

SUNBIRDS AND SPIDER-HUNTERS

Family NECTARINIIDÆ

Vol. I., p. 297.

THIS family is represented in the mountains of the Malay Peninsula by a considerable number of species, though only two, *Æthopyga saturata wrayi* and *Arachnothera magna magna*, which are peculiar to the region, are at all common ; these two birds, however, will be amongst the first to attract the attention of the visitor to the hill stations. Others, such as the scarlet sunbird, are found in the intermediate zone, while some, very common on the seashore, are of only rare occurrence inland, far from the coast.

There should be no difficulty in identifying the spider-hunters or the brilliant males of the sunbirds ; the females of the latter section, however, are in some cases very much alike, and present no very marked characters, but as the sexes are usually found in association, it is generally possible to allocate the females to the correct males with no great risk of error.

Collectors should bear in mind that females and birds in moult are, at the present day, more required than the full-plumaged males, which are well represented in most large museums ; specimens in spirit are also in demand.

KEY TO THE SPECIES HERE DESCRIBED

MALES

- | | | | |
|---|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1 | { Larger birds, sexes almost alike,
males never with metallic
plumage : spider-hunters | | 2 |
| | | { Smaller birds, sexes very different,
males with the plumage always
partially metallic : sunbirds | 6 |
| 2 | { Plumage strongly striped above and
below | | <i>Arachnothera magna magna</i> , p. 295 |
| | | { Plumage not, or only faintly, striped
below | |
| 3 | { Ear coverts bright yellow, distinct
from cheeks | | } <i>Arachnothera chrysogenys astilpna</i> ,
p. 296 |
| | | { Ear coverts greenish, not distinct
from cheeks | |

4	{	Throat and breast grey	<i>Arachnothera longirostra longirostra</i> ,
			p. 295
		Throat and breast greenish	5
5	{	Throat and breast darker greyish green; upper mandible ridged; no pectoral tufts in male	<i>Arachnothera affinis modesta</i> , p. 297
		Throat and breast more yellowish green; upper mandible rounded; pectoral tufts orange-yellow in male	<i>Arachnothera crassirostris</i> , p. 297
6	{	Plumage always partially metallic (males)	7
		Plumage never metallic (females)	15
7	{	Metallic plumage confined to forehead	<i>Anthreptes simplex frontalis</i> , p. 293
		Metallic plumage not confined to forehead	8
8	{	Plumage very strongly streaked below	<i>Anthreptes macularia macularia</i> ,
			p. 292
		Plumage not, or very lightly, streaked below	9
9	{	Central pair of tail feathers not elongated, tail square or rounded	10
		Central pair of tail feathers elongated; or tail pointed	11
10	{	Throat, brown; belly, greenish yellow	<i>Anthreptes rhodolaema</i> , p. 294
		Throat, metallic amethystine; belly, dark	<i>Leptocoma brasiliانا</i> , p. 294
		Throat, metallic steel; belly, pale yellow	<i>Leptocoma f. flammixillaris</i> , p. 294
11	{	Crown, carmine or dark red	12
		Crown, metallic green or violet	13
12	{	Central tail feathers, scarlet; belly, pale grey	<i>Æthopyga mystacalis temmincki</i> ,
			p. 287
		Central tail feathers, metallic violet; belly, blackish grey	<i>Æthopyga siparaja siparaja</i> , p. 289
13	{	Lower breast, lemon-chrome	<i>Æthopyga nipalensis australis</i> , p. 291
		Lower breast, blackish	14
14	{	With a narrow yellow band on rump	<i>Æthopyga saturata wrayi</i> , p. 289
		With no yellow band on rump	<i>Æthopyga saturata anomala</i> , p. 290

