
*Studies of Birds from Eastern Brazil and Paraguay, Based on a
Collection Made by Emil Kaempfer*

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Article VI.—STUDIES OF BIRDS FROM EASTERN BRAZIL AND PARAGUAY, BASED ON A COLLECTION MADE BY EMIL KAEMPFER

BY ELSIE M. B. NAUMBURG

FORMICARIIDAE

This is the concluding part of a study of the Formicariidae of eastern Brazil and Paraguay, based on a collection of ten thousand birds of this and other families made by Emil Kaempfer.¹ I have undertaken a comprehensive study of the ant birds (Formicariidae) of this region and a great deal of preliminary taxonomic work has been necessary to determine the identity of the species and subspecies. Even so, additional information is still needed for the complete solution of many problems, and in some cases the inter-relationship of certain subspecies could not be finally determined.

I am greatly indebted to Dr. C. E. Hellmayr for a careful examination of some types and for valuable notes he has sent me from time to time about European material. I am also indebted to Mr. J. T. Zimmer for his coöperation at all times.

Dysithamnus stictothorax (Temminck)

Myothera strictothorax (typog. error²) TEMMINCK, 1823, Rec. Pl. col., livr. XXX, Jan., Pl. 179, figs. 1, 2 (= ♂, ♀) ("Brésil," the types in the Vienna Museum, examined by C. E. H., were obtained by Sellow in the State of Bahia).

Thamnophilus strictothorax WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1013 (Nazareth das Farinhas near Bahia).

Dasythamnus guttulatus BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 81 (descr. ♂, ♀; São Paulo, Bahia).

Dysithamnus guttulatus PELZELN, 1868, Orn. Bras., II, p. 79 (Bahia).—CABANIS, 1874, Journ. Ornith., p. 86, Rio Janeiro (Cantagallo).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 220 (descr. ♂, ♀; Bahia, se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 238, São Paulo (Iguapé); idem, 1907, Cat. Faun. Braz., I, p. 202, São Paulo (Alto da Serra, Ubatuba, Iguapé); Minas Geraës (Marianna).

Dysithamnus stictothorax HELLMAYR, 1915, Verhandl. Orn. Ges. Bay., XII, No. 2, Feb.,

p. 147, Espirito Santo (Braço do Sul, near Victoria); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 114, forest region of southeastern Brazil, from southern Bahia and eastern Minas Geraës to São Paulo (Alto da Serra, Ubatuba, Iguapé).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 464, São Paulo (Ubatuba, Iguapé, Alto da Serra, Icatú) Minas Geraës (Marianna).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Minas Geraës: Santa Barbara do Caparaó (alt. 3000 ft.), 2 ♂ ad., Sept. 26, Oct. 5, 1929. Santa Catharina: Salto Pirahy (near Joinville, alt. 450 ft.), 1 ♂ ad., May 27, 1929.

RANGE.—Forest region of southeastern Brazil, from southern Bahia (Nazareth das Farinhas) and eastern Minas Geraës (Marianna, Santa Barbara do Caparaó) through Espirito Santo (Braço do Sul, Victoria), Rio de Janeiro (Cantagallo, Therezopolis, Organ Mts.) and São Paulo (Alto da Serra, Ubatuba, Iguapé, São Sebastião, Icatú) to Santa Catharina (Salto Pirahy).

Measurements³

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Minas Geraës:				
Santa Barbara do Caparaó	♂ ad.	59.0	45.0	15.5
Santa Barbara do Caparaó	♂ ad.	60.5	44.5	15.0
Santa Catharina:				
Salto Pirahy	♂ ad.	59.0	47.0	15.0

Other Specimens Examined⁴

BRAZIL				
Rio de Janeiro:				
Therezopolis, Organ Mts.	1 ♂ ad.		1 ♀ ad.	
São Paulo:				
São Sebastião	3 ♂ ad.		3 ♀ ad.	Roths. ⁵ Coll.

¹ Previous papers in this series were published in the Bulletin of The American Museum of Natural History, Volume LXVIII, Art. 6, and Volume LXXIV, Art. 3.

² Corrected to *stictothorax* in the Index (Tableau méthodique), volume I, p. 18.

³ Measurements refer to birds in the Kaempfer Collection in the A. M. N. H., unless otherwise stated.

⁴ Unless otherwise stated, all specimens are in the A. M. N. H., and only a few of the large collections in the A. M. N. H. are listed.

⁵ Roths. = Rothschild Collection.

Six specimens in the Rothschild Collection from São Paulo, dating from 1901, are rather faded. Allowing for color changes, they agree with two skins (Kaempfer Collection) from Minas Geraës (Santa Barbara do Caparaó, alt. 3000 ft.) and with two skins from Rio de Janeiro (Therezopolis, Organ Mts., alt. 3200 ft.). A third specimen also in the Kaempfer Collection from Santa Catharina (Salto Pirahy), taken at a lower altitude (450 ft. instead of 3000–3200 ft.), has the head and ear-coverts a lighter slaty gray instead of blackish gray. Study of additional material from this region is imperative. The record signifies a notable southward extension of its range.

