ON A COLLECTION OF BIRDS FROM THE SIMLIPAL HILLS, MAYURBHANJ DISTRICT, ORISSA.

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A short collecting trip made by Dr. B. Biswas and party during February 1951 brought 114 bird specimens from different parts of the Simlipal Hills, Mayurbhanj District, Orissa. The following is the report on the collection with systematic and other notes of interest.

The Mayurbhanj District (Text-fig. 1) lies between 22°34′ and 21°17′ N. and between 85°40′ and 87°10′ E. The Simlipal Hills, where the collection was made, occupy the major central portion of the district. It is a composite group of hills rising from 1,500 feet to 3,824 feet, and occupying about 600 square miles in area. The peaks are densely wooded to the summit, sending countless tributaries to the Baitarani on the south and pouring down the Burabalang river with the feeders of Subarnarekha on the north. The intermediate valleys are cultivated.

The forests mainly composed of Sal and a few other fruit bearing trees are distributed over the central group of hill ranges and the plains sloping to the east and west of these hills.

The temperature has been recorded to range between 33°F., minimum in January to a maximum of 112°F., in May and June. The average annual rainfall is about 56.68 inches; the average main distribution of rain from January to May is 5.64 inches and June to October 48.59 inches.

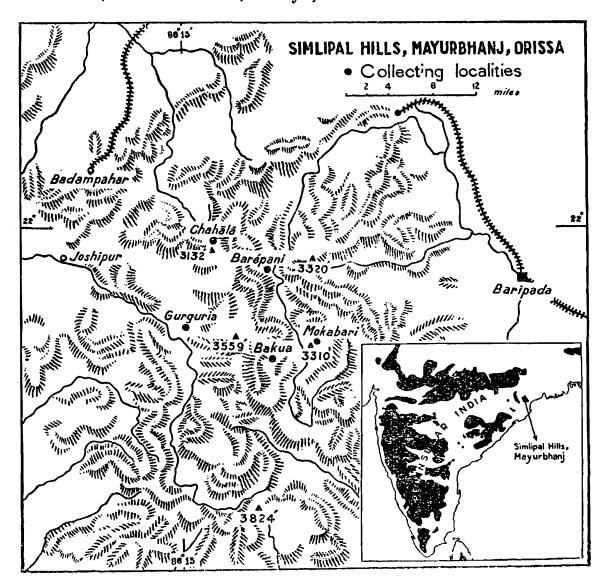
No consolidated account of the avifauna of Mayurbhanj has appeared so far, except for some stray notes. It is a well known fact that many forms of plants and animals occurring in the Himalayas, southern Assam, Burma and Malaya are also found in South India and that the major route of this migration in geological time was the Western Ghats. Abdulali (1949), however, suggested the possibility of an alternate route of migration of many such forms to South India through the Eastern Ghats. The hills of Orissa lie in the extreme north-east of the Indian Peninsula and if Abdulali is correct, should contain examples to support him. The study of the collection of birds from the Simlipal Hills provides an interesting problem of zoogeography by the presence of some species which are only known from the Himalayas and the southern Assamese hills in India and in one or two instances, also from the Nilgiris, and thus Abdulali's hypothesis is borne out. Such species are:—

Cuculus sparverioïdes.—This species is distributed in the Himalayas from Kashmir to Assam, and from Szechwan and lower Yangtse valley south to the hills of Burma, Siam and Cochin-China. In winter, it is found in the hills of Indian Peninsula, Sumatra, Java, Borneo, the Philippines and Celebes. It is an inhabitant of dense evergreen or semi-evergreen forests.

Nyctyornis athertoni.—This species is distributed in isolated places in the Western Ghats, central Indian hills, and throughout the Himalayas, southern and eastern Assam, Burma, south to Tenasserim and Siam. It is an inhabitant of evergreen and moist deciduous biotope.

Megalaima lineata.—This species is distributed throughout the Himalayas, southern Assam, Burma, Siam, Annam, Cambodia, Cochin-China, south to Malayan Peninsula, Java and Bali. It is an inhabitant of evergreen forests.

