#### NOTE IV.

### A REVIEW OF THE GENUS RHIPIDURA,

WITH AN ENUMERATION OF THE SPECIMENS IN THE LEYDEN MUSEUM

BY

### J. BÜTTIKOFER.

When occasionally looking over the specimens of the genus Rhipidura in our Museum, there were so many puzzling questions which could not be satisfactorily dissolved at once, that I decided to a comparative revision of the whole genus. This revision is not solely based upon our own material, but also on the rich and well-arranged collection in the British Museum, which I had the good fortune to look through during my recent visit to London. and amongst which I found several species, which were published after the issue of Dr. Sharpe's excellent Catalogue of the Muscicapidae. As in this catalogue the synonymy of each species is well-established up to the date of its issue, it would be of very little value to give it here once more, and I restricted, therefore, all synonymical remarks to those species about which I differ from the author of the Catalogue and to the species which were published afterwards.

As to the limits of the genus, I agree with Dr. Sharpe Notes from the Leyden Museum, Vol. XV. in including the genera Leucocerca and Sauloprocta; moreover I found, and Dr. Sharpe adheres now to this opinion, that the genus Neomyias, established in his catalogue, has to be reunited with Rhipidura.

The genus, as it is understood in this review, contains the considerable number of 75 species, of which five are described here as new.

Although I was fully aware of the difficulties to meet with, I made an attempt to find a natural order in which to place the numerous species of this genus. For this purpose I divided the whole genus into a group with small (13 cm. or less) and another with large bill (more than 13 cm.). This classification is, I am sorry to say, not quite perfect, as the last species of the small-billed group, R. albiventris from the Philippines, would, in fact, rather belong to the second group. On account of its red back, however, which forms a characteristic of a section of the first group, and its near relationship to R. cyaniceps, I prefer to close the first group with it, rather than placing it at the head of the second. On the other hand I placed in my second group, for similar reasons, a species with short bill, R. pectoralis, as it has no other relationship whatever with the short-billed group. The further classification of the species of each group into well-defined sections and subsections will be learnt from the key to the species, and I am pleased to say that but a very few species had to be placed, as it were by force, into one or other section of the genus.

I cannot close these few introductory lines without any expression of gratitude, especially to the address of Dr. Sharpe, for the kindness with which I was allowed to examine the rich materials in the British Museum and to increase the number of our species of this genus with such which were hitherto wanting in the series of the Leyden Museum.

#### Key to the species.

and, to the species.	
A. Bill small, not more than 13 cm. in length from	
front 1).	
<ul> <li>a. Dark form, no rusty red or cinnamon on upper surface.</li> </ul>	
a'. Some of the tail-feathers, if not all, with	
white shafts.	
a". Shafts of all the tail-feathers white.	
a". Inner web of tail-feathers entirely white. flabellifera	1.
b". Inner web of tail-feathers only edged	
with white bulgeri	2.
b". Shafts of centre pair of tail-feathers brown.	
a". Breast and abdomen uniform ochraceous.	
a4. Lower throat dark, either black or gray.	
a <sup>5</sup> . Outer web of outermost tail-feathers	
entirely white.	
a <sup>6</sup> . Throat-patch black (albiscapa diemenensis	3.
	4.
66. Throat-patch gray, chest also gray,	
streaked with ochraceous buff preissi	5.
b. Outer web of outermost tail-feathers	_
dull white, brownish at tip pelzelni	6.
c <sup>5</sup> . Outer web of outermost tail-feathers	
and tips to all the tail-feathers smoky	~
brown brenchleyi	7.
64. No dark throat, the whole lower sur-	
face, except the white chin and upper	
throat, being ochraceous buff cervina	8.
b". Breast and abdomen not uniform ochraceous.	
a4. Chin black with hoary gray margins,	
throat, chest and breast uniform dull	0
ashy brown	9.
c4. Throat entirely white, chest and breast	10.
black with white edgings verreauxi	11.
b'. No white shafts in the tail-feathers.	11.
a". Upper and lower surface dark, nearly uniform.	
a". No white superciliary stripe.	
a4. Upper and lower surface, with the ex-	
ception of the black head and tail, sooty	
brown, tinged with olive fuliginosa	12.

<sup>1)</sup> An exception from this rule is formed by R. albiventris, which, for its larger bill, would belong to the large-billed group, but is placed here on account of its very near relationship to R. cyaniceps.

<ul><li>b<sup>4</sup>. Upper and lower surface black</li><li>b"'. With a white superciliary stripe.</li></ul>	fallax	13.
a4. Tail uniform	atra	14.
64. Tail broadly tipped with white	albicollis	15.
b". Above gray, earthy brown or chocolate-	*	
brown, abdomen either pale chestnut, ful-		
vous or white.		
a". No black patch on lower throat, which		
is, as well as the chest, white with dusky		
brown streaks.		
a4. Outer web of two pairs of outermost		
tail-feathers white on its terminal half,		
back earthy brown	layardi	16.
64. Only the outermost tail-feather with the		
outer web white, back tinged with chest-		
nut brown.		
a <sup>5</sup> . Dusky streaks on chest numerous, broad	erythronota	17.
b. Dusky streaks on chest narrower and	, •	
less numerous	rufilateralis	18.
b". Lower throat black, forming a more or	•	
less complete cross-band.		
a4. Chest, breast, flanks and abdomen pale		
chestnut.	humarathea	19.
b4. Chest below the cross-band uniform	ng per <b>ge</b> nra	10.
white, unscaled.		
· · · · · · · · · · · · · · · · · · ·		αn
a <sup>5</sup> . Upper surface ashy gray		20.
b. Upper surface earthy brown	personata	21.
c4. Chest white with black centres, giving		
it a scaly appearance.		
as. Upper surface smoky brown		22.
65. Upper surface chocolate brown	melanolaema.	23.
b. Lower back always rusty red or cinnamon.		
a'. Forehead black.	٠	
a". Tail entirely cinnamon.		
a'''. Lores black	phoenicura	24.
$b^{\prime\prime\prime}$ . Lores white	opisterythra	25.
b". Tail brown, red at extreme base, all the		
tail-feathers, except the innermost pair, tipped		
with white	squamata	26.
b'. Forehead white, rest of upper surface cinnamon-	•	
rufous	eleaantula	27.
c'. Forehead red.	,	
a". Tail-feathers tipped with white or ashy white.		
a". Dark parts of tail black or dark brown.		
a4. Entire throat black, leaving only a nar-		
·	·	
Notes from the Leyden Museum, Vol.	. <b>XV</b> .	

