasionally as low as the pass at Ginting Bidei, Selangor, at 2300 ft. One of the commonest and most conspicuous birds at all the hill stations; met with in pairs or small parties, usually by themselves

but occasionally with the mixed companies of small birds that surge through the jungle in successive waves. It is found, as a rule, in bushes and on the lower branches of the smaller trees, often in gardens or on hillsides, by the sides of streams and in gullies, but not in heavy jungle or on tall trees. The bird has the usual habits of flycatchers, selecting some commanding perch from which it makes continuous sallies. Frequently, however, it is seen on the ground, lowering its wings and raising and expanding its tail like the common lowland species. It has a pleasant though very feeble little song of several notes, which is, however, not often heard.

Note.—The Malayan form is very doubtfully distinct from the typical R. a. albicollis, being possibly a little darker, with the white on the tail more extensive. As might be expected, birds from the high mountains of Peninsular Siam are intermediate between the two forms.

Terpsiphone paradisi affinis

The Burmese Paradise Flycatcher

Vol. I., p. 179.

The paradise flycatcher may be recognized by its elongated tail, the plumage white and black in the adult males, chestnut-rufous and black in females and immature birds. Total length up to 16 or 18 in. in fully plumaged males.

This species will be found fairly common nearly as high as Maxwell's Hill in the Larut Hills, and also on Cameron's Highlands. At Fraser's Hill, in Selangor, it occurs on occasion, but not frequently, and in the Negri Sembilan hills it is very abundant. Its presence on Penang has been recorded, but there are no very recent records from that island.

Drymophila velata caesia

The Maroon-breasted Flycatcher

Vol. I., p. 184.

Male, light indigo-blue, darker on the head and throat and with a large maroon patch on the breast. Female, a rather lighter uniform blue. Total length, 7.5 to 8 in.

Common throughout the lower jungles, but very rarely ascending as high as 3500 ft. Fairly numerous on Bukit Kutu, Selangor, somewhat below the bungalows. Mr Seimund secured a pair on Gunong Kledang, near Ipoh, 2600 ft., in December.

Drymophila pyrhoptera pyrhoptera 1

The Malaysian Chestnut-winged Flycatcher

Male.—Head all round, mantle, lesser wing coverts, chin and throat, greyish blue; primaries, dark brown; secondaries and tail, rich chestnut; under surface, below the breast, buffy white, the flanks fuscous.

¹ Spelt thus by Temminck, the original describer.

Female.—With only a wash of blue on the head and mantle, which is clay-coloured; under surface, uniform buff, darker than in the male; the flanks brown. Total length, about 6.5 in.

This is a low-country scrub and forest bird, occasionally ascending the hills to about 3000 ft. Wray found it on the Batang Padang mountains and it is common at Ginting Bidei, Selangor. Chasen obtained a male on Penang Hill in December, so the bird finds a place in this volume. The habits are those of other flycatchers.

Rhinomyias umbratile infuscata

The White-throated Jungle Flycatcher

Above, dark brown, the head rather greyer, the rump more rufescent, as are the edges of the wing and tail feathers; lores and feathers in front of the eye, greyish white. Beneath, chin and throat, pure white, very sharply defined from a grey pectoral band. Rest of the under surface pure white, the feathers with black bases. Bill, stout, slightly hooked, the rictal bristles very strong and stiff. Total length, about 7 in. Sexes alike. The clear white throat will serve to distinguish this bird from the female of *Cyornis unicolor harterti*, which it otherwise somewhat resembles.

A jungle flycatcher, commonest in hilly country, at no great elevation, but found occasionally as high as 3500 ft. Hartert records it from Gunong Tahan, and we met with it on Kedah Peak on December near the summit.

The bird is a typical flycatcher in its habits, it frequently perches on projecting branches, usually at some height, from which it hunts insects.

It will be described at length in a later volume.

Culicicapa ceylonensis antioxantha

The Malayan Grey-headed Flycatcher

Vol. I., p. 185.

The dark grey head and throat, bright yellow belly, and green wings and tail, together with the very broad bill, readily separate this bird from all the other local flycatchers. Total length a little less than 5 in.

This species occasionally ascends the hills to a little over 3000 ft., and may be met with occasionally at the Semangko Pass and near the bungalows on Bukit Kutu and Maxwell's Hill, near Taiping. Mr Seimund has recently obtained it in Gunong Kledang, near Ipoh, 2600 ft. It is also a common bird on most of the Negri Sembilan hills and may be expected to occur on Mount Ophir and other Johore hills.

In the key to the species of flycatchers on page 178 of Volume I. there is perhaps a certain ambiguity in the second line of couplet 4, which should perhaps read "plumage with no blue," inasmuch as the present bird, which falls within the section, has a slaty grey head.

Stoporala thalassina thalassoides

The Malaysian Verditer Flycatcher

Glaucomyias thalassoides, Cab., Mus. Hein., i., 1850, p. 53 (Sumatra). Stoparola thalassinoides, Sharpe, Cat. Birds, Brit. Mus., iv., 1879, p. 439; Sharpe, P.Z.S., 1888, p. 271; Hartert, Nov. Zool., ix., 1902, p. 553.

Stoparola melanops thalassoides, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), ii., 1924, p. 241,

Description.—Adult male.—Lores and a narrow line on the forehead, glossy black; forehead, shining pale verditer-blue; remainder of upper and lower surface, a rather duller verditer, duller on the belly; the wing coverts, external aspect of the wings and the tail feathers, a purer blue; point of chin, black.

Adult female.—General colour a very much duller, greyer blue, without the verditer tint; lores, face and chin, mottled greyish brown; under tail coverts with pale silvery blue tips, the centres darker.

Immature.—Are spotted above with buffy and subterminal black tips to the feathers. Face and throat much more mottled than the female; under surface very grey, with irregular bars of blackish buffy and white.

Soft Parts.—Iris, hazel; bill and feet, black; young birds have the base of the bill and the gape yellowish.

Dimensions.—Total length, 5.7 to 6 in.; wing, 2.9 to 3.1 in.; tail, 2.5 to 2.7 in.; tarsus, o.6 in.; bill from gape, o.6 in.; culmen, o.45 in.

Range in the Malay Peninsula.—From the northern limit south to Malacca territory, but rare in Johore, whence I have seen one specimen only.

Extralimital Range.—Possibly for a short distance into Tenasserim but northern limits not defined; Sumatra; Borneo.

Nidification.—Unknown, but probably breeds about March or April in the central parts of the Peninsula. The Himalayan St. m. melanops makes a small cup-shaped nest of green moss, etc., lined with fine moss and roots, which is usually placed among boulders or on a mossy bank. The eggs are generally four in number, white or pinkish, with minute reddish markings, usually in a zone at the larger end. Average dimensions, o 78 by o 58 in. (Baker).

Habits.—This is not a very common flycatcher in Malaya, though it is widely distributed over the whole country, mostly in submontane districts, ranging up the hills to about 4000 ft. It seems to like fairly open situations, along the edges of clearings and roads and paths through big jungle, and is not found in scrub or broken country nor in very deep or damp forest. It is not so tame a bird as other Malaysian members of the genus and keeps to the higher trees, though occasionally seen on the ground. Its habits are precisely those of *Cyornis* and *Alsconax*.

¹ For the use of this specific name cf. Oberholser, Proc. Biol. Soc., Washington, 32, 1919, p. 240.