Dysithamnus mentalis mentalis
(Temminck)

Myiothera mentalis TEMMINCK, 1823, Rec. Pl. col., livr. XXX, Jan., Pl. 179, fig. 3 ("Brésil," the type, examined by E. M. B. N. in the Vienna Museum, was obtained by J. Natterer at Curytiba, Paraná).

Myiothera poliocephala WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1098 (se. Brazil; see Allen, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 250).

Dasythamnus mentalis BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 82 (se. Brazil).

Dysithamnus mentalis PELZELN, 1868, Orn. Bras., II, p. 79, Rio de Janeiro (Registo do Sai); Paraná (Curytiba); São Paulo (Rio Paraná).—REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben, p. 366, Minas Geraës (Lagoa Santa).—BERLEPSCH AND IHERING, 1885, Zeit. ges. Orn., II, p. 150, Rio Grande do Sul (Taquara); Santa Catharina (Laguna).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 221 (se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 239, São Paulo (Iguapé, Tieté); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo); idem, 1899–1900, Anuario Estado Rio Grande do Sul, XVI, p. 130 (Taquara do Mundo Novo); idem, 1907, Cat. Faun. Braz., I, p. 202, São Paulo (Ypiranga, Tieté, Itararé, Avandava, Barretos, Bebedouro, Itapurá, Baurá, Iguapé, Alto da Serra, Ubatuba).—SALVADORI, 1900, Boll. Mus. Zool. Torino, XV, No. 378, p. 18, Paraguay (Tebicuari).—OBERHOLSER, 1902, Proc. U. S. Nat. Mus., XXV, p. 128, Paraguay (Sapucay).—CHUBB, 1910, Ibis, p. 521, Paraguay (Sapucay).

Dysithamnus mentalis mentalis TODD, 1916, Bull. Amer. Mus. Nat. Hist., XXXV, p. 536 (monogr., synon.; se. Brazil, Paraguay).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 115 (part), Rio Grande do Sul, west to northern boundary of the State of São Paulo; northeast Argentina

(Misiones); southern Paraguay (Tebicuari, Sapucay).—SZTOLCMAN, 1926, Ann. Zool. Mus. Polon., V, No. 3, p. 147, Paraná (Cará Pintada, Vermelho, Candido de Abreu, Salto de Ubã).—HOZT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 295 (Serra do Itatiaya).—PINTO, 1932, Rev. Mus. Paul., XVII, p. 754, northwestern São Paulo (Valparaizo); idem, 1938, *op. cit.*, XXII, p. 465, São Paulo (Iguapé, Tieté, Alto do Ypiranga, Baurá, Itatiba, Itararé, São Jeronymo, Bebedouro, Itapura, Rio Grande, Ubatuba, Alto da Serra, Ituverava, Pilar, Ypiranga, Braunau, Vanuire, São Miguel Archanjo, Valparaizo, Mogy das Cruzes); Rio Grande do Sul (Nova Wurtemberg).

Thamnophilus [silvestrius] flavescens BERTONI, 1901, Av. Nuev. Paraguay, p. 136, Paraguay (Alto Paraná).