FEMALES

- | | | | | |
|----|---|-----------------------------------------------------------------------------------------|-----------------------------------------|--------|
| 15 | { | Plumage strongly streaked below | <i>Anthreptes macularia macularia</i> , | |
| | | | p. 292 | |
| | | Plumage not strongly streaked below | | 16 |
| 16 | { | With a narrow white stripe behind the eye; abdomen, pale yellow | <i>Leptocoma f. flammaxillaris</i> , | p. 294 |
| | | With no narrow white stripe behind the eye; abdomen duller | | 17 |
| 17 | { | Tail feathers and primaries always more or less edged with red | <i>Æthopyga mystacalis temmincki</i> , | p. 287 |
| | | Tail feathers and primaries never edged with red | | 18 |
| 18 | { | Outer tail feathers not tipped with white; bill straighter | | 19 |
| | | Outer tail feathers tipped with white; bill more curved | | 20 |
| 19 | { | Larger, wing exceeding 2.7 in.; beneath more greenish | <i>Anthreptes rhodolæma</i> , | p. 294 |
| | | Smaller, wing less than 2.4 in.; beneath more yellowish | <i>Anthreptes simplex frontalis</i> , | p. 293 |
| 20 | { | With a yellow band across the rump | | 21 |
| | | With no yellow band across the rump | | 22 |
| 21 | { | Above, a little darker and greener | <i>Æthopyga saturata wrayi</i> , | p. 289 |
| | | Above, a little paler and greyer | <i>Æthopyga saturata anomala</i> , | p. 290 |
| 22 | { | Tail squarer | <i>Leptocoma brasiliانا</i> , | p. 294 |
| | | Tail more graduated | | 23 |
| 23 | { | Central pair of tail feathers darker; under surface more yellowish | <i>Æthopyga siparaja siparaja</i> , | p. 289 |
| | | Central pair of tail feathers more greenish, under surface more greyish green | <i>Æthopyga nipalensis australis</i> , | p. 291 |

Æthopyga mystacalis temmincki

Temminck's Scarlet Sunbird

PLATE 25 (lower figures)

Nectarinia temmincki, S. Muell, *Natuur. Gesch. Land en Volk*, 1843, p. 173 (note); Muell. and Schleg, *Zool.*, 1846, pl. 8, fig. 2.

Æthopyga temmincki, Shelley, *Mon. Nectarinid.*, 1880, p. 47, pl. 16, fig. 1; Gadow, *Cat. Birds, Brit. Mus.*, ix., 1884, p. 16; Robinson, *Journ. Fed. Malay States Mus.*, i., 1905, p. 28; *id. op. cit.*, ii., 1909, p. 213.

Æthopyga mystacalis temmincki, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 372.

Malay Name.—Kélichap merah.

Description.—*Adult male.*—Above, carmine, a horseshoe round the crown, broadening on the occiput and the upper tail coverts, metallic violet; lower back, chrome-yellow; wing coverts, including the primary coverts, carmine; primaries and secondaries, brown, edged externally with golden olive, the outer webs of the secondaries tinged with crimson, inner aspect of wing, grey, paler on the inner edges of the quills, axillaries and under wing coverts, whitish, the outer of the latter scarlet. Tail, blackish brown, the outer webs of the outer feathers scarlet, the middle pair entirely scarlet, except the shaft region. Lores and a moustachial streak, metallic violet; chin, throat and upper breast, carmine, the bases of the feathers white, the throat with very fine yellow streaks; belly and flanks, clear grey; the middle of the belly, the thighs and the under tail coverts tinged with wax-yellow.

Adult female.—Central tail feathers not lengthened. Top of head, greyish, the centres of the feathers dark; back and rump, golden olive; the edges of the primaries and secondaries orange, becoming nearly scarlet; edge of wing, yellowish; tail feathers, dark brown, edged with scarlet; under surface, yellowish olive, greyer on the belly and flanks, more yellow on the middle of the belly and the under tail coverts.

Young males.—Are at first like the females and gradually assume the adult plumage of their sex.

Soft Parts.—Iris, dark or hazel; bill, dark above, brownish or pinkish horn below, paler at base; feet, brownish, sometimes with a pinkish tinge.

Dimensions.—Total length, *male*, 5 to 5·2 in.; *female*, 3·8 to 4 in.; wing, *male*, 2 to 2·2 in.; *female*, 1·9 in.; tail, *male*, 2·2 to 2·5 in.; *female*, 1·5 to 1·8 in.; tarsus, 0·6 to 0·7 in.; bill from gape, 0·65 to 0·7 in.; culmen, 0·6 in.

Range in the Malay Peninsula.—From Peninsular Siam south to the hills of Negri Sembilan, and possibly on Mount Ophir in Johore. Also in the lowlands of West Pahang.

Extralimital Range.—Mountains of Sumatra and Borneo. Whether our bird should be regarded as a subspecies, merely, of the Javan *Æ. mystacalis* is perhaps a little doubtful.

Nidification.—Unknown.