Picus flavinucha.—This species has not been collected by us but obtained by Mr. Sálim Ali (see Biswas, 1952) from the Simlipal Hills. It is also known from the Himalayas, southern Assam, Burma, Siam, Indo-China, southern China, Malaya, Sumatra.



Text fig. 1.—Simlipal Hills, Mayurbhanj, Orissa showing the localities where collections were made.

Chloropsis aurifrons.—This species is found throughout the Himalayas, the whole of Burma and Siam. It is an inhabitant of moist deciduous or semi-evergreen hill forests.

Zoothera dauma.—This species is found along the Himalayas to the mountains of Burma, and also in the Nilgiris. It inhabits the hill forests and sholas.

Dicrurus caerulescens.—This species occurs in Ceylon, Western Ghats, central Indian hills and the Himalayas. It is a bird of semi-evergreen or evergreen hill forests.

The tops of the hills of the Simlipal ranges fulfil the ecological conditions required to shelter and to give a permanent footing to the species mentioned above. The heavy rainfall in this area supports an evergreen moist forest almost similar to the foot hills of the eastern Himalayas. These hill tops serve as isolated ecological pockets in which these species, which may be relicts or remnants of secondary invasions, have been preserved when these spots became isolated from the southern Assam hills and the eastern Himalayas due to topographic changes.

The route through which these species migrated is a debatable question, and the writings of Abdulali (1949), Hora (1949), Ripley (1949) and Menon (1951) may be profitably consulted.

The wing (W.) and the tail (Tl.) were measured in the usual way, and the bill (B.) was measured from the skull to the tip unless otherwise stated. The average measurements are given in parentheses.

The sexes in most cases were determined by the examination of gonads by dissecting out the birds in the field; sexes determined otherwise, e.g., from plumages, are given in parentheses.

The numbers against the specimens refer to the registration numbers in the Zoological Survey of India collection.

Some of the specimens were preserved in spirit for morphological studies. They have been indicated by an asterisk (*) before their registered numbers.

The report on the collection contains 47 species and subspecies. The identification of two Phylloscopi remains pending.

Itinerary.—

Chahālā (ca. 3150'). February 7 to February 14.

Barépani (ca. 3320'). February 11.

Gurguria (ca. 2200'). February 16 to February 23.

Bakua (ca. 2800'). February 18. Mokabari (ca. 3310'). February 21.

I am grateful to Dr. S. L. Hora, Director, and Dr. B. Biswas, Assistant Superintendent, Zoological Survey of India, for giving me an opportunity to join the party, which has enabled me to study the birds in the field, and for allowing me to work on the collection. I am further indebted to Dr. Biswas for his interest, help and suggestions.

Systematic Account.

Order CUCULIFORMES

Suborder CUCULI
Family CUCULIDAE
Subfamily CUCULINAE

Cuculus sparverioïdes sparverioïdes Vigors

(The large hawk-cuckoo)

Specimen collected,—No. 27284 (Juvenal, unsexed), February 23, Gurguria.

Field notes.—Rare, only a single pair was seen in semi-dense wood, flying leisurely. It is a shy bird. Gonads in immature condition.

Remarks.—This is a young specimen in the second stage assuming the grey head, the upper parts are brown faintly barred with rufous. It has been recorded from Raipur in Madhya Pradesh. Coupled with this record the present finding from Mayurbhanj would suggest that the species may possibly be occurring in the hills of Madhya Pradesh, Chotanagpur, Orissa, etc., in suitable places.

Order COLUMBIFORMES

Suborder COLUMBAE

Family COLUMBIDAE

Subfamily COLUMBINAE

Streptopelia chinensis suratensis (Gmelin)

(The Indian spotted dove)

Specimens collected.—Nos. 27279, 3, 27280, 3, 27281, 3 and 27282, 3, February 16; 27283, 3, February 17, Gurguria.

Measurements.—5 &: W. 135—147 (141·8), Tl. 131—141 (136·8), B. 19—20 (19·6).

Field notes.—Common in open country near about cultivated fields. Testes enlarged.

Order PSITTACIFORMES

Suborder PSITTACI

Family PSITTACIDAE

Subfamily PSITTACINAE

Psittaeula eupatria nipalensis (Hodgson)

(The large Indian parakeet)

Specimens collected.—Nos. 27285, Q, 27286, Z, February 8; 28287, Z, February 12, Chahālā.