row space on the chin and a moustachial		
streak white.		
as. Feathers on the abdomen unstriped . 2	raniae	28.
65. Feathers on the abdomen with a dark		
shaft-streak	strolabi	29.
64. Upper throat white.		
as. A black patch on lower throat, chest		
scaly, the black feathers being edged		
with white.		
a <sup>6</sup> . Upper back olive-brown, contrast-		
ing with the lower, which is rich		
cinnamon-red	ubro frontata	30.
b. Upper surface rich brown with a		
reddish tinge	ersicolor	31.
$c^6$ . Upper surface cinnamon-rufous $s$		32.
b. Lower throat black, chest uniform . 7	russata	33.
b". Dark parts on tail brown, more or less		
tinged with pearly gray.		
a4. Mantle olive-brown, contrasting with	•	
the red back.		
as. Chest scaly, the black feathers being	•	
edged with white.		
· as. Entire basal half of tail-feathers red	rufif <b>rons</b>	34.
b. Extreme base of tail-feathers only		
edged with red	tryas	35.
65. Chest below the black throat-patch		
uniform white	emicollaris	36.
b4. Mantle rufous, like back and rump.		
a. A narrow black patch on lower		
throat	hamadryas	37.
65. Black throat-patch very broad, reaching	-	
nearly up to the chin which is white,	•	
as also a broad moustachial streak,		
running down along the sides of the		
	celebensis	38.
c5. No black patch on lower throat, which		
is ashy fulvous	rufidorsa	<b>3</b> 9.
b". Two basal thirds of tail-feathers pale chest-		
nut, terminal third black, three outermost		
pairs narrowly edged and tipped with fulvous t	leysmanni	<b>4</b> 0.
c". Tail sepia brown, extreme base, outer web		
of outermost tail-feathers, and broad tips to		
all the tail-feathers deep rusty red.		
a". Shafts of tail-feathers dark brown, wing		
7,5 cm	lepida	41.
Notes from the Leyden Museum, Vol.	. xv.	

<ul> <li>b". Shafts of tail-feathers rich glossy copper-bronze, wing 6,4 brachyrhynchod". Two centre pairs of tail-feathers black, four outermost pairs uniform pale cinnamon like</li> </ul>	<b>4</b> 2.
the whole plumage	43.
a". Abdomen fulvous	44.
<ul> <li>b". Abdomen white</li></ul>	45.
<ul> <li>a'. Outer tail-feathers pale cinnamomeous fuscorufa</li> <li>b'. Outer tail-feathers isabel with a tinge of fulvous.</li> <li>a''. Upper surface olive-brown, tinged with ashy,</li> </ul>	46.
outer edge of quills dull rufous diluta b". Upper surface earthy brown, without any	47.
grayish tinge, quills edged with lively rufous sumbawensis  b. Tail uniform dark brown or black, or dark with white tips.  a'. Under tail-coverts black or sooty brown, sometimes narrowly tipped with white.  a''. Back olive-brown, tail uniform sooty black.  a'''. Abdomen and flanks ashy olive or olive	48.
brown, never sooty brown	<b>4</b> 9. <b>5</b> 0.
a". Centre tail-feathers entirely black \begin{cases} \maculipectus \text{tenebrosa} \\ tenebrosa \end{cases}	51. 52
<ul> <li>b". All the tail-feathers tipped with white . leucothorax</li> <li>b'. Under tail-coverts white or fulvous.</li> <li>a". Upper surface ashy gray, never tinged with brown.</li> <li>a"". Throat gray or spotted, never pure white.</li> </ul>	53.
<ul> <li>a4. Throat and chest uniform bluish ashy gray euryura</li> <li>b4. Throat and chest spotted with white.</li> </ul>	54.
a <sup>5</sup> . Abdomen and under tail-coverts white perlata b <sup>5</sup> . Abdomen pale ochraceous, under tail-	55.
coverts white	56. 57.

<sup>1)</sup> An exception from this rule is made by R. pectoralis, its bill being not more than 13 cm. in length. It has, however, its nearest allies in the large-billed group.

	1
-	-

#### GENUS RHIPIDURA.

a4. Chest-band distinctly spotted with white.	
a. No white tips on the tail-feathers.	
a <sup>8</sup> . Tail uniform sooty black cinerea	58.
b. Outer web of outermost tail-feather	
white on its terminal half lenzi	59.
65. Tips to two or three outer tail-feathers	
white.	
a <sup>6</sup> . Abdomen ochraceous hoedti	60.
b. Abdomen white vidua	61.
b4. Chest-band uniform or with some very	
narrow white shaft-streaks.	
a <sup>5</sup> . Secondaries not or only faintly edged	
with white.	
a <sup>6</sup> . Abdomen ochraceous setosa	<b>62</b> .
6. Abdomen white kordensis	63.
b. Secondaries broadly edged with white.	
a <sup>6</sup> . Abdomen white obiensis	<b>64</b> .
b. Abdomen pale ochraceous finschi	65.
b". Upper surface tinged with olive brown or	
earthy brown, never pure ashy gray.	
a". Upper throat white.	
a4. Only the outermost pair of tail-feathers	
tipped with white assimilis	66.
64. Two outermost tail-feathers tipped with	
white.	
as. A distinct gray chest-band with white	
lanceolate shaft-streaks to the feathers, white tip to the outermost tail-feather	
less than an inch isura  b. No distinct gray chest-band, white	67.
tips to tail-feathers much more than	
an inch in length rusiventris	68.
c4. Four outermost tail-feathers tipped with	00.
white javanica	69.
d. No distinct white spots on tail-feathers,	uə.
which are brown, becoming paler towards	
the tips, pectoralis	70.
et. Five outer pairs of tail-feathers tipped	
with white nigritorquis	71.
b". Upper throat black, some feathers tipped	,
with white.	
at. A black pectoral band, three outer tail-	
feathers tipped with white auricularis	72.
b4. No black pectoral band, five outer pairs	-
of tail-feathers tipped with white albifrontata	<b>7</b> 3.
Notes from the Leyden Museum, Vol. XV.	

- c". Upper surface, chin, throat and chest glossy black.

b". No white edgings to secondaries, chest unspotted. . . . . . . . . . . . melanoleuca 75.

74.

### 1. Rhipidura flabellifera (Gm.).

A nearly adult specimen, with some spots on the wing-coverts still rufous, from New Zealand.

### 2. Rhipidura bulgeri Layard.

Two adult specimens from Noumea, New Caledonia.

### 3. Rhipidura albiscapa Gould.

Three specimens from >Australia" and two from New South Wales.

### 4. Rhipidura diemenensis Sharpe.

Rhipidura saturata (nec Salvad.) Sharpe, Cat. B. Br. Mus. IV, p. 311 (1879).

Rhipidura diemenensis Sharpe, Ibis, May 1879, p. 368.

Rhipidura sharpei Ramsay, Proc. Linn. Soc. N. S. Wales, 1879, p. 318.

Hab. Tasmania.

# 5. Rhipidura preissi Cabanis.

Rhipidura preissi Cab. Mus. Hein. I, p. 57 (1850); Sharpe, Cat. B. Br. Mus., IV, p. 310; id. P. Z. S. 1881, p. 387.

Hab. Western Australia.

### 6. Rhipidura pelzelni Gray.

Hab. Norfolk Island.

# 7. Rhipidura brenchleyi Sharpe.

One specimen from Aneitum, New Hebrides.

### 8. Rhipidura cervina Ramsay.

Rhipidura cervina Ramsay, Proc. Linn. Soc. N. S. Wales, 1879, p. 340. Rhipidura macgillivrayi Sharpe, P. Z. S. 1881, p. 789, pl. 67.

Hab. Lord Howe's Island.

9. Rhipidura nebulosa Peale.

Three specimens from Samoa.

10. Rhipidura spilodera Gray.

Hab. Banks Islands.

11. Rhipidura verreauxi Marie.

An adult male from Noumea, New Caledonia.

12. Rhipidura fuliginosa (Sparrm.).

One specimen from New Zealand.

13. Rhipidura fallax Ramsay.

Rhipidura fallax Ramsay, P. Z. S. 1884, p. 580.

Hab. Astrolabe Range, S. E. New Guinea.