Dysithamnus mentalis leucobronchialis CORY, 1916, Field Mus. Nat. Hist. Publ., Orn. Ser., I, p. 337, Minas Geraës (Lagoa Santa).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Baixão (alt. 1300 ft.), 1 ♂ ad., 1 ♀, Sept. 21, 22, 1927, Boa Nova (alt. 800 meters),¹ 1 ♂ ad., June 3, 1928; Ituassú (alt. 3000 ft.), 1 ♂ ad., July 5, 1928, Minas Geraës: Rio do Caparaó (alt. 3000 ft.), 1 ["♂"] ad., 1 ["♀"] ad., July 26, Aug. 4, 1929; Resplendor (alt. 400 ft.), 1 ♂ ad., 1 ♀ ad., Jan. 9, 11, 1930; Santa Barbara do Caparaó (alt. 3000 ft.), 1 ♂ ad., Oct. 3, 1929. Espirito Santo: Baixo Guandú (alt. 400 ft.), 2 ♂ ad., 1 ♀ ad., Dec. 20, 26, 27, 1929; Segrado do Veado (Serra do Caparaó, alt. 3000 ft.), 3 ♂ ad., Oct. 9–10, 1929. Paraná: Corvo (Serra da Graciosa, alt. 2700 ft.), 2 ♂ ad., 1 ♀ ad., Feb. 7, 15, 1930; Foz do Iguaçu (alt. 3000 ft.), 7 ♂ ad., 3 ♀ ad., May 16, 19, 24, 1930; Guayra (Rio Paraná, alt. 600 ft.), 1 ♂ ad., 2 ♀ ad., April 16, 20, 24, 1930; Porto Almeida (Rio Iguaçu, alt. 2000 ft.), 1 ♂ ad., 1 ♀ ad., March 29, 1930; Porto Britania (Rio Paraná, alt. 400 ft.), 3 ♂ ad., 2 ♀ ad., May 6, 8, 1930; Tibagy (Fazenda Monte Alegre, alt. 3000 ft.), 6 ♂ ad., 4 ♀ ad., March 2–11, 1930. Santa Catharina: Cascalho (alt. 750 ft.), 1 ♀ ad., Feb. 3, 1929; Salto Pirahy (alt. 450 ft.), 3 ♂ ad., 1 ♀ ad., May 21, 27, June 1, 3, 1929; Ilha Redonda (alt. 500 ft.), 1 ♀ ad., Jan. 23, 1929. Rio Grande do Sul: Campo Bom (alt. 400 ft.), 1 ♂ ad., July 27, 1928; Conceição do Arroio (alt. 700 ft.), 1 ["♂"] ad., 1 ♀ ad., Aug. 18, 21, 1928; Erebangó (alt. 2500 ft.), 1 ♂ ad., April 4, 1929; Hamburgo Velho (alt. 400), 1 ♀ ad., July 31, 1928, Lagoa da Forno (near Torres, alt. sea level), 3 ♂ ad., 1 ♀ ad., Oct. 29, Nov. 1, 1928; Sananduva (alt. 2000 ft.), 6 ♂ ad., 3 ♀ ad., Jan. 2–11, 1929; Santa Cruz (alt. 300 ft.), 2 ♂ ad., Sept. 18, 21, 1928; Sapyranga (alt. 100 ft.), 2 ♂ ad., 2 ♀ ad.,

¹ See Naumburg, 1935, Bull. Amer. Mus. Nat. Hist., LXVIII, p. 457.

August 2, 3, 7, 1928. Southern Matto Grosso: Rio Amambay (alt. 650 ft.), 1 ♂ ad., June 27, 1928.

PARAGUAY.—Colonia Independencia, east of Villarica (alt. 800 ft.), 2 ♂ ad., Sept. 30, 1930, 2 ♂ ad., Oct. 1, 1930, 1 ♂ ad., 1 ♀ ad., Oct. 9–11, 1930; east of Caaguazú (alt. 1000 ft.), 2 ♂ ad., 1 ♀ ad., Nov. 14, 20, 29, 1930; east of Yhu (lumber camp, San Antonio, Jovaty, alt. 1000 ft.), 2 ♂ ad., 1 ♀ ad., Dec. 29, 1930, Jan. 5, 1931; upper Rio Iguassú (alt. 1000 ft.), 1 ♂ ad., 2 ♀ ad., Jan. 1, 7, 12, 1931.

RANGE.—Southeastern Brazil from Bahia (Baixão, Boa Nova) and southern Minas Geraës (Rio do Caparaó, Rio Doce, Resplendor, Santa Barbara do Caparaó, Rio das Velhas, Lagoa Santa, Rio Jordão, Bagagem) to Espirito Santo (Baixo Guandú, Segrado de Veado, Serra do Caparaó); Rio de Janeiro [Registro do Sai, Cantagallo, Therezopolis (Organ Mts.), Ponte Maromba (Serra do Itatiaia)] to São Paulo (Iguapé, Tieté, Alto do Ypiranga, Ypiranga, Baurú, Itatiba, Itararé, São Jeronymo, Bebedouro, Avanhanda, Barretos, Itapura Rio Grande, Ubatuba, Alto da Serra, Ituverava, Pilar, Braunau, Piquete, Vanuire, São Miguel Archanjo, Valparaizo, Mogy das Cruzes, São Sebastião, Victoria Fazenda Cajoá); Paraná (Corvo, Curityba, Foz do Iguassú, Guayra [Rio Paraná], Porto Almeida [Rio Iguassú], Porto Britania, Tibagy, Cará Pintada, Vermelho, Candido de Abreu, Salto de Ubã) and Santa Catharina (Cascalho, Ilha Redonda, Salto Pirahy, Laguna); to Rio Grande do Sul (Campo Bom, Conceição do Arroio, Erebang, Hamburgo Velho, Lagôa da Forno, Sananduva, Santa Cruz, Sapyranga, Taquara Nova Wurtemberg); to southern Matto Grosso (Rio Amambay) and Paraguay (Colonia Independencia [Villarica] east of Caaguazú, east of Yhu, San Antonio, Jovaty, upper Rio Iguassú, Sapucay, Tebicuari, Alto Paraná).