Measurements.—2 \circlearrowleft : W. 221—225, Tl. 293—297, B¹. 36—37. 1 \circlearrowleft : W 220, Tl. 254, B¹. 32.

Field notes,—Fairly common. Gonads in breeding condition.

¹ Measured from the anterior edge of the nostril to the tip.

Order CAPRIMULGIFORMES

Suborder CAPRIMULGI

Family CAPRIMULGIDAE

Subfamily CAPRIMULGINAE

Caprimulgus macrurus albonotatus Tickell

(Jerdon's long-tailed night jar)

Specimen collected.—No. 27292, Q, February 10, Chahālā.

Measurements.—12: W. 190, Tl. 131.

Field notes.—Common at dusk, flying about silently in two's or three's.

Remarks.—The specimen collected is smaller in size than the average northern Indian specimens. The tips of the tail-feathers are yellowish buff.

Order CORACIIFORMES

Suborder CORACII

Family Coraciidae

Subfamily CoracinaE

Coracias benghalensis benghalensis (Linné)

(The Indian roller)

Specimens collected.—Nos. 27289, Q, February 18; 27288, 3, February 21, Gurguria.

Measurements.—1 ♂: W. 187, Tl. 120, B. 45. 1 \(\chi\): W. 187, Tl. 121, B. 46.

Field notes.—Commonly observed in the open parts of the forests around villages. Ovary near breeding condition, largest ova of the size of chicken pea. Testes enlarged to the size of pea.

Suborder MEROPES

Family MEROPIDAE

Meropes orientalis orientalis Latham

(The common Indian bee-eater)

Specimen collected.—No. 27290, Q, February 20, Gurguria.

Measurements.—12: W. 95, Tl. 123, B. 33.

Field notes.—Not very common. Ovary in non-breeding cond tion.

Nyctyornis athertoni athertoni Jardine and Selby

(The blue-bearded bee-eater)

Specimen collected.—No. 27291, Q, February 13, Chahālā.

Measurements.—12: W. 135, Tl. 125, B. 50.

Field notes.—Not common. Ovary granular.

Remarks.—This bird is distributed in certain isolated ecological pockets in Travancore and Belgaum in the Western Ghats, Vızagapatam in the Eastern Ghats and certain places in Madhya Pradesh. Ali (in Marian, 1950, p. 164) collected it from Keonjhar and the Simlipal Hills.

Suborder UPUPAE

Family UPUPIDAE

Subfamily UPUPINAE

Upupa epops epops (Linné)

(The European hoopoe)

Specimen collected.—No. 27293, Q, February 20, Gurguria.

Measurements.—12: W. 147, Tl. 100, B. 56.

Field notes.—Not common. Ovary granular.

Remarks.—It is said to winter as far east as Bihar and Chotanagpur and upto Deccan in the south (Baker, 1927, p. 309). So far as I believe it has not been reported from Mayurbhanj yet.

Order PICIFORMES

Suborder GALBULAE

Family Capitonidae

Megalaima lineata kutru Mukherjee

(The Simlipal lineated barbet)

Specimens collected.—Nos. 27294, Q, February 8; 27295, Q, 27296, Q, 27297, 3, 27298, 3, February 13, Chahālā.

Measurements.—2♂: W. 122·5—125, Tl. 77—78, B. 32—33. 3 ♀: W 126—132 (128), Tl. 77—79 (78), B. 31·5—33·5 (32·3).

Field notes.—Common in the deeper parts of the forest where there are Ficus trees with ripening fruits. Gonads enlarged.

Megalaima zeylanica caniceps (Franklin)

(The northern Indian green barbet)

Specimen collected.—No. 27299, 3, February 13, Chahālā. Measurements.—1 3: W. 119, Tl. 77, B. 33.

Field notes.—Found in the company of the lineated barbets feeding on the same tree.

Megalaima haemacephala indica (Latham)

(The Indian crimson-breasted barbet)

Specimen collected.—No. 27300, &, February 14, Chahālā.

Measurements.—1 &: W. 80, Tl. 34, B. 18.

Field notes.—The specimen was feeding on Figus tree with ripening fruits. They had just started coming to the jungles of Chahālā. Testes enlarged.