This species seems to differ from R. atra Salvad. in wanting the white patch above the eye.

### 14. Rhipidura atra Salvadori.

Rhipidura atra Salvad. Ann. Mus. Civ. Genova, VII, p. 922 (1875); XII, p. 324 (1878).

Rhipidura brachyrhyncha (nec Schleg.) Sharpe, Cat. B. Br. Mus. IV, p. 316 (description of adult male); Salvad. (partim) Ann. Mus. Civ. Genova, XIV, p. 500 (1879); id. Orn. Pap. II, p. 72 (1881).

Adult male and female slaty black with a silky white patch above the eye. Young birds seem to have a red plumage, as Count Salvadori (Ann. Mus. Civ. Genova, VII, p. 922) mentioned a black bird with some red feathers, which latter may be considered the remnants of the immature plumage. The same seems to be the case with R. flabellifera (see Sharpe, Cat. Birds, IV, p. 309).

Adult male and female from Arfak, collected by Bruyn Notes from the Leyden Museum, Vol. XV.

on February 13th and 15th 1876. The female has some rusty red feathers on the breast and near the base of the tail.

Unfortunately for the synonymy of this and other species, a great confusion was caused by the statement of Beccari's, that the specimens of R. atra Salvad. were nothing but the black males and the specimens of R. brachyrhyncha auct. recent. (nec Schleg.) the red females of one and the same species, which ought to bear, as the older, the name R. brachyrhyncha. Although this point of view he agreed with by our most eminent recent Ornithologists. I feel, after a near examination of the matter. quite unable to share this opinion. It is a rather strange supposition that, in only one species of such a large genus, male and female would be so strikingly different in color, the more as in our Museum as well as in the series treated of by Salvadori in the second volume of his Ornithologia delle Papuasia, one of the black specimens is said to be a female. The same is, moreover, the case with the only specimen of this species, found in the collections of the British Museum, being a black female from the Arfak Mountains.

Very curious is the fact that the red birds, which were considered, first by Dr. A. B. Meyer and afterwards by Dr. Sharpe and Count Salvadori, to belong to R. brachyrhyncha Schleg., are quite different from this latter species. They cannot be identified either with R. brachyrhyncha nor R. atra, of which they were believed to be the females, but belong to a quite different species, which is identical with R. cinnamomea, described by Dr. A. B. Meyer in Zeitschr. f. Ges. Orn. 1886, p. 17, pl. III, fig. 3.

# 15. Rhipidura albicollis Vieillot.

Rhipidura albicollis Vieill. N. Dict. d'Hist. Nat. XXVII, p. 13.
Rhipidura atrata Salvad. Ann. Mus. Civ. Genova, XIV, p. 203 (1879).
Rhipidura vidua (nec Salvad.) Schleg. in Snelleman, Sumatra Exp.
Aves, pl. II (1884).

Three specimens from the Indian Continent and one Notes from the Leyden Museum, Vol. XV. (the type of R. vidua, figured in the above mentioned plate) from the Highlands of Padang, collected by the Dutch Expedition through Sumatra.

Our Sumatran specimen is not specifically different from R. albicollis from the Continent, of which I had the good fortune to get 75 specimens in the British Museum to compare with, amongst them one from Perak. One might say that, as a rule, the Sumatran specimens, of which I saw one in the British Museum, would have the white tips clearer white and longer than those from the Continent; I found, however, amongst the Indian birds enough specimens to form a series showing every degree of a gradation between R. albicollis and atrata, and the specimen from Perak certainly would belong to the latter, if it might be maintained as a distinct species. (See also Sharpe, on Birds from Perak, P. Z. S. 1887, p. 435, and Salvadori, Uccelli di Birmania, Ann. Mus. Civ. Genova, 1887, p. 590).

16. Rhipidura layardi Salvadori.

A male and two females from Viti Levu.

17. Rhipidura erythronota Sharpe.

A male from Vanua Levu.

18. Rhipidura rufilateralis Sharpe.

A male from Taviuni, Fiji Islands.

19. Rhipidura hyperythra Gray.

Rhipidura hyperythra Sharpe, Birds of New Guinea, Vol. II, pl. 33.

A specimen from Aru (von Rosenberg) and two from N. W. New Guinea.

20. Rhipidura albilimbata Salvadori.

Two males from Karons, N. W. New Guinea.

Notes from the Leyden Museum, Vol. XV.

21. Rhipidura personata Ramsay.

Two females, collected by Kleinschmidt on the Island Kandavu, Fiji group.

22. Rhipidura kubaryi Finsch.

An adult bird from Ponapé.

23. Rhipidura melanolaema Sharpe.

Hab. Vanikoro, New Hebrides.

24. Rhipidura phoenicura Müll. & Schleg.

Three specimens from Java, amongst which the two types, and a fourth specimen from Borneo.

25. Rhipidura opistherythra Sclater.

Rhipidura opistherythra Sclat. P. Z. S. 1883, p. 197; Sharpe, Birds of New Guinea, Vol. II, pl. 29.

Hab. Timor Laut.

26. Rhipidura squamata Müll. & Schleg.

Eight specimens: Adult male and female from Banda (types, voyage S. Müller), a male from Khoor (von Rosenberg), a female from Matabello (von Rosenberg), male and female from Waaigama, Mysol (Hoedt), a female from one of the small islands on the west-coast of Waigiou (Bernstein) and a specimen without indication of locality.

27. Rhipidura elegantula Sharpe.

Rhipidura elegantula Sharpe, N. L. M. 1879, p. 21.

The typical specimen, collected by Hoedt on the island of Lettie. A second specimen, from the island of Dammer, I had the opportunity to see in the British Museum.

28. Rhipidura uraniae Oustalet.

Rhipidura uraniae Oust. Bull. Soc. Phil. Paris, Mars 1881. Rhipidura atrigularis Rehw. J. f. O. 1885, p. 110.

An unsexed specimen, acquired from Verreaux 1865, and erroneously said to come from Australia.

This specimen agrees very well with the short description of R. atrigularis given by Dr. Reichenow, with the exception of its smaller size which is somewhat inferior even to the measurements of the typical specimen of R. uraniae. From all its red-fronted allies this species is very easily distinguished by its black throat, leaving only the chin and a rather narrow moustachial streak white.

Crown, nape, hind neck, mantle and upper back earthy brown, forehead and a superciliary stripe, lower back, rump and upper tail-coverts cinnamomeous, lesser wingcoverts and scapulars like the mantle, median and greater sepia-brown, edged with earthy brown and tipped with pale fulvous, forming a double row of this color, quills sepia-brown, the outer edge fringed with paler brown: tail black, all the feathers broadly tipped with pure white, extreme base of all the tail-feathers rufous, the centre ones to a greater extent than the outer pairs; lores, sides of face, ear-coverts and sides of neck as well as the whole throat and upper chest black, the black feathers on the lower end of this large gular patch edged with white, giving the chest a scaly appearance, the chin as well as a narrow line running from it along the cheeks onto the sides of the neck and joining the sides of the chest, white. Lower chest dirty white, breast and abdomen pale fulvous, deepening into a more intense fulvous on abdomen, vent, flanks and under tail-coverts. Thighs cinnamon. under wing-coverts white, edge of wing fulvous, inner lining of the quills ashy. Bill brown, with base of lower mandible white, feet pale brown. Wing 6,5 cm., innermost tail-feathers 7,9, outermost 5,7, tarsus 1,8, culmen 1,1.