Habits.—This lovely sunbird, perhaps the most beautiful of its order, is very erratically distributed in the Malay Peninsula. It is not uncommon in Trang, in Peninsular Siam, at no great elevations. It occurs on the Larut Hills, but is not so numerous, nor does it range so high, as *Æ. s. wrayi*. On the main range we have not come across it—except at quite low altitudes at Temengoh and in the Batang Padang valley—until Bukit Kutu in Selangor; at Ginting Bidei it is quite a common bird, as well as on most of the hills of Negri Sembilan, where *Æ. s. wrayi* is not found; on Gunong Angsi it is especially numerous. There is nothing special to note regarding its habits, which are precisely those of other species of the genus.

The male bird figured is from Kedah Peak, 2800 to 3500 ft., collected

by H. C. Robinson and C. B. Kloss, on 1st December 1915, the female, in default of a Malayan specimen in suitable condition, is from Sungei Kumbang Korinchi, West Sumatra, 4700 ft., shot on 20th April 1914.

Æthopyga siparaja siparaja

Raffles' Sunbird

Vol. I., p. 301.

Malay Names.—Burong sĕpah raja ; kĕlichap merah.

Male.—Differs from the corresponding sex of *Æ. m. temmincki* in having the scarlet of a deeper tone, the middle tail feathers metallic violet, not crimson, and the belly a blackish grey, washed with greenish, not a clear light grey.

Female.—A darker green than that of *Æ. m. temmincki*, without any tinge of red on the primaries. Beneath, a nearly uniform wax-yellow.

On Penang Hill this sunbird will be found at and near the summit, but in the Malay Peninsula it occurs only at low elevations, being replaced at moderate heights by the even more beautiful *Æ. m. temmincki*.

Æthopyga saturata wrayi

Wray's Sunbird

Æthopyga wrayi, Sharpe, *P.Z.S.*, 1887, p. 440, pl. 38, fig. 2 (Gunong Ijau, Perak, 4000 ft.); Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 21; Hartert, *Nov. Zool.*, ix., 1902, p. 573; Ogilvie-Grant, *Fascic. Malay., Zool.*, iii., 1906, p. 74; id. *Journ. Fed. Malay States Mus.*, iii., p. 19; Robinson, *op. cit.*, ii., 1909, p. 212.

Malay Name.—Kĕlichap gunung.

Description.—*Adult male.*—Crown, metallic violet; mantle, deep crimson; middle of the back, black, separated from the metallic purplish violet rump and upper tail coverts by a narrow, sulphur-yellow band; scapulars, wing coverts and primaries, black, the latter brownish on the outer webs; inner aspect of wing, blackish, the inner edges of the quills whiter; axillaries and under wing coverts, white, faintly tinged with yellow. Tail, black, the outer feathers faintly edged with metallic violet, the middle pair almost entirely metallic, edged with black and broadly tipped with black. Lores, sides of the face and ear coverts, black. Beneath, chin, throat and upper breast, black, a broad metallic violet moustachial streak; sides of the breast, deep crimson; middle of lower breast, pale sulphur-yellow, with occasional narrow bright red streaks; rest of under surface, greyish olive-green, with a tuft of yellowish on the flanks.

Adult female.—Head and neck, all round, greenish grey; wings, bronzy olive; tail, blackish, washed with green, all except the centre pair broadly tipped with dirty-white; back and greater upper tail coverts, olive-green.

with a broad band of pale sulphur-yellow across the rump. Beneath, greenish grey, more yellowish on the middle of the abdomen.

Immature males.—Are like the adult females, but the tail rather darker and the rump band more conspicuous. They moult gradually into the metallic of the adult male.

Soft Parts.—Iris, dark; bill, black; feet, brownish; females and immature have the greater part of the bill horny brown, paler at the gape.

Dimensions.—Total length, *male*, 5·5 in.; *female*, 4 in.; wing, 1·9 to 2·1 in.; tail, 1·5 to 1·7 in. (middle feathers up to 2·9 in.); tarsus, 0·5 in.; bill from gape, 0·8 in.; culmen, 0·65 to 0·7 in.

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

Extralimital Range.—Wray's sunbird is peculiar to the Malay Peninsula. It is very closely allied to forms from the Himalayas (*Æ. s. saturata*) and from Burma and Yunnan, south to Muleyit in Tenasserim and parts of Siam, and east to Cambodia and other parts of French Indo-China (*Æ. s. sanguinipectus*), but has no representatives in the Indo-Malayan Islands.