Other Specimens Examined

Dysithamnus mentalis mentalis

BRAZIL

Rio de Janeiro:

Therezopolis,

Organ Mts. 2 ♂ ad.

Ponte Maromba

(Serra do Itatiaia)

1 ♀ ad.

São Paulo:

Itararé 2 ♂ ad.

Piquete 3 ♂ ad. 1 ♀ ad. Roths. Coll.

S. Sebastião 4 ♂ ad. 1 ♀ ad. " "

Victoria 5 ♂ ad.

" 1 ♂ ad. Field Mus.

Fazenda Cajoá 4 ♂ ad.

Minas Geraës:

Rio das Velhas 1 ♂ ad. " "

Dysithamnus mentalis affinis

BRAZIL

Matto Grosso:

Chapada 2 ♂ ad. 3 ♀ ad. Roths. Coll.

" 6 ♂ ad. 2 ♀

Goyaz:

Rio São Miguel 1 ♀ ad. Field Mus.

Fazenda Esperanza

1 ♂ ad. Roths. Coll.

Fazenda Esperanza

1 ♀ ad. " "

Dysithamnus mentalis cumbreanus

VENEZUELA

Guacharo 1 ♂ ad.

El Liman (Valley

of Puerto La

Cruz) 1 ♀ ad.

Inland of Pto.

Cabello, San

Esteban Valley 1 ♂ ad. 1 ♀ ad. Roths. Coll.

Quebrada Secca,

St. of Sucre

1 ♀ ad. " "

Rincon of San An-

tonio, St. of

Sucre

1 ♀ ad. " "

Los dos Rios, St.

of Sucre

1 ♀ ad. " "

In spite of considerable individual variations in this wide-ranging subspecies throughout southeastern Brazil, it is impossible to consider these differences as subspecific. In Paraná, Santa Catharina and Paraguay the birds all show a very strong and clear ochraceous yellow on the breast, with the throat definitely showing a contrast to the breast.

Birds from Bahia average slightly paler on the breast, but individual birds from Paraná, Santa Catharina and Paraguay are identical in many cases with Bahia skins. The female from Bahia (Baixão) is more brownish olive instead of greenish olive above and has brownish olive instead of russet edges to the wings while underneath, the breast, abdomen and under tail-coverts are paler yellow. In many cases these differences appear to have a

seasonal character. In some respects the female from Bahia appears near to *Dysithamnus mentalis emiliae* from Pernambuco and the Pará district, though the males of *D. m. mentalis* differ greatly from *D. m. emiliae*, which has the throat, foreneck and chest white partly clouded with gray, with only the middle of abdomen pale yellow. In the color of the back and outer webs of remiges, in the duller grayish-olive throat as well as in the white chest partly clouded with gray, Bahia skins agree with *D. m. emiliae* though the abdomen in the skins from Bahia is much more strongly suffused with yellow. Thus, the Bahia birds, while taking on some of the characters of the northern subspecies from the Pará district and Pernambuco (*D. m. emiliae*), do not differ sufficiently from skins from Minas Gerais, São Paulo and Rio de Janeiro to warrant a new name. I fail to see any subspecific differences in the crown of the southeastern Brazilian birds which, though showing individual variation, ranges from plumbeous to blackish slate.

In the paler yellow color of the under parts, the skins from Bahia agree with the series of *D. m. cumbreanus* from Venezuela but differ in almost all other characters. The female of *D. m. mentalis* from Bahia is grayish olive (less brownish) in the color of the back, has brownish olive instead of russet edges to the wings, and has grayish olive, not buffy brown, auriculars as in *D. m. cumbreanus*.

The male from the Rio Amambay, which is in every respect a typical *Dysithamnus mentalis*, is a new record for this form, never before taken in Matto Grosso.

According to Pinto,¹ males of *Dysithamnus m. affinis* from Sant' Anna do Parnahyba, Matto Grosso (nw. of Baurú), form the passage to *Dysithamnus mentalis mentalis*² by having the crissum more strongly tinged with yellow.

Dysithamnus mentalis emiliae Hellmayr

Dysithamnus mentalis emiliae HELLMAYR, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 92, Pará district, ne.

¹ Pinto, 1932, Rev. Mus. Paul., XVII (2), p. 754.

² Taken by Pinto at nw. São Paulo (Valparaízo).

Brazil [San Antonio do Prata (type), Flor do Prado (Quati-puru), Rio Capim].—SNETHLAGE, 1914, Bol. Mus. Goeldi, VIII, p. 275 [Peixe-Boi, Quati-purú; Rio Guamá (Santa Maria do S. Miguel)]; Rio Tocantins (Mazagão, Baião).—HELLMAYR, 1920, Arch. Naturg., LXXXV, A, Heft 10, p. 88 (crit.); idem, 1924, Field Mus. Nat. Hist. publ., Zool. Ser., XIII, part 3, p. 115, northeastern Brazil (in states of Maranhão and Pará, west to the Tocantins); idem, 1929, *op. cit.*, XII, p. 370, Maranhão (Tury-assú, Victoria, Rio Grajahú).