The pale tips to the median and greater wing-coverts seem to me to indicate a certain stage of immaturity.

The typical specimen of this species is stated to come from the Marianne Islands (Freycinet), while the type of *R. atrigularis* has been collected on the Pelew Islands (Kubary).

29. Rhipidura astrolabi Oustalet.

Rhipidura astrolabi Oust. Bull. Soc. Phil. Paris, Mars 1881.

Hab. Vanikoro, New Hebrides.

30. Rhipidura rubrofrontata Ramsay.

Rhipidura rubrofrontata Ramsay, Proc. Linn. Soc. N. S. Wales, 1881, p. 23; Salvad. (partim) Orn. Pap. III, p. 532 (1882); Sharpe, Birds New Guinea, Vol. II, pl. 26 (1886).

An adult male from Guadalcanar, Solomon Islands.

This species is very closely allied to *R. rufifrons*, but at once distinguished by the lesser extent and darker tinge of red on the base of the tail-feathers as well as by the pure white instead of ashy white tips to all the tail-feathers.

31. Rhipidura versicolor Hartl. & Finsch.

Hab. Island of Uap, Mackenzie group.

32. Rhipidura semirubra Sclater.

Hab. Admiralty Islands.

33. Rhipidura russata Tristram.

Rhipidura russata Tristr. Ibis, 1879, p. 440; id. 1882, p. 142; Salvad. Aggiunte Orn. Pap. p. 78 (1890).
Rhipidura rubrofrontata Salvad. (partim) Orn. Pap. III, p. 533.

Hab. San Christoval, Solomon Islands.

34. Rhipidura rufifrons (Lath.).

Nine specimens from different parts of Australia, amongst which there is one from Melbourne with all the tail-feathers tipped with rufous instead of ashy white.

35. Rhipidura dryas Gould.

Rhipidura dryas Sharpe, Birds of New Guinea, Vol. II, pl. 32. One specimen from Coburg Peninsula, Australia.

36. Rhipidura semicollaris Müll. & Schleg.

Besides the three typical specimens from Timor and one Notes from the Leyden Museum, Vol. XV. from Samao, all four collected by S. Müller, the series contains another specimen from Timor (von Rosenberg) and one from Ombaai, the most eastern island of the Flores group.

### 37. Rhipidura hamadryas Sclater.

Rhipidura hamadryas Sclat. P. Z. S. 1883, p. 54; Sharpe, Birds of New Guinea, Vol. II, pl. 30.

An adult female from Timor Laut, collected by H. O. Forbes.

### 38. Rhipidura celebensis, n. sp.

An unsexed specimen, collected by Teysmann at Macassar, Celebes.

Very closely allied to *R. semicollaris* from the Timor group, but easily distinguished by the darker tinge of the earthy brown parts of the upper surface and the broader black band across the lower throat and chest.

Crown, hind neck, fore-part of mantle, lesser wingcoverts and thighs dark earthy brown, fore-head, hinder part of mantle, whole back, rump and upper tail-coverts rufous, quills and greater wing-coverts sepia-brown, edged with the color of the crown, tail blackish with the upper surface iron gray on both webs of the innermost pair and on the outer webs of the other pairs, the outer web of all the tail-feathers, except the outermost pair, red near the base, tips to all the tail-feathers white, more broadly so towards the outermost pair, on which the white of the tip is running at some distance towards the base on the edge of the outer web. Lores, sides of face, lower throat and chest black, the very lowest part of the latter with white edgings to the feathers, the very broad throat-patch separated from the black cheeks and ear-coverts by a white streak, extending from the chin onto the sides of the chest, breast and abdomen pure white, flanks, vent and under tail-coverts tinged with fulvous, under wing coverts white, inner edge of quills ashy whitish. Bill dark

brown, white at the base of the lower mandible, feet dark brown. Wing 6,6 cm., centre tail-feathers 8,5, outermost pair 6,2, tarsus 2, culmen 1,3.

### 39. Rhipidura rufidorsa Meyer.

A male from Karons, North West New Guinea, Coll. Bruyn.

# 40. Rhipidura teysmanni, n. sp.

An unsexed specimen, collected by Teysmann at Macassar, Celebes, 1878.

This species belongs to the group with the forehead, back and base of tail-feathers cinnamon-red, and R. ruft-frons from Australia may be considered its nearest ally. From this latter, as well as from the other species of the mentioned group, it differs principally in the red of the basal part of the tail being much more widely distributed, fully occupying the two basal thirds and being as plainly visible on the under surface as on the upper, while in all the other species the tail, when closed, hardly will show any red region beyond the under tail-coverts.

Crown, sides of head, the neck and upper part of mantle olive-brown, front, back, rump, flanks, thighs, upper and under tail-coverts, the two basal thirds of all the tail-feathers above and below, cinnamon red. Upper wing-coverts and quills sepia-brown, the first broadly edged with olive-brown, the latter, with the exception of the outermost, broadly fringed with cinnamon, innermost secondaries olive-brown, both webs fringed with cinnamon, under wing-coverts fulvous, quills very broadly edged on the inside with vinaceous, especially the secondaries; the terminal third of tail-feathers about an inch in length in the innermost and somewhat less in the outer pairs, sepiabrown, for about half their length fringed on the inner and outer webs with the color of the basal two thirds, the two innermost pairs very narrowly, the outermost broadly tipped with ashy fulvous. The shafts of the tail-

feathers have the color of the accompanying parts of their webs, but the red on the basal part is running, though not very far, into the black terminal third. Chin and upper throat pure white, a rather narrow black bar without any white edgings to the feathers, across the chest, centre of breast and abdomen pale fulvous with a rather whitish tinge, rest of under surface cinnamon. Bill blackish, whitish at base, feet pale brown. Wing 6,9 cm., centre tail-feathers 8, outermost 6, tarsus 1,9, bill from front 1,2.

I am much pleased to name this fine species after its discoverer, the late Mr. Teysmann, who, besides his well-known botanical investigations throughout the Indian Archipelago, spent much time in enriching the ornithological collections of the Leyden Museum.

### 41. Rhipidura lepida Hartl. & Finsch.

An adult female from Pelew (Museum Godeffroy).

### 42. Rhipidura brachyrhyncha Schlegel.

Rhipidura brachyrhyncha Schleg. Ned. Tijdschr. voor de Dierk. IV, p. 42 (1873).

Rhipidura rufa Salvad. Ann. Mus. Civ. Genova, VII, p. 923 (1875); Sharpe, Cat. Birds Br. Mus. IV, p. 323; Salvad. Orn. Pap. II, p. 71 (1881).

A female, collected by von Rosenberg at Hattam, North West New Guinea, 1870.