Nidification.—Unknown; *Æ. s. saturata* builds pear-shaped nests of grass, roots and fibre, furnished with an eave to the entrance, and suspended to the ends of branches. The eggs are pale, freckled pink or white, with large blotches and spots of deep brown forming rings near the larger end. Dimensions average 0·59 by 0·44 in. (*Baker*).

Habits.—This beautiful sunbird is very common on all the hills of the main range, and on Gunong Tahan and Gunong Benom in Pahang, but never descends below 3000 ft. It is common in all situations, except, of course, the darker jungle where there are no flowers. In the gardens in the Larut Hills it is especially numerous, and has acquired the habit of perforating the bases of the corollas of Hibiscus and the introduced Fuchsias and Salvias for the sake of the nectar and small insects entrapped therein. The flight is very light and graceful, and the birds are incessantly in motion, often hovering with rapidly vibrating wings in front of the flowers, displaying the white axillaries and under wing coverts and the yellowish flank feathers. Females are much more retiring than males and are often difficult to observe. The note is a very feeble little twitter.

Note.—This species seems closer to the typical *Æ. s. saturata* than to the geographically nearer *Æ. s. sanguinipectus*. The birds vary a good deal, and in many the scarlet streaks on the breast are diminished or almost lacking. The pale yellow rump band is also variable in extent.

Æthopyga saturata anomala

Abbott's Sunbird

Æthopyga anomala, Richmond, *Proc. U.S. Nat. Mus.*, xxii., 1900, p. 319 (Khao Song, mountains of Trang, Peninsular Siam, 2500 ft.).

Description.—*Adult male*.—Differs from *Æ. s. wrayi* in having the crimson

of the mantle and sides of the breast very much darker, the yellow patch on the breast reduced in extent, and with no scarlet streaks, and in entirely lacking the pale sulphur band on the rump.

Adult female.—Almost indistinguishable from that of *Æ. s. wrayi*, perhaps a little duller and greyer.

Soft Parts.—As in *Æ. s. wrayi*.

Dimensions.—As in *Æ. s. wrayi*.

Range in the Malay Peninsula.—The mountains of Trang, Peninsular Siam.

Nidification.—Unknown.

Habits.—We ourselves have never succeeded in obtaining this species, which is known only from the original series of fifteen obtained by Dr W. L. Abbott in 1897. Its habits may be expected to resemble precisely those of *Æ. s. wrayi*.

Note.—Mr Stuart Baker considers this race identical with *Æ. saturata*. A comparison of two of the original series with that form shows that it is certainly distinct.

Æthopyga nipalensis australis

The Southern Yellow-backed Sunbird

PLATE 25 (*upper figures*)

Æthopyga nipalensis australis, Robinson and Kloss, *Bull. Brit. Orn. Club*, xliv., 1923, p. 14 (Kao Luang, Nakon Sri Tammarat, Peninsular Siam, 5000 to 5800 ft.); id. *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 375.

Æthopyga sanguinipectus (*nec* Walden) Robinson, *Journ. Fed. Malay States Mus.*, v., 1915, p. 109.

Description.—*Adult male*.—Head, nape and upper mantle, shining metallic green; lower mantle and patch on sides of the neck, dark crimson; wing coverts and middle of the back, olive-green, separated from the rump and upper tail coverts, which are shining metallic green, by a narrow and inconspicuous yellowish band. Primaries and secondaries, dark brown, the outer edges of the secondaries, bronzy. Inner aspect of wing, dusky, inner edges of quills, whitish, axillaries and under wing coverts, white; tail, black, the feathers edged with metallic greenish, the middle pair almost entirely so. Lores, and sides of the head, black; the ear coverts with a faint tinge of olive-green. Below, chin and throat, black, a moustachial streak, metallic green, surrounding the throat and broadening into a patch on the lower throat. Upper breast, lemon, deepening into chrome, with fine orange-red streaks; lower belly, flanks, and under tail coverts, greenish olive.

Adult female.—Above, greenish grey, more bronzy olive on the edges of the secondaries, and with no yellow band on the rump. Tail, blackish, washed with olive-brown, and with white tips to all but the centre pair of feathers. Beneath, throat and breast, greyish, more yellow on the abdomen and under tail coverts; the axillaries and flank feathers distinctly tipped with pale sulphur.

