

LITTLE-KNOWN AREA

A short survey of the Meratus Mountains, South Kalimantan province, Indonesia: two undescribed avian species discovered

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Introduction

The avian biodiversity and endemism of Borneo is impressive, with some 50 endemic species described from the island under earlier taxonomic arrangements (e.g. Myers 2009), and up to twice as many under the recently proposed taxonomic arrangements of Eaton *et al.* (2016). Many of these are montane specialists, with around 27 species endemic to Borneo's highlands. Although the mountains of the Malaysian states, Sabah and Sarawak, are relatively well-explored, much

of the montane part of Indonesia's Kalimantan provinces has seldom been visited (Brickle *et al.* 2009). One of the least-known areas and probably the most isolated mountain range (Davison 1997) are the Meratus Mountains, South Kalimantan province (Plates 1 & 2), a 140 km long north–south arc of uplands clothed with about 2,460 km² of submontane and montane forest, rising to the 1,892 m summit of Gn Besar (several other peaks exceed 1,600 m). Today, much of the range is unprotected except for parts of the southern

Plates 1 & 2. Views across the Meratus Mountain range, South Kalimantan province, Kalimantan, Indonesia, showing extensive forest cover, July 2016.



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end that lie in the Pleihari Martapura Wildlife Reserve (Holmes & Burton 1987). The only previous documented ornithological survey was made in October 1996 by Davison (1997), mostly below 900 m, with only two nights spent camping near the 1,686 m summit of Gn Karokangen; his surveys were hampered by prolonged rainfall.

From 7–10 July 2016 we visited the central part of the Meratus range between Kadayang village (2.747°S 115.555°E) at 500 m, and the 1,892 m summit of Gn Besar (2.712°S 115.625°E). The habitat between 500 and 700 m was largely cinnamon and rubber plantations, gradually giving way to degraded forest with much recent and ongoing logging activity, until it became closed-canopy forest above 900 m; we camped at 1,460 m

(2.718°S 115.599°E). Some surveys were curtailed by heavy rain showers, although at other times we experienced fine clear skies. During an estimated 120 man-hours of opportunistic bird surveys, 91 species were recorded (see Appendix 1), including two apparently undescribed species, a white-eye *Zosterops* sp. and a flycatcher *Cyornis* sp., as well as an undescribed subspecies of Chestnut-hooded Laughingthrush *Garrulax treacheri*. We also observed eight species not previously recorded from the area, evidently significant range extensions.

'Meratus White-eye' *Zosterops* sp. nov.

On our first day we found a distinctive *Zosterops* taxon in a mixed feeding flock—a bird which we later found to be common above

Plates 3–6. Four views of the new taxon 'Meratus White-eye' *Zosterops* sp. nov., Gn Besar, Meratus Mountains, South Kalimantan province, Kalimantan, 9 July 2016, showing yellow loral stripe or spot, slightly darker forehead and forecrown, and the striking bill colouration.



1,300 m. During our visit we encountered this taxon in single-species flocks of up to 40 individuals and also saw it in mixed-species flocks on a regular basis. Although a formal description must await the availability of biological material, we here document this undescribed taxon from our observations and images (Plates 3–6).

The size and structure of the new taxon did not differ noticeably from Hume's White-eye *Z. auriventer* (for revised taxonomy see Eaton *et al.* 2016), a species frequently encountered on the lower slopes and familiar to all of us. However, the new taxon is differentiated from other Bornean upland white-eye species by its uniform yellowish-olive plumage, including underparts. Its forehead, crown, face, ear-coverts and submoustachial region are bright olive-green, although slightly darker on the area immediately above the broad white eye-ring. The eye-ring is broadest below the eye, with a narrow break at the lores. A thin yellowish loreal line or spot is located above the narrow dark sub-loreal line between gape and eye. The chin and throat are brighter, merging into the diffuse yellowish-olive median stripe through the breast and belly. The nape, scapulars, flanks, wing-coverts and upperparts are monotone olive-green, while the primaries and secondaries are golden-olive with blackish fringes, forming a panel on the closed wing. The rump and undertail-coverts are bright yellow-olive, and rectrices blackish. The legs are steel-grey and the iris is dark brown. Apart from its distinctive plumage, the 'Meratus White-eye' is notable for its striking bill colouration, the lower mandible being pinkish-orange merging to greyish at the tip and the upper mandible being darker grey but with some pinkish-orange tones bleeding through at the base. No sexual dimorphism was observed. Presumed juveniles had duller grey bills and possibly narrower eye-rings with a post-ocular break. Like other Bornean white-eyes, the species mostly sings at day-break and in the early morning. Its dawn song is a warbling series of high-pitched short notes, ending with a faster, lower-pitched jumble and lasting 1–3 seconds. Its usual call is a high-pitched, buzzy zip.