Suborder PICI

Family PICIDAE

Subfamily PICINAE

Dinopium bengalense bengalense (Linné)

(The northern Indian golden-backed woodpecker)

Specimen collected.—No. 27301, J. February 10, Chahālā.

Measurements.—1 &: W. 160, Tl. 87, B. 50.

Field notes.—Common.

Picus chlorolophus chlorigaster Vieillot

(The southern Indian small yellow-naped woodpecker)

Specimens collected.—Nos. 27302, \eth , February 8, Chahālā ; 27303 ($\mathfrak Q$), February 18, Bakua.

Measurements.—1 &: W. 130, Tl. 80. 1 \(\text{\text{\$\general}}\): W. 130, Tl. 79, B. 23.

Field notes.—Only a few were noticed in the denser parts of the forest at about 3,000 feet.

Order PASSERIFORMES

Suborder OSCINES

Family Pycnonotidae

Pycnonotus dispar flaviventris (Ticke!l)

(The black-crested yellow bulbul)

Specimens collected.—Nos. 27314, Q, February 7, Chahālā ; 27315, Q, February 11, Barépani.

Measurements.—2 \(\text{\text{?}} : \text{W. 87, Tl. 84, B. 16.} \)

Field notes.—Common in shady places near hill streams.

Pycnonotus jocosus emaria (Linné)

(The red-whiskered bulbul)

Specimen collected.—No. 27313, 3, February 13, Chahālā.

Measurements.—1 &: W. 83, Tl. 79, B. 18.

Field notes.—Not common, found in open parts near the borders of the jungles.

Family IRENIDAE

Subfamily IRENINAE

Chloropsis aurifrons aurifrons (Temminck)

(The gold-fronted chloropsis)

Specimen collected.—No. 27312, Q, February 13, Chahālā.

Measurements.—1 \circ : W. 90, Tl. 66, B¹, 14.

Field notes.—Not common. Ovary granular and in enlarged condition.

Remarks.—As far as I am aware, it has not so far been reported from Orissa. This northern Indian bird has been recorded from Chotanagpur and Rajmahal hills (Baker, 1922, p. 347).

Subfamily AEGITHININAE

Aegithina tiphia humei Stuart Baker

(The central Indian iora)

Specimen collected.—No. 27310, Q, February 19, Gurguria.

Measurements.—1 2: W. 63, Tl. 48, B. 18.

Field notes.—Not uncommon in small flocks.

Family Campephagidae

Pericrocotus peregrinus peregrinus (Linné)

(The small minivet)

Specimens collected.—Nos. 27327, \$\mathbb{Q}\$, 27328, \$\mathbb{Q}\$, 27329, \$\mathbb{Q}\$, 27330, \$\mathbb{Q}\$, 27331, \$\delta\$, *27389 (unsexed), *27390 (unsexed), *27391, (unsexed), February 10, Chahālā; 27332, \$\delta\$, February 20, Gurguria.

Field notes.—Common in parties at about 3,000 feet. Gonads in non-breeding condition.

Pericrocotus flammeus speciosus (Latham)

(The Indian scarlet minivet)

Specimens collected.—Nos. 27325, 3, February 8, 27326, 2, February 14, Chahālā.

Measurements.—1 &: W. 102, Tl. 100, B. 21. 1 Q: W. 103, Tl. 101, B. 22.

¹ Measured from the anterior edge of the nostril to the tip

Field notes.—Not common, singly or in pairs on the tops of the trees in dense jungle at about 3,000 feet. Gonads in non-breeding condition.

Remarks.—So far this Himalayan minivet has not been recorded anywhere from Orissa. The female specimen has the first two primaries unspotted. The red on the central tail feathers in the male is a very narrow line along the edge of the outer web, and does not extend more than one-third of the total length of the tail.

Family MUSCICAPIDAE

Subfamily Muscicapinae

Rhipidura aureola Lesson

(White-browed fantail flycatcher)

Specimens collected.—Nos. 27316 (unsexed), February 8, Chahālā; 27317 (unsexed), February 23, Gurguria.

Measurements.—2 (unsexed): W. 82—85, Tl. 89, B. 15—16.