Soft Parts.—*Male*: iris, dark; bill, black; feet, brownish black. *Female*:

bill, horn, paler on the lower mandible; feet, yellowish brown, much paler than in the male.

Dimensions.—*Male*: total length, about 5 in.; wing, 1'9 to 2 in.; longest tail feather, 2'2 in.; tarsus, 0'55 in.; bill from gape, 0'7 in. *Female*: total length, about 4'2 in.; wing, 1'75 to 1'8 in.

Range in the Malay Peninsula.—Known at present only from nine specimens from the mountains of Bandon (Kao Nawng, 3500 ft.), and of Nakon Sri Tammarat (Kao Luang, 5000 to 5800 ft.), Peninsular Siam.

Extralimital Range.—Other subspecies, differing in the distribution of colours on the upper surface, and in larger size, occur throughout the Himalayas, south through Assam to Manipur and the Shan States, and on Mount Victoria, Chin Hills, usually at fairly high elevations.

Nidification.—Not known, but certain to resemble closely that of other species of the genus.

Habits.—As noted above, this species has as yet been secured only at two localities near the summits of high mountains in Peninsular Siam. I myself have seen it only once, feeding on flowering shrubs, at the edge of a landslip, in very dense jungle. The specimens obtained by Captain Pendlebury's party were found in very similar country, and the habits generally differ in no way from those of *C. s. wrayi*.

The female figured, natural size, is one of the typical series, obtained by Captain Pendlebury on Kao Luang, Nakon Sri Tammarat, at about 5000 ft., on 29th March 1922; the male is from Kao Nawng, Bandon, 3500 ft., 26th June 1913.

Anthreptes macularia macularia

The Banded or Purple-naped Sunbird

Vol. I., p. 304, pl. 22 (*lower figures*).

The longitudinally striped lower plumage, yellowish and dark green, together with the small size (total length, less than 6 in.) and the purplish metallic nape patch and rump in the male differentiates this bird from all other Malayan sunbirds. The only other species with which it could possibly be confused, *Arachnothera magna* (the streaked spider-hunter), is much larger, total length about 7'5 in., with a much coarser bill, has never any metallic element in the plumage, and has the yellow in the stripes of the lower surface brighter and more distinct.

The purple-naped sunbird is fairly common in heavy jungle, as high as 3500 ft., and has been met with on most of the hills, though it is somewhat rarer towards the extreme north of the Peninsula. It is numerous on the lower slopes of Gunong Tahan, in the neighbourhood of the Semangko Pass, and on the Negri Sembilan hills. It is perhaps more widely known under the name *Anthreptes hypogrammica*.

*Anthreptes simplex frontalis***The Plain-coloured Sunbird**

Nectarinia frontalis, Blyth, *Journ. Asiat. Soc. Bengal*, xiv., 1845, p. 558 (Singapore).

Anthreptes xanthochlora, Hume, *Stray Feath.*, iii., 1875, p. 319 (Pabyin, near Mergui).

Anthothreptes simplex, Kloss, *Journ. Fed. Malay States Mus.*, iv., 1911, p. 229; Hopwood, *Journ. Bombay Nat. Hist. Soc.*, xxvi., 1919, p. 857.

Anthreptes simplex frontalis, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 380.

Anthreptes simplex xanthochlora, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 412.

Malay Name.—Kêlichap kêlabu (?).

Description.—*Adult male.*—Whole upper plumage, dull olive-green, tinged with bronze, a frontal patch, metallic greenish, violet in certain lights. Primaries and secondaries, dark brown, with olive-green edges; inner aspect of wing, dusky, the quills with their inner margins whitish, the axillaries and under wing coverts white, tinged with yellow; tail, brownish, washed with olive-green; sides of the face, lores, ear coverts, chin and throat, greyish green; flanks, the same; pectoral tufts very feebly developed, sulphur-yellow, sometimes with brighter tips; middle of abdomen and under tail coverts much more yellowish.

Adult female.—Lacking the metallic frontal patch, and smaller.

Soft Parts.—Iris, red or reddish to chocolate; bill, black or greenish black; feet, oil- or olive-green.

Dimensions.—Total length, 4·7 to 5 in.; wing, *male*, 2·3 to 2·6 in.; *female*, up to 2·3 in.; tail, 1·9 in.; tarsus, 0·6 to 0·7 in.; bill from gape, 0·6 in.; culmen, 0·5 in.