At similar altitudes in other parts of Borneo, the Black-capped White-eye *Z. atricapilla* appears to occupy a similar niche to the 'Meratus White-eye'. However, *atricapilla* differs markedly, with its extensive grey flanks, extensive black forecrown, dark bill and pale iris. The song and particularly the lower-pitched call are also different. Davison (1997) reported that the Black-capped White-eye was common at 1,600–1,650 m on Gn Karokangen and this record appeared in the subsequent literature (e.g. Myers 2009, van Balen 2016). However, his plumage descriptions leave no doubt

that he was in fact dealing with the new species. The occurrence of Black-capped White-eye in the Meratus Mountains is unlikely, given that it is usually conspicuous where it occurs. Another Bornean montane white-eye species, the Mountain Black-eye *Z. emiliae*, also remains unrecorded from the Meratus Mountains.

'Meratus Jungle Flycatcher' *Cyornis* sp. nov.

A female *Cyornis* sp. flycatcher found in the same mixed-species flock as the first 'Meratus White-eyes' also caused great interest because, despite our extensive field experience of all the *Cyornis* species known from Borneo and elsewhere in South-East Asia, we were unable to identify the bird to species level and images were obtained for later evaluation. Then, the following morning, we heard a typical *Cyornis* song and, although it was unfamiliar to us, using playback we were able to confirm that this was another undescribed taxon. In all we recorded it five times between 900 and 1,300 m and obtained images of males and females (Plates 7–9).

No biological material is available at this time, rendering a formal description premature. The following documentation is based on our field notes, images obtained and sound recordings made.

Plate 7. Male 'Meratus Jungle Flycatcher' *Cyornis* sp. nov., Meratus Mountains, South Kalimantan province, 8 July 2016.





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Plate 8. Male 'Meratus Jungle Flycatcher', Meratus Mountains, South Kalimantan province, 8 July 2016, showing only one white rectrix.

The new taxon is estimated to be significantly larger than the Bornean endemic taxon of the Hill Blue Flycatcher complex *C. banyumas montanus*, now Dayak Jungle Flycatcher *C. montanus* (Eaton *et al.* 2016), and possibly Bornean Blue Flycatcher *C. superbus*, now Bornean Jungle Flycatcher (Eaton *et al.* 2016), although not quite as large as White-tailed Flycatcher *C. concretus*.

The male's upperparts, crown, forehead, face and ear-coverts are a deep metallic blue typical of most of the genus, with brighter iridescent blue restricted to the forecrown. The chin, throat, breast and flanks are powder-orange, while the lower breast transitions from orange to a clearly demarcated dirty white, similar to the Hill Blue Flycatcher taxon *C. banyumas coerulifrons* of the Thai-Malay Peninsula. The belly and undertail are off-white in colour except for a small dusky-blue area on the mid-flanks. A single outer rectrix was white, but only on one side, presumably moult-related (Plate 8). The female has a grey-brown head with a paler narrow eye-ring, contrasting slightly with the grey-brown upperparts and browner tail, and a pale orange throat with a deeper orange breast; the rest of the underparts resemble the male. Both sexes have dark grey bills, significantly heavier



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Plate 9. Female 'Meratus Jungle Flycatcher', Meratus Mountains, South Kalimantan province, 7 July 2016.

than *C. [banyumas] montanus*, approaching the size of the bill of a Large-billed Blue Flycatcher *C. caeruleatus*, now Sunda Jungle Flycatcher (Eaton *et al.* 2016). The legs are noticeably pale pink and the iris is dark. The song of the new form is a warbling series of 3–7 high-pitched, prolonged, glissading, deliberate notes ending with faster, lower notes, lasting 1–3 seconds. Calls vary from soft, dry clicks and chirps to an urgent two-syllable *chee-weeet* alarm call, up-slurred on the first syllable.

