

SUNBIRDS AND SPIDER-HUNTERS

Family NECTARINIIDÆ

THIS family has strongly marked characters, which divide it from most other Oriental birds, and may be said to take the place in the Old World of the humming-birds in the New, though there is no near relationship between the two families. The bill is long, gently curved downwards, and has both mandibles finely serrated at the tips, though a glass is frequently required to make this out; there are fine rectal bristles, always short, and often extremely inconspicuous, but the nostrils are not hidden by bristles, but are covered with an operculum.

The wing has ten primaries, the first small, and is somewhat rounded; the tail has twelve feathers, is sometimes square, sometimes graduated; the central pair in some genera is much elongated. The tarsi are slender, variable in length and scutellated behind.

The plumage of the sunbirds is brilliant, metallic or partly so in the males, dull and inconspicuous in the females, and the young are like the females; in some species the adult male has an "eclipse" dress, in which stage it also resembles its mate. The spider-hunters are duller-coloured and larger birds, generally greenish, some of the species having ornamental breast plumes in the male.

All members of the group are small birds, none larger than a sparrow.

The nests are purse-shaped structures, generally rather elongated, and suspended from trees, the entrance usually furnished with an eave. The eggs are lightly spotted, but in a few species are uniform.

All the species are strictly sedentary birds.

The family is a large one of over four hundred species, found throughout the warmer parts of Africa, Asia and Australasia. It is well represented in Malaya, where over twenty-five species are found, of which seven are included in this volume.

KEY TO THE SPECIES HERE DESCRIBED

	<i>MALES</i>	
I	{	Larger birds, sexes almost alike, males never with metallic plumage: spider-hunters 2
		Smaller birds, sexes very different, males always with metallic plum- age: sunbirds 3

2	{	Ear coverts, bright yellow, distinct from cheeks	} <i>Arachnothera chryso-genys astilpna</i> , p. 306
		Ear coverts, greyish green, not distinct from cheeks	
3	{	Plumage, largely metallic (males)	4
		Plumage, never metallic (females)	7
4	{	Plumage, longitudinally streaked below	} <i>Anthreptes m. macularia</i> , p. 304
		Plumage, not longitudinally streaked below	
5	{	Throat, crimson	} <i>Æthopyga siparaja siparaja</i> , p. 301
		Throat, brown	
6	{	Throat, metallic amethystine	6
		Larger, with chrome-orange pectoral tufts	} <i>Chalcostetha c. calcostetha</i> , p. 298
		Smaller, with no pectoral tufts	

FEMALES

7	{	Plumage, longitudinally streaked beneath	} <i>Anthreptes m. macularia</i> , p. 304
		Plumage, not longitudinally streaked beneath	
8	{	Larger, tail much graduated, broadly tipped with white	} <i>Chalcostetha c. calcostetha</i> , p. 298
		Smaller, tail slightly graduated or square, white tips absent or very narrow	
9	{	Larger, bill not greatly curved, brighter beneath	} <i>Anthreptes m. malacensis</i> , p. 302
		Smaller, bill more curved, duller beneath	
10	{	Above, greener grey, tail also greenish at base	} <i>Æthopyga s. siparaja</i> , p. 301
		Above, greyer; tail, blackish	

*Chalcostetha calcostetha calcostetha***Macklot's Sunbird**

PLATE 23 (centre figure, male; lower, female)

Nectarinia calcostetha, Jard., *Nat. Libr. Ornith.* xiii., *Nectarinid.*, 1843, p. 264 (Java).

Chalcostetha insignis, Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 313.

Chalcostetha chalcostetha, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 373.

Malay Name.—Kēlichap bakau.

Description.—*Adult male.*—General plumage, metallic. Head and nape, shining emerald-green; lores, a band through the eyes, sides of the neck and mantle, glossy velvety black, not metallic; scapulars, lower back, rump and tail coverts, greenish metallic, more amethystine on the lower back and tail coverts. Lesser wing coverts as the crown, greater coverts, black, with glossy violet reflections. Primaries and secondaries, brownish black, more glossy on the secondaries; inner aspect of wing, brownish; axillaries and under wing coverts, sooty brown. Tail, black, with purplish reflections. Beneath, chin and throat, metallic copper, edged with a purple line; lower breast and belly more violet-purple; middle of the abdomen, flanks, thighs and under tail coverts, greyish black; pectoral tufts, chrome-orange, mixed with paler yellow.