Range in the Malay Peninsula.—From the northern limit certainly to Negri Sembilan, but nowhere common. Singapore Island(?).

Extralimital Range.—Tenasserim, but how far north uncertain; Borneo. The typical bird from Sumatra is darker above and greyer beneath.

Nidification.—A nest taken by Hopwood on the sea-coast near Tavoy in Tenasserim in March is described as “resembling a munia’s nest, but larger, and pendulous, the entrance hole near the top, but without a portico; made principally of grass and fibre and lined with silk cotton.” The eggs obtained were somewhat like those of *Anthreptes m. malacensis* described in Volume I., p. 302, but duller and more weakly marked. The two eggs averaged 0·76 by 0·51 in., but Baker states that they are probably exceptionally large.

Habits.—This inconspicuously coloured sunbird is widely distributed, mostly in hilly country, along the foot of the main range, up to a height of about 3000 ft., and appears to be common only in certain localities in Selangor and Negri Sembilan. In Peninsular Siam, as is the case in Tenasserim, we found it feeding on flowering shrubs, growing on dry and sandy plains on the sea-coast, but in the southern districts it is solely an inhabitant of high

forest, and we have never seen it among the mangroves and betel-palms as reported by Hopwood. There is nothing special to be said about its habits, which are those of *A. m. macularia*, the banded sunbird, except that it is a rather more retiring bird than that species, keeping much to the smaller trees and bushes, and not displaying as does that species.

Anthreptes rhodolaema

Shelley's Sunbird

This sunbird closely resembles the common brown-throated sunbird, *Anthreptes m. malacensis*, to be seen in almost every coconut-palm, and described and portrayed in Volume I. of this work (p. 302, pl. 22, upper figures). It differs from this bird in the much darker tints, especially the green of the belly, in both sexes. In the male the ear coverts are maroon-red, not olive, and the wing coverts also are the same colour. This sunbird inhabits deep jungle, not coconut groves, and is nowhere common; we have come across it in Peninsular Siam, Penang, the coast of Perak and the interior of that State. Mr Seimund has obtained recently a single female on Gunong Kledang, near Ipoh, 2600 ft. Dr Hartert mentions the species as having been received from between 2000 and 5000 ft. on Gunong Tahan (*Nov. Zool.*, ix., 1902, p. 574), and on the strength of his record I include a brief mention of the bird in this volume, deferring a full description to Volume IV. As with many birds collected by Waterstradt, I think it probable that some confusion has arisen in the original labelling of the specimens.

Leptocoma flammixillaris flammixillaris

The Burmese Yellow-breasted Sunbird

Male.—Central tail feathers not elongate. Above, a light olive-brown, faintly tinged with green in freshly moulted specimens, without metallic patch on the forehead; tail, blackish, tipped with white. Beneath, throat and breast, metallic steel, purplish in centre, bordered beneath by a chocolate band, with a black patch in centre of the breast; rest of under parts, pale yellow; pectoral tufts, bright orange.

Female.—Like the male above, but with a short white stripe behind the eye. Beneath, a uniform pale yellow. Total length, about 4·3 in.

On the mainland this species occurs only on and near the coast, about as far south as Selangor; it is common in Penang, and Chasen has obtained it near the summit of the hill, 2700 ft.

Leptocoma brasiliiana

Van Hasselt's Sunbird

Vol. I., p. 300.

Malay Name.—Kělichap blacham.

Male.—Head, brilliant metallic green, with bronzy reflections; mantle and wing coverts, velvety black; rump and upper tail coverts, metallic

purplish green. Beneath, chin, throat and upper breast, purplish amethystine ; lower breast and belly, maroon-crimson ; tail feathers, purplish black.

Female—Above, greyish olive ; beneath, dull yellow, duller and greener on the throat and breast, paler on the abdomen and under tail coverts ; tail feathers, black, with a slight gloss, the outer pairs with narrow white tips. Total length in both sexes, about 4 in. ; bill from gape, 0'65 to 0'75 in.

As noted previously (Volume I., p. 301), this beautiful sunbird is very common up to the summit of Penang Hill, 2700 ft., while it has been obtained recently in large numbers by Mr F. N. Chasen. It is rare in the interior, but Mr E. Seimund secured a single female on Gunong Kledang, near Ipoh, 2600 ft., in December 1927.

Arachnothera longirostra longirostra

The Little Spider-hunter

Vol. I., p. 305.