Dysithamnus affinis emiliae TODD, 1916, Bull. Amer. Mus. Nat. Hist., XXXV, p. 555 (descr. ♂, ♀; Baião, Rio Tocantins).

Dysithamnus mentalis (errore) GOELDI, 1903, Ibis, p. 499 (Capim River).

Dysithamnus mentalis mentalis (errore) HELLMAYR, 1906, Nov. Zool., XIII, p. 367, Pará district (Santo Antonio do Prata).

Dysithamnus mentalis SNETHLAGE, 1926, Bol. Mus. Nac. Rio de Janeiro, II, No. 6, p. 45, Ceará.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Pernambuco: Palmares (alt. 600 ft.), 2 ♂ ad., 3 ♀ ad., March 4, 1927.

RANGE.—From the Tocantins (Mazagão, Baião) through the State of Pará (Santo Antonio do Prata, Flor do Prato [Quati-purú], Rio Capim); Rio Guamá (Santa Maria do S. Miguel); and Maranhão [Tury-assú, Victoria (Queimadas), Rio Grajahú]; to Ceará and eastern Pernambuco (Palmares).

Measurements

	SEX	WING	TAIL	EXP. CULMEN
BRAZIL				
Pernambuco:				
Palmares	♂ ad.	60.0	37	3
"	♂ ad.	59.0	36	14.0
"	♀ ad.	59.5	36	15.0
"	♀ ad.	60.5	39	13.0
"	♀ ad.	59.0	36	13.5

Other Specimens Examined

BRAZIL				
Rio Tocantins:				
Baião	1 ♂ ad.	1 ♀ ad.		
Maranhão:				
Tury-assú	1 ♂ ad.	1 ♂ im.		Field Mus.
Victoria (Queimadas), Rio Grajahú	1 ♀ ad.			Field Mus.

³ Culmen broken.

The males from Pernambuco differ from typical *Dysithamnus mentalis mentalis* from Paraná by having the back and outer remiges duller, grayish olive; throat, foreneck and chest white, partly clouded with gray, only the middle of the abdomen being pale yellow instead of ochraceous yellow; the under wing-coverts and quill lining nearly pure white instead of yellow. I cannot see any difference in the crown of the head¹ which is plumbeous in *Dysithamnus mentalis emiliae* as well as in *Dysithamnus mentalis mentalis* nor in the dark color of the sides of the head and in the whitish loreal spot, which are similar in both subspecies.

The Pernambuco record signifies a notable extension of range and these specimens agree in every particular with the couple from the Rio Tocantins.

Dysithamnus xanthopterus (Burmeister)

Dysithamnus xanthopterus BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 81, Rio de Janeiro (Novo Friburgo); descr. ♀.

Dysithamnus xanthopterus SCLATER, 1857, P. Z. S. London, XXV, p. 132 (descr. ♂, ♀; se. Brazil); idem, 1858, *op. cit.*, p. 222 (same); idem, 1890, Cat. B. Brit. Mus., XV, p. 223 (se. Brazil).—IHERING, 1900, Rev. Mus. Paul., IV, p. 158, Rio de Janeiro (Novo Friburgo); idem, 1902, *op. cit.*, p. 275, São Paulo (Alto da Serra); idem, 1907, Cat. Faun. Braz., I, p. 203 (same locality).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 124, southeastern Brazil [in states of Rio de Janeiro (Novo Friburgo) and São Paulo (Alto da Serra)].—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 295 (Serra do Itatiaya, alt. 5200-6100 ft.).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 466, Rio de Janeiro (Nova Friburgo); São Paulo (Alto da Serra).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Corvo (Serra da Graciosa, alt. 2700 ft.), 1 ♂ ad., 2 ♀ ad., 2 juv., Feb. 10, 15, 18, 1930.

RANGE.—Southeastern Brazil in states of Rio de Janeiro (Nova Friburgo, Serra do Itatiaya), São Paulo (Alto da Serra) and Paraná (Corvo).

Measurements

BRAZIL Paraná: Corvo	SEX	WING	TAIL	EXP.
				CUL- MEN
	1 ♂ ad.	62.5	54.0	14
	1 ♀ ad.	61.0	56.0	14
	1 ♀ ad.	60.5	54.5	14
	["♂"] juv.	64.0	55.0	14
	["♂"] juv.	64.0	56.0	14

Other Specimens Examined

BRAZIL Rio de Janeiro:			
Nova Friburgo	1 ♂ ad.	Roths.	Coll.
" "	1 ♀ ad.	"	"

This very rare species² is very different from *Dysithamnus stictothorax* and *Dysithamnus mentalis*. It is quite different in coloration, the male having the head, neck and upper back slaty gray. The sides of head and front have white spots. Lower back and outer edges of remiges and wing-coverts are bright rufous, nearly chestnut; the tail is brownish with rufous edges. Lower parts are pale slaty color, whitish on the throat and breast, while the flanks and lower belly are olivaceous.