Adult female.—Above, including the wing coverts, greyish brown with a strong greenish tinge, greyer on the head and rump. Primaries and secondaries, brown, narrowly edged with golden olive; inner aspect of wing, pale brown, broadly whitish towards the base of the feathers; axillaries and under wing coverts, yellowish white with dark centres, edge of wing whitish. Tail, blackish, with a slight purple lustre, all except the centre pair of feathers with broad white tips. Lores, dark brown, a superciliary stripe and a patch beneath the eye, dirty-white; sides of the face, greyish brown. Beneath, chin and throat, greyish white; breast, darker greyish brown; middle of abdomen, wax-yellow, paler on the flanks and vent; under tail coverts, white, with dark centres; thighs, mingled yellowish and brown.

Immature.—Like the female, but at first with shorter brownish tail with no trace of lustre; young males acquire the adult plumage in patches, the purple stripe on the sides of the neck and throat being the first to appear.

Note.—The females are peculiarly liable to bleaching and attrition of the plumage. Freshly moulted birds are quite green above, but soon fade to a dull neutral brown.

Range in the Malay Peninsula.—Throughout its length in suitable localities and on all the islands. Especially abundant in Singapore and in the Tioman group (Sri Buat).

Extralimital Range.—Ranging into South Tenasserim, about as far north as Mergui, and also in South and Central Siam, Sumatra, Borneo and Java.

Nidification.—There are no records from the Malay Peninsula, though I have seen deserted nests that must have belonged to this species among the mangroves on Sri Buat, an island between Tioman and the coast of Pahang. Baker records it from Java, breeding in rubber plantations, and building a nest very similar to that of *A. m. malacensis*. The eggs were invariably two in number, in ground-colour pale greenish or greyish stone-colour, mottled all over with dull pale purplish brown with sparse spots and blotches of deep purple, almost black in the centre. Average dimensions, 0.6 by 0.55 in. The breeding season in Java is from April to the end of September.

Habits.—Baker (*loc. cit.*) states that this bird is found on the lower hills up to about 3000 ft., and in its Javan habitat this is possibly true. In the Malay Peninsula, with the sole exception of Penang, where it has been met with near

the summit of the hill (2700 ft.), it is almost exclusively a denizen of the mangrove forests, and of coconut groves on and near the coast. Davison met with it in very large numbers at Singapore, and it is still extremely common there. It is occasionally seen among the mangroves on the coast of Selangor, but the only localities I have personally met with it in large numbers are the small islands of the Tioman group. There is nothing particular to note about its habits. Its flight is perhaps slower than most other sunbirds, but the male has the same habits of hovering and exhibiting its pectoral tufts as have the smaller sunbirds and certain of the duller-coloured spider-hunters.

Note.—The male bird figured is from Malacca, and the female from Patoe Island, near Mergui, Tenasserim.

Leptocoma brasiliiana

Van Hasselt's Sunbird

Certhia brasiliiana, Gmel., *Syst. Nat.*, i., 1789, p. 474 (Brazil in error: Java).

Arachnechthra hasselti, Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 360.

Leptocoma hasselti, Grant, *Cat. Birds' Eggs, Brit. Mus.*, v., 1912, p. 19, pl. 1, fig. 24.

Leptocoma brasiliiana, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 400.

Malay Name.—Këlichap blacham (Penang).

Description.—*Male.*—Head, metallic green, with bronzy reflections; lores, a stripe through the eyes and mantle, velvety black; rump and upper tail coverts, metallic purplish green; wing coverts, black, with a faint purple gloss; primaries and secondaries, blackish brown; axillaries and under wing coverts, dull black; below, chin, throat and upper breast, purplish amethystine; lower breast and belly, maroon-crimson; lower belly, vent, thighs and under tail coverts, greyish black; tail feathers, purplish black, with metallic purplish edges.