Field notes.—Common in small flocks in open parts of the forest.

Rhipidura albicollis albicollis (Vieillot)

(The white-throated fantail flycatcher)

Specimens collected.—Nos. 27318, Q, February 11, Barépani; 27319, Q, February 13, Chahālā; 27320, Q, February 18, Bakua; 27321 (unsexed), February 21, Mokabari.

Measurements.—3 $\ \$: W. 70—73 (72), Tl. 90—100 (95), B. 14—15 (14·8). 1 (unsexed): W. 72, Tl. 96, B. 15.

Field notes.—Common in open parts near the borders of the jungles. Ovary in non-breeding condition.

Hypothymis azurea styani (Hartlaub)

(The black-naped flycatcher)

Specimen collected.—No. 27324, Q, February 22, Gurguria.

Measurements.—19: W. 70, Tl. 69, B. 17.

Field notes.—Not common, found in thick woods. Generally found singly. Ovary in non-breeding condition.

Culicicapa ceylonensis pallidior Ticehurst

(The grey-naped flycatcher)

Specimens collected.—Nos. 27322, 3, and 27323 (unsexed), February 21, Mokabari.

Measurements.—13: W 64, Tl. 56. 1 (unsexed): W. 59, Tl. 52, B. 12. Field notes.—Not common in dense forest.

condition.

Subfamily TIMALIINAE

Tribe TURDOIDINI

Turdoides somervillei terricolor (Blyth)

(The jungle babbler)

Specimen collected.—No. 27311, Q, February 19, Gurguria.

Measurements.—19: W. 107, Tl. 110, B. 24.

Field notes.—Common in parties in the open parts of jungle. Ovary granular.

Subfamily SYLVIINAE

Phylloscopus trochiloides viridanus Blyth

(The greenish willow-warbler)

Specimens collected.—Nos. 27369, 3, February 7, and 27372 (unsexed), February 8, Chahālā.

Measurements.—13: W 63, Tl. 49, B. 12. 1 (unsexed): W. 59, B. 12. Field notes.—Not very common, testes in non-breeding condition.

Phylloscopus inornatus humei (Brooks)

(The green willow-warbler)

Specimens collected.—Nos. 27371, Q, February 7, Chahālā; 27370, 3, February 20, Gurguria.

Measurements.—1 ♂: W 57, Tl. 43, B. 12·5. 1 ♀: W. 57, Tl. 43, B. 12·5. Field notes.—Common in thick woods. Testes in non-breeding

Prinia rufescens rufescens (Blyth)

(Beavan's wren-warbler)

Specimens collected.—Nos. 27374, 3, February 13, Chahālā; 27375 (unsexed), February 18, Bakua.

Measurements.—1 &: W. 45, Tl. 60, B. 14. 1 (unsexed): W. 48, B. 14. Field notes.—Very common in bush in small batches. Poor fliers.

Prinia hodgsoni hodgsoni Blyth

(Hodgson's wren-warbler)

Specimens collected.—Nos. 27373 and 27395 (unsexed), February 10, Chahālā; 27396, \mathfrak{P} , February 18, Bakua.

Measurements.—1♀: W. 45, Tl. 50, B. 13·5. 2 (unsexed): W. 44—45, Tl. 50, B. 13—13·5.

Field notes.—Common in bushes.

Subfamily TURDINAE

Zoothera dauma dauma Latham

(The small-billed mountain thrush)

Specimen collected.—No. 27358, Q, February 19, Gurguria.

Measurements.— 1 ♀: W. 136, Tl. 98, B. 29.

Field notes.—This was the only specimen seen. It came out of dense undergrowth of the forest and passed across the jungle path to enter a dense bush on the bank of the river, where it was shot. Ovary enlarged.

Remarks.—The occurrence of this thrush in the Orissa Hills is rather surprising. This specimen could not be separated from the Nepalese examples.

Saxicola leucura (Blyth)

(The white-tailed bush-chat)

Specimen collected.—No. 27376, Q, February 17, Gurguria.

Measurements.—1 ♀: W. 66, Tl. 49, B. 12.

Field notes.—Very common in flocks in bushes.

Copsychus saularis saularis (Linné)

(The Indian magpie robin)

Specimen collected.—No. 27359, 3, February 17, Gurguria.