The female has a cap rufous like the back and is entirely pale olivaceous below.

The Corvo (Paraná) record extends the known range considerably to the south.

Dysithamnus plumbeus plumbeus Wied

Myiothera plumbea WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1080 (se. Brazil, no locality specified; descr. ♂).³

Dysithamnus plumbeus plumbeus IHERING, 1907, Cat. Faun. Braz., I, p. 203 [part; Bahia, Espirito Santo (Porto Cachoeiro)].

Dysithamnus plumbeus plumbeus HELLMAYR, 1915, Verhandl. Orn. Ges. Bay., XII, No. 2, p. 146, Espirito Santo (Porto Cachoeiro), descr. ♀; Bahia; Rio de Janeiro; idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser. XIII, part 3, p. 127, wooded region of southeastern Brazil (Bahia to Espirito Santo and Rio de Janeiro).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 467, Espirito Santo (Porto Cachoeiro); Minas Gerais (Rio Matipó).

² Only 2 specimens in the A. M. N. H.

³ Pinto, 1938, Rev. Mus. Paul., XXII, p. 467, suggests Espirito Santo as type locality.

¹ 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 115.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Cajazeiras¹ (alt. 1000 ft.), 1 ♂ ad., June 20, 1928. Minas Geraës: São Benedicto² (alt. 110 meters), 1 ♂ ad., Jan. 17, 1930. Espirito Santo: Baixo Guandú [Rio Guandú (alt. 400 ft.)], 3 ♂ ad., 1 ♀ ad., Dec. 21, 23, 28, 1929; Lagôa Juparanã (alt. 400 ft.), 1 ♂ ad., Nov. 30, 1929.

RANGE.—Forest region of southeastern Brazil, from southern Bahia (Cajazeiras, Rio Grungogy) to eastern Minas Geraës (São Benedicto, Rio Manhuassú, Rio Matipó) and Espirito Santo (Baixo Guandú, Lagôa Juparanã, Porto Cachoeiro).

Measurements

BRAZIL	SEX	WING	TAIL	EXP. CUL-MEN	
Bahia:					
Cajazeiras	♂ ad.	68.5	44.0	16.0	
Minas Geraës:					
São Benedicto	♂ ad.	72.5	44.0	16.0	
Espirito Santo:					
Baixo Guandú	♂ ad.	68.5	43.0	18.0	
" "	♀ ad.	75.5	48.5	16.5	
" "	♂ ad.	71.5	44.5	18.5	
" "	♂ ad.	71.5	44.5	17.5	
Lagôa Juparanã	♂ ad.	70.0	45.5	16.0	

Other Specimens Examined

BRAZIL.—Type³ ♂ ad.

As the American Museum has only Wied's type (1 ♂ ad.) of *Dysithamnus plumbeus plumbeus* it was a fortunate occurrence that Mr. Kaempfer was able to collect six adult males of this exceedingly rare form and one female (No. 317562).⁴

Hartert, 1892 (Kat. Vogels. Senckenb. Mus. Frankfurt, p. 111, footnote 201), has shortly characterized the female and Hellmayr, 1915 (Verh. Orn. Ges. Bay., XII, p. 146), has given a fuller description of a specimen from Porto Cachoeiro, Espirito Santo, in the Museu Paulista.

Pinto, 1938 (Rev. Mus. Paul., XXII,

p. 467), has recently recorded this species from Minas Geraës (Rio Matipó) and suggests Espirito Santo as type locality. In the British Museum there are two males from Rio, and if Kaempfer had not collected one male from Bahia (Cajazeiras) I would rather doubt that *D. plumbeus plumbeus* ranges as far north as Bahia. The specimens in the Frankfurt Museum were, according to Dr. Hellmayr, probably secured by Freyreiss and may have come from Espirito Santo.

The only certain localities are: Bahia (Cajazeiras); Minas Geraës (São Benedicto, Rio Matipó); Espirito Santo (Porto Cachoeiro, Baixo Guandú [Rio Guandú], Lagôa Juparanã).

The "Rio" skins probably did not come from the immediate vicinity of the Brazilian capital, according to Dr. Hellmayr.

This is the first specimen of the female sex that I have seen. The upper parts are a dull brownish-olive color. Sides of the head grayish olive, streaked with white. Throat dull grayish white; rest of under parts brownish mixed with gray, paler gray in the middle, some feathers edged with buffy brown. Flanks deeper buffy brown. Crissum rufescent. Lesser upper wing-coverts with very distinct pure white, the remaining upper wing-coverts with narrow, dull white apical margins.