Borneo has four other endemic *Cyornis* flycatchers (Eaton *et al.* 2016), all easily separable from the new taxon: Bornean Blue Flycatcher males show an extensive, shining electric blue forehead to nape and lower back to rump, with underparts deeper, more extensive orange. Male Large-billed Blue Flycatchers are separated by a black chin, brighter lower back and rump, and orange belly. Male Mangrove Blue Flycatchers *C. rufigastra*, restricted to coastal lowlands, show more extensive electric blue on the forehead, extensive rufous-orange underparts, a black chin and black tail. Male Malaysian Blue Flycatchers *C. turcosus* have an entirely blue upper breast.

We consider the new species a possible replacement for the endemic taxon of the Hill

Blue Flycatcher complex *C. montanus* (now Dayak Jungle Flycatcher), although the male of the latter species is easily separated by its black chin, orange belly and shorter tail. Other members of this species complex are also worthy of comparison. The Javan endemic *banyumas* and *ligus* both have extensive orange underparts, including belly and undertail-coverts, whilst the Thai-Malay Peninsula taxon *coerulifrons* is much more similar in appearance (but not in vocalisations), although it exhibits more extensive areas of electric blue on the forecrown and wings. The female is separated from all the above species by its narrow eye-ring, although separation from other taxa of the *C. banyumas* complex requires further study.

Other noteworthy species observed

Bornean Barbet *Psilopogon eximius*

Range extension: one seen and several heard between 900 m and 1,300 m; the nearest previous records are from Barito Ulu (B. van Balen *in litt.*), over 300 km to the north-west.

Bornean Whistler *Pachycephala hypoxantha*

Range extension: fairly common above 1,100 m, with several individuals seen and heard; over 300 km south-east of the previous most southerly records from Barito Ulu (B. van Balen *in litt.*).

Grey-chinned Minivet *Pericrocotus solaris*

Range extension: occasionally recorded above 900 m; previously recorded only as far south as the Menyapa Mountains, some 450 km away (Brickle *et al.* 2009).

Bornean Treepie *Dendrocitta cinerascens*

Range extension: commonly recorded above 1,100 m; nearest previous records were from the Mahakam drainage, over 260 km away (B. van Balen *in litt.*).

Penan (Chestnut-vented) Bulbul

Alophoixus ruficrissus

Both races of this Bornean endemic have rich reddish-brown underparts; however, we saw several birds all with slightly paler, yellow-tinted underparts, which may be an undescribed subspecies.

Chestnut-hooded Laughingthrush

Garrulax trecheri

Previously recorded by Davison (1997) between 1,200 and 1,600 m; we saw small numbers between 1,100 and 1,720 m. They differed from the three subspecies known from north and central Borneo in having peachy-buff (not buff-grey) underparts, lacking pale streaking on the breast and showing



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Plate 10. Chestnut-hooded Laughingthrush *Garrulax trecheri*, Meratus Mountains, South Kalimantan province, 10 July 2016, showing peachy-buff underparts, lack of streaking on the breast and white flecking below the eye.

distinctive white flecking below the eye (Plate 10), and may represent an undescribed subspecies.

Bornean Stubtail *Urosphena whiteheadi*

Range extension: at least seven individuals were encountered, of which three were sound-recorded. Notably, all birds heard gave a single drawn-out introductory *tseeee* instead of the two introductory *tsit-tsit* notes recorded in the rest of the species's range (B. van Balen *in litt.*). Although the two birds seen well both appeared rather pale-breasted and more distinctly grey-spotted than most birds observed in northern Borneo, the species's plumage appears to be variable and further work is needed to confirm whether this is an undescribed taxon. The previous most southerly record was from the Menyapa Mountains, some 450 km away (Brickle *et al.* 2009).

Fruithunter *Chlamydochaera jefferyi*

Range extension: very common, with over 60 recorded between 1,300 and 1,800 m. Many of the ridge-top trees were fruiting, which is probably why the large numbers, including many immatures, were present; the nearest previous record was from Bukit Baka in the Schwaner

range, on the border between Central and West Kalimantan provinces, more than 400 km away (B. van Balen *in litt.*).

Bornean Shortwing *Brachypteryx erythrogyna*

Range extension: several birds of both sexes were heard and seen above 1,300 m and all appeared similar to birds from Mt Kinabalu, Sabah. Previously the most southerly record in Kalimantan was from the Menyapa Mountains (Brickle *et al.* 2009).