Adult female.—Above, greyish olive, the crown with darker centres to the feathers; wings, dark brown, with paler brown edges to the primaries; on the inner aspect with broad white inner margins; axillaries and under wing coverts, pale yellowish white, the edge of the wing white; tail feathers, blackish, with a slight gloss, the outer pairs with narrow white tips. Sides of the face and ear coverts, dull greyish green. Beneath, dull yellow, duller and greener on the throat and breast, paler on the abdomen and under tail coverts.

Soft Parts.—*Male*: iris, feet and bill, black. *Female*: iris, dark; upper mandible, black; lower, brownish; feet, black or brownish.

Dimensions.—Total length, 3·9 to 4·1 in.; wing, 1·8 to 2 in.; tail, 1·2 to 1·4 in.; tarsus, 0·5 to 0·6 in.; bill from gape, 0·65 to 0·75 in.

Range in the Malay Peninsula.—Along both coasts of the Peninsula, and on nearly all the islands.

Extralimital Range.—Northwards through Tenasserim to Assam, range eastwards uncertain, but probably to Cochin-China; Sumatra, Java and Borneo.

Nidification.—Not much is recorded from the Malay Peninsula. A nest from an unspecified locality described by Oates is very like that of *Æthopyga siparaja*.

Two eggs in the British Museum, collected by Darling in Junk Zeylon on 28th February, are oval with a glossy shell. The colour is brown, with a dark zone of the same colour round the larger end, and with a few indistinct freckles. Measurements, 0.57 by 0.40 in. Eggs from Java ascribed to the same species, and taken in June and July, are described by Baker as "pale violet-grey, the markings consist of tiny specks, and lines of purple-black, with others underlying of grey and neutral tint."

Habits.—This sunbird is not uncommon on the coasts and islands of the Malay Peninsula, especially among the mangroves, but is rare inland, the only locality in which it is at all abundant being Penang Hill. In Sumatra and Java, on the other hand, it ascends to considerable elevations, up to 4000 ft. or more. On Pulau Mapor, a small island at the eastern entrance of Singapore Straits, I found it exceedingly numerous, and it is equally common on Langkawi and Terutau, but always quite close to the sea. The males do not have a dull plumage like some members of the genus, which acquire it after the breeding season is over, but moult direct from the metallic plumage to a similar one, once they are adult. The food seems to be minute insects and honey nectar, which is often obtained by puncturing the base of the flower. Flight is weak and fluttering, and the males seem generally to be in a large majority. The note, like that of the majority of the family, is a weak chirp or twitter.

Æthopyga siparaja siparaja

Raffles' Sunbird

Certhia siparaja, Raffles, *Trans. Linn. Soc.*, xiii., 1922, p. 299 (Sumatra).

Æthopyga siparaja (Raffles), Shelley, *Mon. Nectariniidæ*, 1876, p. 57, pl. 19.

Malay Names.—Burong sĕpah raja ; kĕlichap merah.

Description.—*Adult male.*—Forehead and fore crown, a narrow stripe from the gape down the sides of the neck, rump, upper tail coverts and tail, metallic violet ; back of the head, nape, mantle, scapulars, and lesser upper wing coverts, deep crimson ; primaries, secondaries and greater coverts, olive-brown ; inner aspect of wing, lead-colour ; the axillaries and under wing coverts, pale grey ; a patch of orange-yellow on the middle of the back. A stripe from the gape dividing the deep crimson of the sides of the head from the violet moustachial stripe on the chin, throat and breast, bright crimson, with fine obscure stripes of yellow. Rest of the under parts, blackish grey, strongly washed with greenish olive on the flanks ; under tail coverts, brownish grey, with pale edges ; thighs, the same.

Adult female.—Above, olive-green, the wings darker and more bronzy ; tail, olive-green at the base, becoming blackish, with a slight gloss at the tip, and with narrow white tips, broadest on the outer feathers ; axillaries and under

wing coverts, white, the edge of the wing, yellowish white. Beneath, almost uniform pale wax-yellow.

Immature.—Young birds are like the female at first, but with shorter, straighter beaks; the dark belly is developed very early in the males, and the red and violet feathers are assumed gradually, first on the throat, wing coverts and mantle.