Bill, long and slender ; colour above, dull olive-green ; below, throat grey, becoming greener on breast and pale wax-yellow on belly ; male with bright chrome pectoral tufts, female without them. Total length, about 6'5 in. ; bill from gape, 1'45 to 1'7 in.

This species also, which is a very common lowland bird, occasionally works its way for some distance up the slopes, sometimes to as high as 3000 ft. It is not, however, anything but a rare mountain bird, and will not, as a rule, be found in situations affected by the streaked spider-hunter described below.

Arachnothera magna magna

The Large Streaked Spider-hunter

Cinnyris magna, Hodgson, *Ind. Rev.*, ii., 1837, p. 272 (Nepal).

Arachnothera magna, Shelley, *Mon. Nectarinid.*, 1880, p. 347, pl. 112 (upper figure) ; Gadow, *Cat. Birds, Brit. Mus.*, ix., 1884, p. 105 ; Sharpe, *P.Z.S.*, 1887, p. 441 ; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), ii., 1890, p. 268 ; Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 21 ; Ogilvie-Grant, *Journ. Fed. Malay States Mus.*, iii., 1909, p. 19 ; id. *Cat. Birds' Eggs, Brit. Mus.*, v., 1912, p. 29, pl. 1, fig 13.

Arachnothera magna magna, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 415.

Description.—*Adult.*—Sexes alike. Whole upper surface, a bright yellowish olive, with black median streaks to the feathers, thicker on the head (where they become black centres) and mantle, thinner and less numerous on the rump ; lesser wing coverts with heart-shaped black centres edged with yellowish olive. Primary coverts, primaries and secondaries, brownish, edged with the colour of the back ; inner aspect of wing, blackish ; the inner edges of the quills and the axillaries pale yellowish white ; the under wing

coverts with dark centres edged with yellow, edge of wing a deeper yellow. Tail as the back, but browner, with a subterminal black bar; sides of the head and ear coverts, greyish green, with median black streaks. Whole under surface, pale yellowish, with clear black streaks, narrower on the throat; under tail coverts, brighter yellow with black centres.

Soft Parts.—Iris, dark brown; bill, black, the edges of the mandibles dull yellow; feet, bright gamboge-yellow.

Dimensions.—Total length, 7 to 7.5 in.; wing, 3.3 to 3.8 in.; tail, 2.1 to 2.5 in.; tarsus, 0.75 to 0.85 in.; bill from gape, 1.7 to 1.8 in.; culmen, 1.4 to 1.65 in. Females are rather smaller than males, with shorter bills.

Range in the Malay Peninsula.—From Northern Perak to Southern Selangor, absent or rare in Pahang.

Extralimital Range.—From the Western Himalayas to East Assam, south to Manipur, the Chin Hills, the Shan States, and Tenasserim; French Indo-China in a slightly modified form. Pegu and the Karen Hills are occupied by a very slightly smaller form, with finer streaking above and below (*A. magna aurata*).

Nidification.—Not known in the Malay Peninsula. In the Himalayas and Tenasserim the nests are described as more or less purse-shaped structures composed of skeleton leaves, bound together with fibres and cobwebs and attached to the under surface of a large leaf, usually that of a banana. The eggs are two or three in number, and are very variable, usually dark greyish or chocolate-brown, sometimes almost uniform, sometimes with fine stipplings. Baker gives the average dimensions as 0.9 by 0.61 in.

Habits.—This bird is common in the Larut Hills and along the main range; as far south as Gunong Menang Gasing in South Selangor, but does not extend into Negri Sembilan and is never found below about 3000 ft. It is an inhabitant of the gullies and damp places overgrown with bananas and other large-leaved plants, and is very active and in constant motion, searching the leaves and flowers for insects and grubs. Flight is swift and powerful, though the bird is never on the wing for any distance. The male, though it has no pectoral tufts, displays in much the same manner as the other species, maintaining itself almost vertically in the air, as it were, on its tail, and fluffing out the loose plumage of the flanks. The note constantly uttered is a rather irritating “*chirr-r-r*,” sounded on the wing as well as when perched.

Arachnothera chrysogenys astilpna

The Yellow-eared Spider-hunter

Vol. I., p. 306.

Malay Name.—Kêlichap pisang.

A full description has been given of this spider-hunter in Volume I. of this work. Dull olive-green above, greyish green below, the middle of the abdomen and the under tail coverts more yellowish. The most distinctive characters are the pale yellow ring round the eye and the ear coverts, and a patch beneath them of the same colour. Total length, about 7 in.