As I have already pointed out when treating of R. atra, the birds considered to be R. brachyrhyncha by Meyer, Salvadori and Sharpe are not identical with R. brachyrhyncha Schleg., and it is by mistake that Salvadori states to have examined the type of the latter, which is still preserved unstuffed in the margazines of the Leyden Museum. Most likely Salvadori took our stuffed female of R. meyeri mihi for the type of Schlegel's R. brachyrhyncha, as this specimen bears the latter name in his hand-writing. Although Schlegel's description of R. brachyrhyncha is very

clear, and sharply pointing to the characters which make this species a near ally of R. lepida, I redescribe it here in extenso:

Head, mantle and lesser wing-coverts dusky fulvous, superciliary streak and nuchal region tinged with ferrugineous, back, rump and upper tail-coverts deep ferrugineous, quills and greater wing-coverts sepia-brown, both margined with the color of the back, giving the whole wing a rusty appearance. Tail dark brown, with glossy red shafts, extreme base of the centre tail-feathers and of the outer web of the others ferrugineous, with which color the outer webs of all the tail-feathers are fringed nearly down to the end; tips of all the tail-feathers at the length of about half an inch deep bay, making the tail, when seen from underneath, like that of R. lepida, with the exception that in the latter the red tips are longer and the red is running along the whole outer edge of the outermost pair, while in R. brachyrhyncha the outermost pair is not edged with red exteriorly. The underparts of the bird are pale gravish fulvous, more intensely fulvous on breast and abdomen, and cinnamomeous on the under tail-coverts. Under wing-coverts fulvous. inner lining of the quills vinous bay, bill very short and pale, lower mandible, with the exception of the darker tip, white, feet and claws pale yellow. Wing 6,4 cm., tail 8,7, tarsus 1,9, culmen 1,1.

The essential differences between R. brachyrhyncha Schl. and R. meyeri mihi (= R. brachyrhyncha auct. nec Schl.) are to be sought for in the color of the tail, which in the first species is dark brown with red base and red tips, while in the second the centre tail-feathers are entirely black, the outer entirely cinnamomeous.

# 43. Rhipidura cinnamomea 1) Meyer.

Rhipidura brachyrhyncha (nec Schleg.) Meyer, Sitzb. k. Akad. d. Wiss. Wien, LXIX, p. 501 (1874); Sharpe, Cat. B. Br. Mus. IV,

<sup>1)</sup> See the observations about this species antea, under the heads R. atra and brachyrhyncha.

p. 316 (description of the female); Salvad. Ann. Mus. Civ. Genova, XIV, p. 500 (1879); Orn. Pap. II, p. 72 (\$\sqrt{2}\$). Rhipidura cinnamomea Meyer, Zeitschr. f. ges. Orn. III, p. 17, pl. III, fig. 3 (1886).

A female collected by Bruyn, and an unsexed specimen collected by Woelders, both from Arfak, N. W. New Guinea.

General color cinnamon, somewhat paler below than above, especially on chin and throat, which are pale fulvous. Crown and hind neck tinged with olive; quills and wing-coverts dark brown, edged with the color of the back, under wing-coverts and inner edge of quills cinnamon. Three outermost pairs of tail-feathers uniform cinnamon, the fourth pair cinnamon on the outer, black on the inner web, the two innermost pairs entirely black. Bill very short, the bristles reaching beyond the tip, upper mandible black, lower white, feet pale flesh-color. Wing 7,1 cm., tail 8, outermost pair 6, tarsus 2, culmen 1,2.

In the distribution of the colors on the tail-feathers this species agrees with the two following: R. cyaniceps and albiventris, but there seems to occur some individual difference, probably due to age. While in our above described specimen the fourth tail-feather has the inner web entirely black, the other specimen has one of the feathers of the fourth pair nearly almost black on the inner web, while the other feather of the same pair has only a basal part of the inner web black and the whole rest cinnamomeous. In the specimen erroneously described by Dr. Meyer as R. brachyrhyncha (Sitzb. Wien, LXIX, p. 501) the black on the tail-feathers seems, on the other hand, to be more widely distributed, as it occupies not only the whole outer web of the fourth pair, but also the edge of the inner web of the third and the base of the inner web of the second, leaving only the first (outermost) pair entirely red. Dr. Meyer's type is the first male which is as yet known of this hitherto wrongly understood species.

Salvadori (Aggiunte Orn. Pap. 1890), considering R. cinnamomea to differ specifically from what he says to be

the female of R. brachyrhyncha, believes the first named form to be the female of the black R. fallax Ramsay, thus forming a case analogue to his R. brachyrhyncha, in which the red female is also said to belong to a black male  $(R. \ atra)$ .

44. Rhipidura cyaniceps (Cass.).

One specimen from the Philippine Archipelago.

45. Rhipidura albiventris (Sharpe).

One specimen from Guimaras, Philippine Archipelago.

46. Rhipidura fuscorufa Sclater.

Rhipidura fuscorufa Sclat. P. Z. S. 1883, p. 197, pl. XXVII.

Two specimens from the Tenimber group of Islands.

This is the first of a group of three large-billed species, which are in some way related with the small-billed forms R. cinnamomea, R. cyaniceps and R. albiventris, having the two centre tail-feathers uniform black, while the outer pairs are pale, at least on their outer webs, and never tipped with rufous or white. Upper surface earthy brown, head darker, a white spot above the eye, median and greater wing-coverts and secondaries, especially the innermost, broadly margined with pale rufous, two innermost pairs of tail-feathers black, the next pair black with rufous edge and tip, three outermost pairs entirely pale rufous, chin and throat white, chest-feathers gray at base, with very large white tips, giving the whole chest a white appearance like in the preceding species, rest of under surface, including the under wing-coverts, pale rufous.

47. Rhipidura diluta Wallace.

Rhipidura diluta Wall. P. Z. S. 1863, p. 491.

One specimen from Flores.

Upper surface grayish brown, forehead much darker, wing-coverts and secondaries edged with dark rufous,

three central pairs of tail-feathers uniform brown, next pair with paler tip, two outermost pairs dirty whitish, darker at the base of the inner web, chin, throat and a narrow line from the nostril above the eye white, chest and sides of body ashy brown, rest of lower surface including the under wing-coverts ashy fulvous. Bill narrower than in the allied species.

### 48. Rhipidura sumbawensis, n. sp.

Two specimens from Sumbawa, presented by Mr. van Lansberge, 1882.

Closely allied to R. diluta, but with much broader bill, with the upper surface much paler brown, the quills edged with very clear rusty red, the three outermost pairs of tail-feathers more fulvous, less ashy than in R. diluta, and the lower surface much more strongly tinged with fulvous.

Forehead and lores blackisch, crown rufous brown, whole back and rump pale earthy brown with no grayish tinge at all, upper tail-coverts darker; upper wing-coverts like the back, median and greater as well as the primary coverts externally edged with rufous, quills brown, broadly margined with clear rusty red. Three innermost pairs of tail-feathers uniform sepia-brown, paler than in R. diluta. fourth pair broadly tipped with fulvous, fifth pair fulvous nearly up to the base, the outermost pair entirely fulvous with much paler outer web. Throat and a streak from the nostril above the eye white, duller in younger specimens, rest of under surface pale fulvous, somewhat tinged with ashy, under wing-coverts and thighs uniform clear fulvous, inner edge of quills vinous red. Bill broad, black, paler at base of lower mandible, feet flesh-color, iris black. Wing 8 cm., tail 8,7, outermost pair 7,3, bill 1,4, tarsus 2. A probably younger specimen is smaller, the wing having 7.4, the tail 8 cm.

The comparison of our Sumbawa specimens with four specimens of R. diluta from Flores in the British Museum,

amongst which the type of the species, convinced me that the first really belongs to a new, hitherto overlooked species.

### 49. Rhipidura threnothorax Müll. & Schleg.

Rhipidura threnothorax Müll. & Schleg. Verh. Land- en Volkenk. p. 185 (1839-44); Meyer, Sitzb. k. Akad. d. Wiss. Wien, LXIX, p. 212 (1874); Sharpe, Cat. B. Br. Mus. IV, p. 325 (1879); Salvad. Orn. Pap. II, p. 54 (1881).