Soft Parts.—Iris, dark or hazel; upper mandible, black, lower, brownish; feet, brownish.

Dimensions.—Total length, about 5 in.; wing, 2' to 2'2 in.; tail, 1'6 to 1'7 in.; tarsus, 0'55 in.; bill from gape, 0'7 in.

Range in the Malay Peninsula.—From rather north of Penang Island to the southern extremity; Penang and Singapore islands, on both of which it is very common.

Extralimital Range.—North of Penang¹ and in the Langkawi group this species grades into *Æ. s. cara*, which has the violet of head and tail replaced by greenish. The Bornean bird is darker below and has been named *Æ. chalcopogon*, and Mr Oberholser has recently separated the form from Java as *Æ. s. heliogona*.

Nidification.—There are no published accounts of the nesting in Malaya, though it breeds abundantly on the coast of Singapore. Whitehead found a nest at the end of April at about 2000 ft. on Kinabalu, in North Borneo. It was placed under an overhanging bank amongst loose roots of trees. The nest was a long pocket made outwardly of dead grass and lined with fine roots. There were two eggs, of a pale salmon-pink, blotched with darker tints at the larger end, and marked with dark lake-red. Dimensions, 0'55 by 0'4 in.

Habits.—Although in Sumatra and in Borneo this lovely little sunbird is found far from the coasts, at altitudes up to 4000 ft., in the Malay Peninsula it is hardly known away from the sea, where it haunts the mangroves, coconut plantations and dry open beaches with flowering shrubs. On Penang Island, like most of the local sunbirds, it ascends the hill to a considerable height. Its habits are those of the other species, and males seem generally to be in a majority, though the females are certainly shyer and more retiring, having no fine feathers to flaunt.

Anthreptes malacensis malacensis

The Brown-throated Sunbird

PLATE 22 (*upper left figure, male; upper right figure, female*)

Certhia malacensis, Scop., *Del. Flor. et Faun. Insubr.*, ii., 1786, p. 91 (Malacca).

Anthreptes malaccensis, Gadow, *Cat. Birds, Brit. Mus.*, ix., 1884, p. 122; Kelham, *Ibis*, 1881, p. 504.

Anthreptes malacensis malacensis, Stuart Baker, *Faun. Brit. Ind., Birds*, (2nd ed.), iii., 1926, p. 409.

Malay Name.—Kělichap mayang kělapa.

¹ Birds from Penang and to the north thereof are considered by Mr Oberholser to belong to *Æthopyga lathami* (Jard.). The application and provenance of this name, without examination of the original type, is, however quite uncertain.

Description.—*Adult male.*—With bright yellow pectoral tufts. Head, neck and mantle, dark metallic, with greenish and amethystine reflections; lower back and rump, brilliant metallic purple; lesser and median wing coverts the same; inner median coverts and scapulars, maroon; primaries and coverts, dark brown with pale edges; secondaries the same, but more broadly edged with green; inner aspect of wing, ashy, the quills with pale inner margins; axillaries, yellowish white; under wing coverts, ashy, with pale edges; tail, above, black, the centre two pairs with metallic green edges; below, dark ashy; area below the eye, ear coverts and a patch on sides of neck, dark olive; a narrow stripe from the gape to sides of neck, broadening posteriorly, metallic violet-purple, more greenish behind and at gape. Below, chin and throat pale chocolate-brown; breast, bright yellow; sides and flank, more olivaceous green, but with bright yellow pectoral tufts; centre of abdomen and under tail coverts, paler yellow; thighs, greenish olive.

Adult female.—Upper surface, yellowish olive, the feathers of the head with darker centres; lores, ear coverts, and a patch behind them, glaucous olive-green; a pale yellow ring round the eye, incomplete behind; wing coverts, green, brownish at base, and with distinct whitish tips. Primaries and secondaries, blackish brown, with whitish or greenish edges; edge of wing, pale yellow; axillaries and under wing coverts, whitish yellow. Tail, blackish, the central feathers edged with green, and with distinct white tips. Beneath, bright yellow, paler on the throat; the flanks, vent and under tail coverts much infuscated with olive-green.