Thamnomanes caesius caesius (Temminck)

Muscicapa caesia TEMMINCK, 1820, Rec. Pl. col., livr. III, Pl. xvii, fig. 1 (♂), 2 (♀) (based on specimens obtained by Prince Wied-Neuwied in e. Brazil, viz. Prov. Bahia; see Allen, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 250).—WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 826, Espirito Santo (Iritiba River, Villa Nova de Benevente) and Sertão of Bahia.

Lanius caesius LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 46 (descr. ♂, ♀; hab. part; Brazil).

Thamnomanes caesius SCLATER, 1858, P. Z. S. London, XXVI, p. 223 (part; se. Brazil; descr. ♂, ♀).—PELZELN, 1868, Orn. Bras., II, p. 80 (part; spec. collected by Kammerlacher [in Prov. Bahia]).—ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 250 (type in Amer. Mus., from Prov. Bahia).—HERING, 1907, Cat. Faun. Braz., I, p. 204 [part; Rio de Janeiro (Macahé); Espirito Santo (Rio Doce)].—PINTO, 1935, Rev. Mus. Paul., XIX, p. 174, Bahia (Serra do

¹ On the Rio Grungogy = Rio Gongogy of authors.

² On the Rio Manhuassú.

³ Allen, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 250 (type, No. 5323).

⁴ For description of female see Hellmayr, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 127. The only females seen by Dr. Hellmayr were one from Bahia, at the Senck. Natur. Wiss. Ges. Frankfurt, Germany, and one from Espirito Santo (Porto Cachoeira) in the Museu Paulista. The above female is the third specimen of that sex he has seen.

Palhão between the Rio das Contas and Rio Grungogy, Cachoeira Grande do Rio Jucuruçú, Ilhéos).

Thamnomanes caesius caesius HELLMAYR, 1906, Nov. Zool., XIII, p. 368 (part; Bahia; Espirito Santo); idem, 1907, *op. cit.*, XIV, p. 64 [diagn.; Bahia; Espirito Santo (Rio Iritiba, Villa Nova de Benevente)]; idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 129, wooded region of southeastern Brazil [from Bahia to Espirito Santo and Rio de Janeiro (Macahé)].—PINTO, 1938, Rev. Mus. Paul., XXII, p. 468, Bahia (Ilhéus, Rio Grungogy, Rio Jucuruçú); Espirito Santo (Porto Cachoeiro); Minas Geraës (Rio Matipó).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Cajazeiras on the Grungogy River (alt. 1000 ft.), 4 ♂ ad., 3 ♀ ad., June 11, 14, 20, 22, 24, 1928; Jequié (alt. 180 meters) on the Rio das Contas, 1 ♀ ad., Sept. 14, 1927. Minas Geraës: Resplendor (Rio Doce, north shore, alt. 400 ft.), 2 ♂ ad., Jan. 11, 12, 1930; São Benedicto, on the Rio Manhuassú, alt. 600 ft., 1 ♂ ad., 1 ♀ ad., Jan. 17, 20, 1930. Espirito Santo: Baixo Guandú (Rio Guandú, alt. 400 ft.), 6 ♂ ad., 4 ♀ ad., December 7, 20, 21, 23–27, 1929; Lagôa Juparanã (alt. 400 ft.), 6 ♂ ad., 1 ♀ ad., Oct. 30, Nov. 2, 3, 6, 24, 29, Dec. 3, 1929.

RANGE.—Southeastern Brazil from Bahia (Cajazeiras on the Rio Grungogy, Jequié on the Rio das Contas, Serra do Palhão, between the Rio das Contas and Rio Grungogy, Cachoeira Grande do Rio Jucuruçú, Ilhéos, Sertão of Bahia) to Minas Geraës (Resplendor, Rio Doce, São Benedicto on the Rio Manhuassú, Rio Matipó), Espirito Santo (Baixo Guandú, Rio Guandú, Lagôa Juparanã, Rio Iritiba, Villa Nova de Benevente, Porto Cachoeiro) and Rio de Janeiro (Macahé).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Bahia:				
Cajazeiras	4 ♂ ad.	70.1	65.5	16.0
"	♀ ad.	66.0	61.5	14.0
"	♀ ad.	70.0	64.0	14.5
"	♀ ad.	65.5	61.0	15.0
Jequié	♀ ad.	67.5	60.0	15.0
Espirito Santo:				
Baixo Guandú	6 ♂ ad.	70.7	62.4	16.4
"	♀ ad.	70.0	69.0	15.5
"	♀ ad.	68.5	65.0	15.5
"	♀ ad.	70.0	65.0	16.5