Rhipidura fumosa Schleg. Ned. Tijdschr. voor de Dierk. IV, p. 42 (1873); Salvad. Orn. Pap. II, p. 56 (1881).

Rhipidura ambusta Ramsay (teste Sharpe and Salvadori).

This species, with which I unite, in accordance with Dr. Sharpe, R. fumosa Schleg., is easily distinguished from all its congeners with white-spotted breast by its uniform sooty black tail. I have before me a series of five specimens, each in a different dress, which, as I think, we have to consider as so many different stages of age, of which it will be useful to give here a short description.

a. First stage: Young female from Jobi, collected by von Rosenberg, April 23rd 1869 (type of R. fumosa Schleg.). Above dark olive-brown, hind neck, mantle and back strongly tinged with rusty, rump, upper tail-coverts, abdomen, vent, thighs, under tail-coverts and tail sooty black; wing-coverts and quills dark smoky brown, under wing-coverts somewhat paler; chin, throat and a superciliary stripe white; chest, breast and flanks pale olivebrown, the upper chest with numerous hidden, small whitish spots, which, I think, will be the beginnings of the larger and purer white spots of the more developed stages of plumage. The bill is also showing a mark of immaturity, the lower mandible being white with a partially black tip, while it is, as a rule, pure white in the adult bird. The upper mandible as well as the feet are in all stages blackish brown. The wing, compared with the more advanced stages, is very short, measuring only 7 cm., tail 9, tarsus 2,1, culmen 1,5.

This or a perhaps somewhat more advanced stage is Notes from the Leyden Museum, Vol. XV. described by Dr. A. B. Meyer in the above cited Sitzungsberichte.

- b. Second stage: Female, collected by S. Müller, together with the typical specimen at the bay Lobo, S. W. New Guinea. General color above and below considerably much paler than in specimen a, probably owing to its having, as a stuffed specimen, been much more exposed to the light. The white on chin and throat extending upon the cheeks, the chest grayish olive instead of olive-brown, each feather bearing, in its centre, a large cordiform dirty white spot of four millimetres in width. No black at all on the chest, the outermost of the under wing-coverts edged with white, lower mandible white with a blackish mark near the tip. Wing 7,5 cm., tail 9,4, tarsus 2,2, culmen 1,5.
- c. Third stage: Female, collected by Bernstein at Sorong, January 20<sup>th</sup> 1865. Differs from the preceding specimen in having the head and back less tinged with rufous, in being more ashy olive on chest and breast and in having the cordiform spots much purer white and on most of the feathers, especially near the throat, encircled with black. Under wing-coverts as in the previous specimen. Hardly any black at the tip of lower mandible. Wing 8 cm., tail 9,2, tarsus 2, culmen 1,7.
- d. Fourth stage: An unsexed specimen from New Guinea (Frank, 1873). Similar to the former specimen, but having the white spots on the chest very large with all the surrounding parts of each feather entirely black, while many of the grayish olive breast-feathers, especially on the centre of the breast, bear concealed white, cordiform spots without black surrounding. Under wing-coverts very conspicuously tipped with white, and some of the outermost lesser wing-coverts also tipped with white. Lower mandible entirely white. Wing 8 cm., tail 9,8, tarsus 2,3, culmen 1,7.
- e. Fifth stage(?). Type of the species (3), collected by S. Müller at the bay Lobo, S. W. coast of New Gui-

nea. Similar to the former specimen, but the white spots on the black chest very much smaller, hardly two millimetres broad, and drop-shaped, very narrow at the base, becoming broader and round at the end, none of them cordiform as in the preceding specimens. Some of these white drop-shaped spots are found, partially visible, partially hidden, on the ashy olive feathers of the breast. Lower mandible entirely white. Wing 8 cm., tail 8,6, tarsus 2,2, culmen 1,5.

It is not without some hesitation that I unite this specimen, the type of the species, with the four former ones, the difference in form and size of the white spots on the chest being so very striking; but on the other hand the large-spotted specimen, described above as the second stage, is found by S. Müller together with the small-spotted typical specimen, and considering, moreover, the fact that in the allied R. maculipectus the small and the large form of white spots are found in one and the same individual, it would be rather venturous to base a new species upon the difference in size of the white chest-spots only.

The British Museum contains a specimen similar to stage four from Salwati, another from New Guinea" and one from the Astrolabe Mountains, which latter is the form described as *R. ambusta* by Ramsay.

# 50. Rhipidura rosenbergi, n. sp.

A female, collected by von Rosenberg at Wonoembaai, Aru, agrees with the preceding species in the olive-brown upper surface, the uniform sooty black tail, the entirely white throat and the black, white-spotted chest, but differs from it in having below the white throat the whole under surface sooty black, almost as intense as the chest, and not only is the chest, but also the breast, spotted with white. These two latter characteristics make it a near ally of R. maculipectus, from which it is, however, distinguished by the olive-brown upper surface, the uniform black tail and the entirely white throat.

Crown, hind neck and mantle and back olive-brown. the latter somewhat tinged with rufous, the rump darker, upper tail-coverts, tail, flanks, abdomen, thighs and under tail-coverts sooty black, the outermost tail-feathers with a very slight indication of a white tip; lesser wing-coverts and some of the median blackish, tipped with white, rest of the wing-coverts and all the quills smoky brown, narrowly fringed with paler brown on the outer webs; under wing-coverts sooty brown, tipped with white; chin, cheeks, entire throat, front and a broad superciliary stripe pure white, the latter bordered at its upper edge with deep black, strongly contrasting with the olive-brown crown; lores, a streak underneath the eye, and ear-coverts sooty black; chest and breast pure black with a large heartshaped, pure white spot towards the end of each feather, only the upper region of the chest the white spots are wanting on some feathers, while they are smaller and more drop-shaped on the others. Bill black, lower mandible white, blackish at the tip, feet dark brown. Wing 8 cm., tail (incomplete) 9,8, outermost pair 8, tarsus 2,4, culmen 1.5.

This form might be considered to be a very old stage of R. threnothorax, in which the whole lower surface had become entirely black, but the black tip to the lower mandible shows that the bird cannot be very old, moreover the species threnothorax is not known as yet to live on the Aru Islands. In the British Museum I had the opportunity of seeing a specimen from Aru, which is somewhat paler brown on breast and abdomen than our typical specimen, and I think not to be wrong when considering the lower surface in the immature stages to be darker than in R. threnothorax, and more approaching the young of R. maculipectus.

# 51. Rhipidura maculipectus G. R. Gray.

Rhipidura maculipectus G. R. Gray, P. Z. S. 1858, p. 176; Sharpe, Cat. B. Br. Mus. IV, p. 326; Salvad. Orn. Pap. II, p. 56 (1881).

Rhipidura saturata Salvad. Ann. Mus. Civ. Genova, XIV, p. 497 (1879); Orn. Pap. II, p. 58 (1881).

Four specimens (males and females) from Aru (von Rosenberg, 1865), a male from Haruko, a small island east from Amboina (Hoedt, 1863), one specimen from Mysol (von Rosenberg, 1866), two specimens from Salwati (Bernstein, 1863), a young female, the type of *R. saturata* Salvad, from Salwati (Bernstein, 1863) and two males from Sorong, New Guinea (Bernstein, 1864).