Immature.—Both sexes are at first alike, and the adult plumage of the male is only gradually acquired, the metallic stripe from the gape, and the purple lesser wing coverts and rump being the first to appear, followed by scattered feathers on the crown and back and by the chocolate-brown throat. The chrome-yellow pectoral tufts appear last of all.

Soft Parts.—Iris, chocolate-chestnut or reddish brown; bill, black, base, pinkish, and the edge of the lower mandible yellowish in the female; feet, sage-green or greenish lead, with the soles yellow or orange. In young birds the gape is often yellow, or orange-yellow.

Dimensions.—Total length, about 5·5 in.; wing, 2·7 to 2·9 in.; tail, 1·9 to 2·2 in.; tarsus, 0·65 to 0·7 in.; bill from gape, 0·8 to 0·85 in.

Range in the Malay Peninsula.—Throughout the Peninsula and on all the island groups, even the smallest.

Extralimital Range.—Tenasserim, South Siam, French Indo-China and Sumatra. The species has been much divided, and very many island forms have received names, differences being exhibited chiefly in the coloration of the under parts of the females.

Nidification.—The breeding season is practically throughout the year, but more usually in the earlier half. Stuart Baker describes the nests as oval-shaped, made of fibrous roots and grass, lined with grass and cotton-down, with the entrance protected with an overhanging eave. Nests are usually hung from the end of a leaf of a coconut or betel palm, usually at some height from the ground; the eggs are always two in number; the ground-colour is

from pure white to deep purplish pink, with numerous twisted lines of purple-black and mottlings of lilac-grey and lavender. The average dimensions are 0·7 by 0·52 in.

Habits.—In the Malay Peninsula it may almost be said that this sunbird is purely dependent on man, at least as much so as the sparrow or the house rat, inasmuch as it is practically never found at any distance from coconut-palms, which themselves do not flourish except in the vicinity of dwellings. Almost every palm harbours a pair or more of these charming little birds, which flit about the blossom spathes feeding on the pollen and nectar, and to a certain extent on the insects attracted by these. Its flight is not strong or long sustained, but the bird is in continual movement and inclined to be pugnacious. Williamson describes the note as “a loud and rather insistent one of three syllables, *chu-chu-chu*, repeated many times”; usually it is merely a low twitter.

Note.—The male bird figured is from Penang Island, and the female from Klang, Selangor.

Anthreptes macularia macularia

The Banded or Purple-naped Sunbird

PLATE 22 (*lower left figure, male; lower right figure, female*)

Anthreptes macularia, Blyth, *Journ. Asiat. Soc. Bengal*, xi., 1842; p. 107 (Settlement of Malacca).

Anthreptes hypogrammica hypogrammica, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 409.

Malay Name.—Kêlichap rimba.

Description.—*Adult male.*—Pectoral tufts, short and inconspicuous. Upper surface, including external aspect of wings, yellowish olive-green. Primaries, brownish, the outer webs edged with green, the secondaries more broadly so. Tail, black, the outer feathers narrowly tipped with white; axillaries and under wing coverts, nearly pure white, the outermost of the latter with dark bases; lower back with a concealed white patch formed by the bases of the feathers; a collar on the head, neck, and the upper tail coverts, metallic violet-purple; sides of the face and ear coverts, greyish green. Under surface, chin and throat, greyish, with broad blackish-green stripes; rest of under surface the same, but with the edges of the feathers more yellow; flanks, vent, under tail coverts and thighs, brownish green without the stripes.

Adult female.—Similar, but without the metallic collar and upper tail coverts, which are like the rest of the upper surface.

Soft Parts.—*Male*: iris, reddish brown; bill, black; feet, oily yellowish green. *Female*: iris, chocolate; upper mandible, black; lower, yellowish at base; feet, oil-green.

Dimensions.—Total length, 5·3 to 5·9 in.; wing, 2·4 to 2·6 in.; tail, 2 to 2·3 in.; tarsus, 0·65 to 0·7 in.; bill, 0·85 to 0·9 in.

Range in the Malay Peninsula.—The whole length of the Peninsula; Penang and Singapore.

Extralimital Range.—From Aracan south to the peninsular border; Sumatra. Birds from Borneo are slightly richer coloured beneath, and have been named *A. m. intensior*.