Measurements.—1 3: W. 114, Tl. 90, B. 12.

Field notes.—Not common, only a few specimens were seen around villages. Testes in non-breeding condition.

Family MOTACILLIDAE

Motacilla cinerea caspica Gmelin

(The eastern grey wagtail)

Measurements.—1 3: W. 82, Tl. 84, B. 17. 1 \(\text{\text{?}}: \) W. 79, Tl. 87, B. 18. 2 (unsexed): W. 80—81, Tl. 85, B. 17—17·5.

Field notes.—Common on boulders of river beds. Gonads in non-breeding condition.

Anthus hodgsoni hodgsoni Richmond

(The Indian tree pipit)

Specimens collected.—Nos. 27307, Q, February 14, Chahālā; 27309, (unsexed), February 19, 27308, &, February 20, Gurguria.

Measurements.—13: W. 86, Tl. 59, B. 15.5. 19: W. 81, Tl. 58, B. 15.5. 1 (unsexed): W. 83, Tl. 59, B. 15.

Field notes.—Common in small parties searching for food among the undergrowths and fallen leaves. Non-breeding condition of gonads.

Family LANIIDAE

Subfamily LANIINAE

Lanius schach Linné (subspecies?)

(The rufous-backed shrike)

Specimens collected.—Nos. 27356, Q (juvenal), February 7, 27357, Q (juvenal), February 8, Chahālā.

Field notes.—Not very common, found in the dried-up reed jungles.

Family SITTIDAE

Subfamily SITTINAE

Sitta frontalis frontalis Swainson

(The velvet-fronted nuthatch)

Specimens collected.—Nos. 27353, \mathcal{Q} , and 27354, \mathcal{Q} , February 7; 27355, \mathcal{Q} , 27403, \mathcal{Q} , February 8, Chahālā.

Measurements.—4 $\ \$ $\$: W. 69—76 (73·2), Tl. 40—44 (41·3), B. 15—16 (15·2).

Field notes.—Very common in flocks in dense jungle. Ovary developed.

Family Paridae

Subfamily PARINAE

Parus major stupae Koelz

(The southern grey tit)

Specimen collected.—No. 27344, Q, February 22, Gurguria.

Measurements.—1 ♀: W. 63, Tl. 50·5, B. 10.

Filed notes.—Not very common. Ovary just commenced swelling. Observed in open country, singly or in pairs.

Parus xanthogenys aplonotus (Blyth)

(The southern yellow cheeked tit)

Specimens collected.—Nos. 27345, \mathcal{Q} , February 7, 27351 (unsexed), 27352 (unsexed), February 8, 27346, \mathcal{J} , 27348, \mathcal{J} , February 10, Chahālā; 27349, \mathcal{Q} , February 18, Bakua; 27350, \mathcal{Q} , February 19, 27347, \mathcal{Q} , February 20, Gurguria.

Measurements.—2 3: W. 71, Tl. 59, B. 12·5. $4 \ \$ 2: W. 68—70 (68·5), Tl. 54—59 (55·7), B. 12. 2 (unsexed); W. 69—73; Tl. 51—57; B. 12·5. Field notes.—Very common. Non-breeding gonads.

Family DICAEIDAE

Dicaeum agile agile (Tickell)

(The thick-billed flowerpecker)

Specimen collected.—No. 27360, 3, February 22, Gurguria.

Measurements.—1 &: W. 62, Tl. 28, B. 13.

Field notes.—Not common. Testes in breeding condition.

Dicaeum erythrorhynchos erythrorhynchos Latham

(Tickell's flowerpecker)

Specimens collected.—Nos. 27361, 3, 27362, 3, February 17; 27363, 9, 27379, 3, February 18; 27398 (unsexed), February 22, Gurguria.

Measurements.—3 3: W. 48—49 (48·3), Tl. 24—25 (24·5), B. 12. 1 9: W. 50, Tl. 25, B. 12. 1 (unsexed): W. 47·5, Tl. 24, B. 12.

Field notes.—Common. Gonads in breeding condition.