In accordance with Dr. Sharpe I consider the female specimen in our Museum, described as R. saturata by Count Salvadori, to be the immature stage of R. maculinectus. a stage showing very much analogy with that of R. threnothorax, described as R. fumosa by Schlegel. This analogy consists especially in the uniform color of the plumage, the shortness of the wing (7,2 cm. instead of 8,2), the black tip to the lower mandible and the nearly unspotted chest, while the white-tipped tail, the black throat and the sooty brown general color at once indicate its belonging to R. maculipectus. R. fumosa and R. saturata once admitted as the young stages of R, threnothorax and R. maculipectus, the idea must entirely be abandoned that the form I described above under the name of R. rosenbergi. after all might turn out to be some immature stage of R. maculipectus.

# 52. Rhipidura tenebrosa Ramsay.

Rhipidura tenebrosa Ramsay, Proc. Linn. Soc. N. S. Wales, VI, p. 835 (1881); Salvad. Orn. Pap. III, p. 535.

Hab. Solomon Islands.

# 53. Rhipidura leucothorax Salvadori.

Rhipidura episcopalis Salvad. Ann. Mus. Civ. Genova, VI, p. 311 (1874); Sharpe, Birds of New Guinea, Vol. II, pl. 26. Rhipidura episcopalis Ramsay, Proc. Linn. Soc. N. S. Wales, II, pp. 371 and 377 (1878).

Four specimens from Sorong and Andai, N. W. New Guinea.

This species has, as a rule, the chin black like the throat, but one of our specimens, as well as the only specimen of this species in the British Museum has the chin white.

### 54. Rhipidura euryura S. Müller.

Leucocerca euryura Salvad. Ucc. di Borneo, p. 136 (1874). Neomyias euryura Sharpe, Cat. B. Br. Mus. IV, p. 342 (1879).

Three typical specimens from Java (Müller and Boie); a fourth specimen from Java and another from Sumatra, in which latter island this species was not known to be found as yet.

This species is easily known by its nearly uniform bluish gray color, having only the eyebrow, abdomen, under tail-coverts and a very small tip to the outermost tail-feather white.

### 55. Rhipidura perlata S. Müller.

Male and female (types), collected by S. Müller in Sumatra, and three specimens from Borneo.

These specimens, though all apparently adult, differ very much in size, the wing of the smallest specimen from Borneo being 7,9 cm., the largest 8,6, which is also the size of the typical specimens from Sumatra.

Whole upper surface bluish gray, chin, throat, chest and flanks sooty black, breast, abdomen and under tail-coverts white, the throat provided with narrow white shaft-streaks and the chest with large drop-like spots of the same color. Tail black, the three outer pairs of feathers very broadly tipped with white.

# 56. Rhipidura tenkatei Büttikofer.

The typical specimen from the island of Rotti (see N. L. M. 1892, p. 205). This species differs from *R. buruensis* by the large white tips to the two outermost pairs of tail-feathers.

### 57. Rhipidura buruensis Wallace.

Seven specimens, collected by Hoedt and Teysmann on the island of Bouru. This species is easily known by its ochraceous abdomen and under tail-coverts and the dirty white outer webs of the outermost pair of tail-feathers, while the rest of the tail is uniform sooty brown.

### 58. Rhipidura cinerea Wallace.

Hab. Ceram.

This species is distinguished by its uniform sooty black tail.

#### 59. Rhipidura lenzi Blasius.

Rhipidura lenzi Blas. J. f. O. 1883, p. 145 (Celebes); Meyer, Isis, I, p. 26 (1884); Forbes, P. Z. S. 1884, p. 431 (Amboyna); Salvad. Aggiunte alla Orn. Pap. pt. II, p. 77 (1890).

Two males from Ceram (?) with the manuscript name of R. forsteni Temm. 1), and a female from Amboyna, collected by Hoedt in 1866.

All three specimens agree in their coloration with the description as given by Dr. Blasius, only would it be better to choose, for the general color, the expression saturate cinerea instead of cinereo-nigra. Dr. Blasius' bird is also a little larger than the three specimens in our Museum, but the individual difference in size in this group being rather considerable, this larger size is of hardly any specific value.

Type specimen, said to be from

North Celebes . . . . . . wing 9,3 cm. tail 9,0 cm. Specimens said to be from Ceram > 8,9 > > 8,4 > Specimen from Amboyna . . . > 8,6 > > 8,2 >

Another specimen from Amboyna, collected by H. O. Forbes and now in the British Museum, is of the same size, the wing measuring 8,5, the tail 8,2 cm.

<sup>1)</sup> Salvadori, Orn. Pap. II, p. 64, erroneously identified R. forsteni with R. cinerea Wall.

Dr. A. B. Meyer, in his above quoted paper, developes the reasons for which he does not believe in Celebes being the habitat of R. lenzi, and not having seen any specimens of this species himself, he utters some doubts as to its specific value, the more as it is closely allied to R. buruensis and R. cinerea. I fully share Dr. Meyer's doubts as to the localities and believe Amboyna to be the only well-ascertained habitat of this species. Whether our two Ceram birds, which were acquired more than fifty years ago, are really from Ceram or not, is hard to say, and therefore I should not lay too much weight upon this locality, which, moreover, is the habitat of the very closely allied species R. cinerea Wall. This latter species. the type and only known specimen of which I examined in the British Museum, has the whole tail plain sooty black (all the twelve tail-feathers are present), whereas R. lenzi differs from it in having the terminal half of the outer web of the outermost tail-feather white.

R. lenzi in the British Museum differs from the specimens in our Museum in having the tip of the inner web of the outermost tail-feather also white. Count Salvadori, l. c., leans to the opinion that R. lenzi might be identical with R. cinerea, out for the above mentioned reason, I hardly think that this opinion will turn out to be correct.

# 60. Rhipidura hoedti, n. sp.

An adult female from the Island of Lettie, Timor group of islands, collected by the Dutch Naturalist Hoedt, May 24th 1866.

Closely allied to R. tenkatei, from which it differs, however, by the longer white tips to the two outermost pairs of tail-feathers and the pure white throat. It stands also near R. isura, from Australia, but is so much darker that it cannot be confounded with this latter species.

Above dark gray, darker on the head and nearly black on the front, back faintly tinged with brown, upper tailcoverts and tail sooty brown, tip of the outermost pair

at the length of an inch pure white, the outer web white up to the distance of an inch from the base; next pair with a large white spot at the tip, edged on the outer web with the color of the basal part; third pair with a very narrow wedge-shaped spot on the outer web near the shaft. Wings brown, coverts and quills edged with olive-brown, greater and median coverts tipped with white. forming a double row of white, inner secondaries edged and tipped with white, as in R. setosa, under wing-coverts ashy fulvous, inner edge of quills vinous gray, sides of head blackish, a distinct spot above the eye silky white, chin and throat pure white, chest pale ashy gray, with well-defined, somewhat black edged, lanceolate spots of white, flanks uniform ashy gray, centre of breast dirty white, abdomen and vent very pale ochre, under tailcoverts pure white, thighs dark gray, spotted with white. Bill entirely black, feet sooty brown. Wing 8,4 cm., tail 8,7, outermost pair 7,7, tarsus 1,8, culmen 1,5.

### 61. Rhipidura vidua Salvadori.

Hab. Koffiauw.