Nidification.—The breeding habits of the Malayan form are unknown. Moulton collected a nest and eggs of the Bornean race near Kuching on 15th August. Stuart Baker describes the nest as attached to the end of a betel-palm leaf twenty feet from the ground. It measured about eight inches long by four or five in length, and was very like the usual sunbird nest, but with no eave over the entrance. The two eggs were pale lilac-grey with a few blotches, and many scriggly lines of purple-black, mostly confined to a broad ring at the larger end; the secondary spots were pale lavender and grey. Measurements about 0.73 by 0.52 in.

Habits.—The striped sunbird is very widely distributed in the Malay Peninsula up to an altitude of about 3500 ft., but is commonest in the sub-montane zone from about 500 to 1500 ft. It is not found in the mangroves or in fresh-water swamp forest, nor is it an orchard or garden bird. It occurs usually in pairs or singly in old jungle, and frequents flowering trees and creepers, moving about in them very much as *A. malacensis*, though it is not so active or sprightly a bird as that species. It is especially fond of the showy leguminous creepers, with orange or scarlet flowers, of the genus *Bauhinia*, and when these are in flower can generally be found on them. I have never seen it either on betel or coconut palms, as noted by Davison in Tenasserim, but this is probably due to the less-marked seasonal changes in the south of the Peninsula, permitting a more extended flowering season for the high jungle trees and creepers.

Note.—The male bird figured is from Gunong Tahan, Pahang, and the female from Kuroo, Malacca.

Arachnothera longirostra longirostra

The Little Spider-hunter

Certha longirostra, Latham, *Ind. Orn.*, i., 1790, p. 299 (Bengal).

Arachnothera longirostra, Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 371; Stuart Baker, *Ibis*, 1896, p. 345 (nesting).

Arachnothera longirostra longirostra, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 418.

Arachnothera longirostris heliocrita, Oberholser, *Journ. Washington Acad. Sci.*, 13, 1923, p. 228 (Singapore).

Malay Name.—Kělichap jantung.

Description.—*Adult male.*—Upper parts, including the wing coverts, dull olive-green, darker on head and rump; the feathers of the crown with blackish centres; lores, greyish white, a short stripe from the gape to below the eye, blackish. Primary coverts, blackish brown; primaries and secondaries, brown with green edges, broader on the latter; axillaries and under wing coverts, greyish white. Tail, black, the feathers fringed with green, and with greyish white tips, broadest on the outer feathers. Throat, greyish, becoming greyish

green on breast ; lower breast and belly, pale wax-yellow, more greenish on the flanks and under tail coverts ; thighs, greenish ; pectoral tufts, bright chrome.

Female.—Lacks the chrome pectoral tufts.

Immature.—Paler above, the chin and throat washed with yellowish green and less defined from the belly.

Soft Parts.—Iris, brown ; upper mandible, black, lower, grey, the tip black ; feet, plumbeous blue.

Dimensions.—Total length, 6 to 6·4 in. ; wing, 2·4 to 2·8 in. ; tail, 1·6 to 1·9 in. ; tarsus, 0·65 to 0·70 in. ; bill from gape, 1·45 to 1·70 in. Females are decidedly the smaller.

Range in the Malay Peninsula.—Throughout its length, and on all the islands ; Langkawi, the Bandon Islands and the Tioman group.

Extralimital Range.—Nearly all continental India, the Indo-Chinese countries and probably Sumatra. Bornean and Javan birds differ slightly.

Nidification.—There are no reliable records of the breeding of this bird in the Malay Peninsula, but in Assam, Baker describes the nest as a bag-shaped structure made entirely of skeleton leaves, and attached to the under side of the leaf of a plantain or other large-leaved plant, the nest being sewn on with fibre by the bird itself. The same authority states that the eggs have no gloss and are very fragile, the ground-colour varies from white to a warm salmon-pink, with specks of bright reddish brown, sparse everywhere, except in a dense, well-defined zone round the larger end. In Siam, Herbert took pure white eggs with a zone of tiny, purple-black specks. The average dimensions are given as 0·74 by 0·54 in.