Family STURNIDAE

Subfamily STURNINAE

Gracula religiosa peninsularis Whistler and Kinnear

(The central Indian grackle)

Specimens collected.—Nos. 27364, 3, February 8, 27365, 3, 27366, 2, February 10, Chahālā.

Measurements.—2 3: W. 159—163, Tl. 74, B. 18—19. 1 9: W. 154, Tl. 74, B. 19.

Field notes.—Common in pairs, at about 3,000 feet in dense jungle.

Family ORIOLIDAE

Oriolus xanthornus xanthornus Linné

(The Indian black-headed oriole)

Specimens collected.—Nos. 27367, 3, February 10, Chahālā; 27368, 3, February 21, Mokabari.

Measurements.—2 3: W. 134—144; Tl. 87—90; B. 28—29.

Field notes.—Not uncommon in the denser parts of the jungle. Testes in non-breeding condition.

Family DICRURIDAE

Dicrurus caerulescens caerulescens Linné

(The white-bellied drongo)

Specimens collected.—Nos. 27333, 3, February 8, Chahālā, and 27334, Q, February 17, Gurguria.

Measurements.—1 &: W 124, C. T. F. 87, O. T. F. 124, B. 1 Q: W 122; C. T. F. 91, O. T. F. 120, B. 25.

Field notes.—Commonly seen in the borders of the jungle. Gonads in enlarged condition.

Remarks.—This is an interesting record of its occurrence in the hills of Orissa. Whistler and Kinnear (1933, p. 349) in revising the species gave the northern limit of this subspecies as Nallamalai Hills in the Eastern Ghats. The present record, however, extends this range further northward.

Dicrurus leucophaeus longicaudatus Jerdon

(The grey drongo)

Specimens collected.—Nos. 27340, Q, 27341, Q, February 7, 27342, Q, February 13, Chahālā, 27343, Q, February 20, Gurguria.

Measurements.—2 ♂: W. 143—147, C. T. F. 101—107, O. T. F. 158—164, B. 18. 2 \(\text{Q}\): W. 135—139, C. T. F. 94—97, O. T. F. 148, B. 18.

Field notes.—Common in cleared spaces in the jungle between 2,000 and 3,000 feet. Gonads approaching breeding condition.

Remarks.—Whistler and Kinnear (1933, p. 349) gave Jeypore in the Eastern Ghats as the northern limit of this subspecies, but the present record extends its limit further northward.

Dicrurus aeneus aeneus Vieillot

(The bronze drongo)

Specimens collected.—Nos. 27336, Q, 27337, J, February 8; 27338 (unsexed), February 10; 27339, J, February 12, Chahālā.

Measurements.—2 \circlearrowleft : W. 112—118, C. T. F. 84—85, O. T. F. 110, B. 15. $1 \ \, \varphi$: W. 121, C. T. F. 85, O. T. F. 112. $1 \ \, \text{(unsexed)}$: W. 122, C. T. F. 87, O. T. F. 112, B. 15.

Field notes.—Common in the borders of the jungles in open parts.

Dicrurus macrocercus Macrocercus Vieillot

(The black drongo)

Specimen collected.—27335, &, February 17, Gurguria.

Measurements.—13: W 145, C. T. F. 96, O. T. F. 157, B. 27.

Field notes.—Not common. Testes had commenced swelling.

¹ C. T. F. and O. T. F. as given for the species of *Dicrurus*, represent central and outer tail feathers respectively.

² In this family measured from the anterior edge of the nostri lto the

Family CORVIDAE

Corvus macrorynchus culminatus Sykes

(The Indian jungle crow)

Specimens collected.—27379, ♀, February 12, 27378, ♂, February 13, Chahālā; 27380, ♀, February 19, Gurguria.

Measurements.—1 ♂: W 306, Tl. 171, B. 43. 2 \cop : W. 292—296, Tl. 167—171, B. 43.

Field notes.—Very common in cleared places in jungle. Ovary granular.

Crypsirina vagabunda vagabunda (Latham)

(The Indian tree pie)

Specimen collected.—No. 27377, Q, February 8, Chahālā.

Measurements.—1 ♀: W 142, Tl. 197, B.1 21.

Field notes.—Not common, found in open parts of the jungle.

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¹ In this family measured from the anterior edge of the nostril to the tip.