### 62. Rhipidura setosa (Quoy & Gaim.).

A great series from the Waigiou Archipelago (Guebeh, Gagie, Waigiou, Salwati, Mysol), from New Guinea (Bay Lobo, types of *R. gularis* Müll.), Seleh, Sorong, Dorey, Andai, Warbusi, Doktur) and the Bay of Geelvink (Meosnoum and Jobie).

This species is characterized by its ashy gray upper surface with darker head, the sooty brown upper tail-coverts and by the black tail having the outermost pair and sometimes also the next one tipped with white, the white reaching up halfway to the base on the outer web of the outermost pair, further by the superciliary streak, whole chin and throat, centre of breast and under tail-coverts, being pure white; chest ashy gray, some of the feathers with white shaft-streaks, abdomen buffy white.

### 63. Rhipidura kordensis Meyer.

Rhipidura kordensis Meyer, Sitzb. k. Akad. Wien, LXX, p. 201 (1874).

Three specimens from Soëk, Geelvink Bay.

Closely allied to the large-billed R. setosa, from which it is distinguished by the black head and chest, and the white (instead of fulvous) breast, abdomen and under tail-coverts.

### 64. Rhipidura obiensis Salvadori.

Rhipidura obiensis Salvad. Orn. Pap. II, p. 59. Rhipidura sp. Bernst. Ned. Tijdschr. Dierk. II, p. 135 (1865).

Nine specimens from Obi major and one from Obi lattu (Obi Islands).

Closely allied to the white-bellied R. kordensis, but having the chest more ashy, and the secondaries broadly edged with white on the outer web. From R. finschi, with which it agrees as to these white edgings, it is distinguished by its white instead of fulvous breast, abdomen and under tail-coverts.

# 65. Rhipidura finschi Salvadori.

Rhipidura finschi Salvad. Orn. Pap. III, p. 532.

A male from New Britain, and another from Duke of York Island.

### 66. Rhipidura assimilis Gray.

Six specimens from the Key Islands, three from Matabello and one, erroneously as I think, said to be from Mysol (von Rosenberg).

This species is at once distinguished from the other species of the *setosa*-group by a well-defined white superciliary stripe, beginning at the nostrils and ending at some distance behind the eye, while the other species have only a patch of silky white above the eye.

### 67. Rhipidura isura Gould.

Rhipidura isura Gould, P. Z. S. 1840, p. 174. Rhipidura setosa (nec Quoy & Gaim.) Sharpe, Cat. Birds Br. Mus. IV, p. 329; (?) Salvad. Orn. Pap. II, p. 61.

An immature specimen from Australia, received from Gould, and an adult specimen from Port Essington, collected by Cockerell.

This species is undoubtedly fully entitled to specific rank, as it is easily distinguished from R. setosa by its dull earthy brown upper surface, by the white shaft-streaks on the much paler and narrower chest-band, and more especially by the greater extent of the white color on the tail-feathers. Amongst R. setosa the specimens with the greatest extent of white on the outermost tail-feathers (2 cm.) are those from the island of Guebeh, which birds have the white tips to the second pair much more strongly developed than those from any other locality. In the Australian specimens the white tip to the outermost pair is still longer, measuring 2,4 cm., and the white on the outer web is reaching nearer up to the base than in R. setosa. The white tip to the second pair is not longer than in our birds from Guebeh (1,5 cm.), but the third pair is, though very narrowly and in much worn tails not at all, tipped with white, a peculiarity already stated by Gould, whereas in none of our 30 specimens of R. setosa the slightest indication of such a tip can be found.

Our immature specimen represents a very interesting stage of plumage, having the upper surface earthy brown, the feathers of the back narrowly, the upper tail-coverts very broadly tipped with fulvous, wing-coverts and quills earthy brown, the median and greater coverts broadly tipped with buffy white, thus forming a double bar; tips to primary coverts as well as broad edges and tips to the secondaries dull white.

# 68. Rhipidura rufiventris (Vieill.).

Three specimens, the three types of R. ochrogastra Notes from the Leyden Museum, Vol. XV. Müll. & Schl., and two others, presented by von Rosenberg, all five specimens from Timor.

Upper surface gray, head black with a white patch above the eye, chin and throat white, feathers of the chest gray at the basal half, and so largely tipped with white that hardly any gray can be seen except on the sides of the chest on which the feathers are less tipped with white, breast, flanks, abdomen and under tail-coverts pale fulvous, tail black, outer web of first pair white nearly up to the base, inner web as well as the whole second pair tipped with white at more than an inch in length, the third pair with a narrow white tip near the shaft.

### 69. Rhipidura javanica (Sparrm.).

Eight specimens from Java, two from Sumatra, two from Banka, three from southern Borneo and a not fully adult specimen from »Indes orientales".

This is the only large-billed form with uniform gray chest, having the four outermost pairs of tail-feathers tipped with white. The immature female is much paler brown than the adult and has the wing-coverts broadly tipped with fulvous. The chest-band is very narrow and, even as the sides of the breast, earthy brown instead of gray.

70. Rhipidura pectoralis (Jerdon).

An adult male from the Indian Continent.

### 71. Rhipidura nigritorquis Vigors.

Five specimens from the Philippines and the Sulu Archipelago.

This large white-throated species is easily recognized by its very narrow black chest-band and having all but the innermost pair of tail-feathers broadly tipped with white.

72. Rhipidura auricularis De Vis.

Rhipidura auricularis De Vis, Ibis, 1891, p. 30.

Hab. Musgrave Range, S. E. New Guinea.

### 73. Rhipidura albifrontata Franklin.

Three specimens from the Indian Continent.

Distinguished from all its congeners by the very broad pure white front and superciliary stripes, leaving only a narrow space on the centre of the crown black; throat black, rest of under surface white. All but centre tailfeathers broadly tipped with white, outer web of outermost pair entirely white.

### 74. Rhipidura cockerelli Ramsay.

Rhipidura cockerelli Ramsay, P. L. S. New South Wales, VI, p. 181 (1881); Sharpe, Birds of New Guinea, Vol. II, pl. 28. Sauloprocta (?) cockerelli Salvadori, Orn. Pap. III, p. 531.

An adult male from Guadalcanar, Solomon Islands.

Upper surface, throat, chest and breast black, abdomen, under tail-coverts, numerous drop-shaped spots on the chest, a superciliary spot and the outer webs of inner secondaries pure white. Tail uniform black, nearly square.

75. Rhipidura melaleuca (Quoy & Gaim.).
Rhipidura tricolor (Vieill.) N. Dict. d'Hist. Nat. XXI, p. 490; Sharpe,
Cat. B. Br. Mus. IV, p. 339.
Sauloprocta melaleuca Salvad. Orn. Pap. II, p. 48.

A series of about sixty specimens from Morotai, Halmahera, Ternate, Tidore, Motir, Batchian, Obi, Bouru, Amboyna, Ceram, Goram, Poulo Padjang, Aru, Mysol, Guebeh, Waigiou, New Guinea, Meosnoum, Duke of York, Cape York.

This species being only black and white, I fully agree with Count Salvadori, who rejected the oldest name (tricolor) in favor of the second (melaleuca), but on the other hand I could not find sufficient reason to separate it generically from Rhipidura.

Two nestlings of this species differ from the adult in having the upper wing-coverts narrowly tipped with brown and the superciliary streak as well as vent and under tail-coverts washed with fulvous.

Leyden Museum, September 1892.