Habits.—Very common in jungle country up to about 3000 ft. ; like the other species of spider-hunters, frequenting the edges of clearings and groves of wild bananas and the like. It is occasionally, though rarely, seen in gardens and orchards. Flight is rapid and, when in company with the female, the male is fond of displaying its bright-coloured axillary tufts, balancing almost upright with its bill nearly vertical, and with the wings vibrating rapidly. The habit is one that it has in common with some of the metallic sunbirds, and with most of the spider-hunters.

Note.—For the present I am not prepared to apply Mr Oberholser's recently suggested subspecific name to the form of this widespread species inhabiting the Malay Peninsula.

Arachnothera chrysogenys astilpna

The Yellow-eared Spider-hunter

Arachnothera chrysogenys astilpna, Oberholser, *Journ. Washington Acad. Sci.*, 13, 1923, p. 227 (Tenasserim).

Arachnothera chrysogenys intensiflava, Stuart Baker, *Bull. Brit. Orn. Club*, xlvii., 1925, p. 14 (Kossoum, N. Malay Peninsula) ; id., *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 413.

Arachnothera chrysogenys copha, Oberholser, *Smithsonian Misc. Coll.*, 60, No. 7, 1912, p. 20 (North-West Sumatra).

Arachnothera chrysogenys (Temm.), Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 371.

Malay Name.—Këlichap pisang.

Description.—*Adult.*—Sexes alike. Above, dull olive-green, the head darker; lesser wing coverts, green with dark centres; median and greater coverts, blackish, broadly edged with olive-green. Primaries and secondaries, dark brown, broadly edged with bronzy olive-green, the secondaries with the outer webs entirely so. Inner aspect of wings, greyish brown; the quills with pale yellowish-buff edges towards the base; axillaries and under wing coverts, whitish buff, angle of wing, whitish. Tail, brown, the feathers broadly edged with olive-green. Sides of the face, dusky greenish grey, a narrow ring round the eye, the ear coverts and a patch beneath them, pale silky yellow; chin and throat, greyish green; breast, greyer, washed with green and obscurely lined; middle of the abdomen and flanks, brighter greenish yellow; under tail coverts, more yellowish.

Immature.—Generally duller, with the pale yellow patch on ear coverts and cheeks smaller, or sometimes nearly absent.

Soft Parts.—Iris, dark hazel, chestnut or chocolate; bill, black, the lower mandible with the base pinkish, and the edges broadly yellow; feet, brownish fleshy or pinkish brown.

Dimensions.—Total length, about 7 in.; wing, 3·2 to 3·6 in.; tail, 1·7 in.; tarsus, 0·78 in.; bill from gape, 1·6 to 1·8 in.

Range in the Malay Peninsula.—Throughout the length of the Peninsula, and in Penang and Singapore islands. Of doubtful occurrence on the other groups.

Extralimital Range.—South Tenasserim. Northern birds are rather brighter in colour on the belly, and have been named as above by Oberholser. Those from Java, whence the species was first described, are said to be darker and duller. Many birds from Malacca and some from Sumatra and Borneo also are dull, but it is still doubtful if there is really more than one form, the apparent differences being possibly associated with age and sex.

Nidification.—Nothing is known about the nest and eggs of this spider-hunter, but they are doubtless very similar to those of other members of the genus.

Habits.—The habits of this species are very much those of the long-billed spider-hunter, except that the present bird is more of a jungle dweller, and is met farther up the hill-sides, to at least 3000 ft. Its favourite situations are gullies and the banks of small streams, and places where huge trees have fallen down and permitted the growth of wild bananas, tall gingers and other broad-leaved plants, amongst which the spider-hunter finds its food, which is principally flies, spiders and small beetles. It is particularly fond of hunting upon the pear-shaped inflorescence of bananas, which are always full of insects of various kinds, and is generally seen in pairs, often running up the midribs of the larger leaves, almost like a creeper or nuthatch. This species has no bright-coloured axillaries, and I have never seen it take up the peculiar, hovering attitude adopted by the long-billed spider-hunter, perhaps because it has nothing to display. The note, which is constantly uttered on the wing, is three short syllables followed by a long one—much prolonged: “*twit, twit, twit, twe-ee.*”