Bornean Leafbird *Chloropsis kinabaluensis*

Range extension: a single female, identified by its black throat with well-demarcated bright viridian (rather than yellow) mask surround, was recorded at 900 m; previously recorded only as far south as the Menyapa Mountains (Brickle *et al.* 2009).

Conclusion

Our discovery of at least two undescribed taxa confirms that the avifauna of the Meratus Mountains, South Kalimantan province, is very little known. The ranges of the new taxa are unknown and they may be restricted to this area. Given the brevity of our visit, it is possible that other significant findings await observers able to explore these mountains, particularly the areas between the two main ridges of the range.

Editors' note: In *BirdingASIA* 24 we were able to produce our regular taxonomic review covering developments up to the end of 2014. Due to other commitments our regular contributors have been unavailable in 2016 and this year has seen two large contributions to Asian taxonomy in the form of *Birds of the Indonesian Archipelago* (Eaton *et al.* 2016) and the *HBW and BirdLife International illustrated checklist of the birds of the world, Volume 2 Passerines* (del Hoyo & Collar 2016). This paper utilises conclusions from Eaton *et al.* (2016); however, we have where possible and appropriate cross-referenced Appendix 1 with del Hoyo & Collar

(2016) to help readers who are 'getting to grips' with these new departures in taxonomy. As usual in such circumstances we seek to remain neutral and the outlining of proposals does not indicate adoption by or opinion of the Oriental Bird Club.

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Appendix 1

List of species recorded during survey. Species nomenclature and taxonomy follows Eaton *et al.* (2016). Equivalent nomenclature and taxonomy following del Hoyo & Collar (2016) shown in **semi-bold** in brackets. * = new range extension