Widely distributed throughout the Peninsula, this bird generally occurs at low levels. It has, however, been found near the summit of Penang Hill, and on hills in Peninsular Siam, and may be looked for in the vicinity of banana and other broad-leaved plants.

Arachnothera affinis modesta

The Malayan Grey-breasted Spider-hunter

A rather bright greenish yellow above, the wings rather more brownish, the edge bright yellow. Below, an ashy greenish grey with faint shaft streaks. Tail, blackish, washed with green, with very conspicuous whitish quadrate spots on the inner webs of the three outer pairs of feathers. Total length, 5.75 to 6 in. Female, rather smaller, but otherwise not differing from the male.

A very common species on the lower slopes of the hills, occasionally ascending to about 3000 or 3500 ft., and especially numerous on the Negri Sembilan hills. The species has a wide distribution from the north of Tenasserim to Johore, Sumatra and the lowlands of Borneo. The races from Java and the Bornean mountains differ slightly in the degree of obscure streaking on the under surface and in tint.

Arachnothera crassirostris

The Lesser Thick-billed Spider-hunter

Arachnocestra crassirostris, Reichenb., *Handl., Scansoriæ*, 1854, p. 314, No. 747, pl. 592, fig. 4016 (India, here restricted to Settlement of Malacca).

Arachnothera crassirostris, Gadow, *Cat. Birds, Brit. Mus.*, ix., 1884, p. 102; Ogilvie-Grant, *Fascic. Malay., Zool.*, iii., 1906, p. 72; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 214.

Arachnoraphis crassirostris, Shelley, *Mon. Nectarinid.*, 1880, p. 371, pl. 119.

Description.—Bill, very thick at base, the upper mandible rounded, without any culminal ridge.

Adult male.—Upper surface, olive-brown, with dark centres to the feathers of the crown; the rump more yellowish; wing coverts, primaries and secondaries, dark brown, with yellowish edges; inner aspect of wing, dusky brown; the quills with pale yellow inner margins; the under wing coverts and axillaries, pale sulphur-yellow, the edge of the wing rather deeper yellow. Tail feathers, blackish, edged with olive, with a pale tip, which becomes a distinct pale yellow quadrate spot on the inner web of the outer two pairs. A dark brown stripe from the bill through the eye to the ear coverts with a yellowish stripe above and below the eye. Beneath, greyish yellow on the throat, becoming greenish grey on the breast, and clear pale yellow on the abdomen and under tail coverts; flanks and thighs, more greenish; lateral tufts, bright chrome-orange.

Adult female.—Like the adult male, but without the bright lateral tufts.

Immature.—Like the female, but duller and greyer below.

Soft Parts.—Iris, dark brown, hazel or hazel-grey; bill, black, the lower mandible greyish horn; feet, dark olive-green or greenish plumbeous, the soles orange.

Dimensions.—Total length, 6·5 in.; wing, 2·9 to 3·1 in.; tail, 1·8 to 2 in.; tarsus, 0·6 to 0·7 in.; bill from gape, 1·25 in.; culmen, 1·1 to 1·2 in.

Range in the Malay Peninsula.—From the northern border to the territory of Malacca.

Extralimital Range.—Birds from Sumatra and Borneo appear to be identical with the Malayan bird, but the available material is limited.

Nidification.—Unknown.

Habits.—Almost the rarest of the spider-hunters in the Malay Peninsula, though widely distributed. We have obtained it at Tasan, Champorn, within a few miles of the British Indian frontier; at Gedong, in South Perak; near Lipis in Pahang; on Cameron's Highlands, at 3500 ft., and on Bukit Lantai in Negri Sembilan. The "Skeat Expedition" collected it in the interior of Kelantan, and there are specimens in the British Museum from Bernam and Klang, in Selangor; from Kuroo, near Tampin, in Negri Sembilan, and from the territory of Malacca. Davison obtained this specimen on a silk cotton-tree (*Bombax*), in flower, in company with other species of spider-hunters, sunbirds and flower-peckers, and notes that this was the only occasion on which he encountered the species. Those that we ourselves have obtained were from among wild bananas in heavy jungle. The occurrence at so high an altitude as 3500 ft. on Cameron's Highlands is probably exceptional, but I have described the species in full in this volume in the hope that further information may be elicited.