- Crested Partridge (**Roulroul**) *Rollulus rouloul*
 Little Cuckoo Dove *Macropygia ruficeps*
 Sunda Cuckoo *Cuculus lepidus*
 Sunda Brush Cuckoo *Cacomantis sepulcralis*
 (**Brush Cuckoo C. variolosus sepulcralis**)
 Asian Palm Swift *Cypsiurus balasienis*
 Swiftlet sp. *Aerodramus* sp.
 Bornean Frogmouth *Batrachostomus mixtus*
 Crested Serpent Eagle *Spilornis cheela*
 Blyth's Hawk Eagle *Nisaetus alboniger*
 Rufous-bellied Eagle *Lophotriorchis kienerii*
 Sunda Owlet *Glaucidium sylvaticum*
 (**Collared Owlet G. brodiei sylvaticum**)
 Mountain Scops Owl *Otus spilocephalus*
 Barred Eagle Owl *Bubo sumatranus*
 Diard's Trogon *Harpactes diardii*
 Bushy-crested Hornbill *Anorrhinus galeritus*
 Rhinoceros Hornbill *Buceros rhinoceros*
 Wreathed Hornbill *Rhyticeros undulatus*
 Gold-whiskered Barbet *Psilopogon chrysopogon*
 Mountain Barbet *Psilopogon monticola*
 Blue-eared Barbet *Psilopogon australis*
 (**Black-eared Barbet P. duvaucelii**)
 * Bornean Barbet *Psilopogon eximius*
 Rufous Piculet *Sasia abnormis*
 Maroon Woodpecker *Blythipicus rubiginosus*
 Banded Yellownape *Chrysoplegma miniaceum*
 (**Banded Woodpecker C. miniaceum**)
 Checker-throated Yellownape *Chrysoplegma mentale*
 (**Chequer-throated Yellownape C. humii**)
 Crimson-winged Woodpecker *Picus puniceus*
 Grey-capped Pygmy Woodpecker *Picoides canicapillus*
 Banded Kingfisher *Lacedo pulchella*
 (**Black-faced Kingfisher L. melanops**)
 Blue-crowned Hanging Parrot *Loriculus galgulus*
 Green Broadbill *Calyptomena viridis*
 Black-and-yellow Broadbill *Eurylaimus ochromalus*
 Bornean Banded Pitta *Hydrornis schwaneri*
 Golden-bellied Gerygone *Gerygone sulphurea*
 Blyth's Shrike-vireo *Pteruthius aeralatus*
 (**White-browed Shrike Babbler P. aeralatus**)
 (**White-bellied**) Erpornis *Erpornis zantholeuca*
 * Bornean Whistler *Pachycephala hypoxantha*
 Bar-winged Flycatcher-shrike *Hemipus picatus*
 * Grey-chinned Minivet *Pericrocotus solaris*
 White-throated Fantail *Rhipidura albicollis*
 Spotted Fantail *Rhipidura perlata*
 Ashy Drongo *Dicrurus leucophaeus*
 Black-naped Monarch *Hypothymis azurea*
 Jay Shrike (**Crested Shrike Jay**) *Platylophus galericulatus*
 * Bornean Treepie *Dendrocitta cinerascens*
 Grey-headed Canary-flycatcher *Culicicapa ceylonensis*
 Scaly-breasted Bulbul *Pycnonotus squamatus*
 Black-headed Bulbul *Microtarsus (Brachypodius) atriceps*
 Penan (**Chestnut-vented**) Bulbul *Alphoixius ruficrissus*
 Cinereous Bulbul *Hemixos cinereus*
 (**Green-winged Bulbul H. connectens**)
 Streaked Bulbul *Ixos malaccensis*
 Striped Tit-babbler *Mixornis gularis*
 (**Bold-striped Tit-babbler M. bornensis**)
 Sunda Scimitar Babbler *Pomatorhinus bornensis*
 (**Chestnut-backed Scimitar Babbler P. montanus**)
 Grey-throated Babbler *Stachyris nigriceps*
 Moustached Babbler *Malacopteron magnirostre*
 Temminck's Babbler *Pellorneum pyrrogenys*
 Brown Fulvetta *Alcippe brunneicauda*
 Chestnut-hooded Laughingthrush *Garrulax treacheri*
 Chestnut-crested Yuhina *Staphida everetti*
 Hume's White-eye *Zosterops auriventer*
 Meratus White-eye *Zosterops* sp. nov.
 Sunda Warbler *Seicercus grammiceps*
 (**Yellow-breasted Warbler Phylloscopus montis**)
 Mountain Leaf Warbler *Seicercus trivirgatus*
 (**Mountain Warbler Phylloscopus trivirgatus**)
 * Bornean Stubtail *Urosphena whiteheadi*
 Bamboo Bush (**Yellow-bellied**) Warbler *Abroscopus superciliiaris*
 Mountain (**Tailorbird**) Leaf-toiler *Phyllergates cucullatus*
 Ashy Tailorbird *Orthotomus ruficeps*
 Dark-necked Tailorbird *Orthotomus atrogularis*
 Rufous-tailed Tailorbird *Orthotomus sericeus*
 Velvet-fronted Nuthatch *Sitta frontalis*
 * Fruithunter *Chlamydochaera jefferyi*
 Verditer (**Flycatcher**) Warbling Flycatcher *Eumyias thalassinus*
 Indigo (**Flycatcher**) Warbling Flycatcher *Eumyias indigo*
 Little Pied Flycatcher *Ficedula westermanni*
 Meratus Jungle Flycatcher *Cyornis* sp. nov.
 Bornean (**Blue Flycatcher**) Jungle Flycatcher *Cyornis superbus*
 Bornean Shortwing *Brachypteryx erythrogyna*
 Bornean Shade-dweller *Vauriella gularis*
 (**Eyebrowed Jungle Flycatcher V. gularis**)
 * Bornean Leafbird *Chloropsis kinabaluensis*
 Asian Fairy Bluebird *Irena puella*
 Yellow-breasted Flowerpecker *Prionochilus maculatus*
 Yellow-rumped Flowerpecker *Prionochilus xanthopygius*
 Orange-bellied Flowerpecker *Dicaeum trigonostigma*
 Bornean (**Black-sided**) Flowerpecker *Dicaeum monticulum*
 Ruby-cheeked Sunbird *Chalcopteryx singalensis*
 Brown-throated Sunbird *Anthreptes malaccensis*
 Van Hasselt's (**Maroon-bellied**) Sunbird *Leptocoma brasiliana*
 Temminck's Sunbird *Aethopyga temminckii*
 Grey-breasted Spiderhunter *Arachnothera modesta*
 Little Spiderhunter *Arachnothera longirostra*
 Purple-naped Spiderhunter *Arachnothera hypogrammica*
 Dusky Munia *Lonchura fuscans*