Thamnomanes caesius hoffmannsi
Hellmayr

Thamnomanes caesius hoffmannsi HELLMAYR, 1906, Bull. B. O. C., XVI, p. 53, east of Pará (Santo Antonio do Prata); idem, 1906, *op. cit.*, XIII, p. 367 (Santo Antonio); idem, 1907, Nov. Zool., XIV, p. 65 (diagn.; Pará district); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 44 (Peixe-Boi, Ipitanga), p. 92 (Pará, Igarapé-Assú, Santo Antonio, Peixe-Boi, Guamá, Capim); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 129, northeastern Brazil (Pará district ranging westward to the right bank of the Rio Xingú and adjoining parts of Maranhão).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 284 (Pará, Santo Antonio, Rio Capim, Rio Guamá); idem, 1908, Journ. Ornith., LVI, p. 531, Rio Tocantins (Arumatheua); idem, 1914, Bol. Mus. Goeldi, VIII, p. 278 (Pará, Mocajatubá, Providencia, Ananindeua,¹ Apehú, Santa Isabel, Peixe-Boi, Santo Antonio do Prata); Rio Guamá (Santa Maria do São Miguel); Rio Capim (Resacca); Rio Tocantins (Arumatheua, Cametá, Baião).—IHERING, 1907, Cat. Faun. Braz., I, p. 204, Pará (Igarapé-Assú).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 463, Pará (Rio Xingú, Rio Tocantins, Rio Guamá); Maranhão (Tury-assú).

Thamnomanes hoffmannsi SNETHLAGE, 1913, Journ. Ornith., LXI, p. 509 (right bank of the Rio Xingú).

Thamnomanes caesius (not of Temminck) HELLMAYR, 1905, Nov. Zool., XII, p. 285 (Igarapé-Assú; descr. ♀).

Thamnomanes glaucus (not of Cabanis) SNETHLAGE, 1907, Journ. Ornith., LV, p. 284 (two ♀ from Pará and Rio Guamá in Goeldi Museum).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: Santa Filomena (Rosario, alt. 13 meters), 1 ♀ ad., March 29, 1926.

RANGE.—Northeastern Brazil, Pará district (Utinga, Igarapé-Assú, Santo Antonio do Prata, Peixe-Boi, Rio Guamá, Rio Capim, Mocajatuba, Providencia, Ananindeua, Apehú, Santa Isabel, Ipitanga); Rio Tocantins (Arumatheua, Cametá, Baião); Rio Xingú (right bank) and adjoining parts of Maranhão [Tury-assú, Santa Filomena (Rosario)].

Other Specimens Examined

BRAZIL

Pará:

Utinga

♂ ad.

Igarapé-Assú

♂ ad.

Roths. Coll.

¹ Also written Ananindeuba; see Hellmayr, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 129.

Prata	♂ ad.	Roths. Coll.
"	(type)	" "
Igarapé-Assú	♂ ad.	" "
Peixe-Boi	♀ ad.	" "
Rio Tocantins (Baião)	♀ ad.	" "
Utinga (Belem do Pará)	♂ ad.	Field Mus.
Maranhão (Tury-assú)	♂ ad.	" "
" " " 3	♀ ad.	" "

One female collected by Mr. Kaempfer in Maranhão agrees with four others from Tury-assú (Maranhão) sent to me by the Field Museum. It is also exactly like the females of *Thamnomanes c. caesius* from Espírito Santo, Minas Geraës, and Bahia in the Kaempfer Collections, having a large, partly concealed white interscapular blotch.

The males agree with *T. c. caesius* in having no white interscapular blotch, but the general color below is much lighter, and clearer plumbeous. Axillaries, under wing-coverts and edge of wing are white as in *T. c. caesius*.

Specimens from the Pará region west to the east bank of the Rio Xingú are *Thamnomanes c. hoffmannsi*.

A much more careful study will have to be made of this subspecies before the problem of the various individuals and subspecies can be solved.¹

Myrmotherula hauxwelli hellmayri Snethlage

Myrmotherula hauxwelli hellmayri SNETHLAGE, 1906, Ornith. Monatsber., XIV, p. 9 (no locality given, the types evidently came from near Pará).—HELLMAYR, 1906, Nov. Zool., XIII, p. 369, Pará (Santo Antonio do Prata); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 45, Pará (Peixe-Boi); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 141, northeastern Brazil (in states of Maranhão (Tury-assú) and Pará (Utinga) west to the Tocantins); idem, 1929, *op. cit.*, XII, p. 370, Maranhão (Tury-assú, Alto de Algeria).

Myrmotherula hellmayri SNETHLAGE, 1907, Journ. Ornith., LV, p. 285, Pará (Santo Antonio); idem, 1914, Bol. Mus. Geoldi, VIII, p. 283 [Pará, Providencia, Ananindeua, Benevides, Santa Isabel, Peixe-Boi, Santo Antonio do Prata; Rio Guamá, Rio Capim (Resacca)]; Rio Tocantins (Mazagão, Cameté, Baião, Arumatheua).—PINTO, 1938, Rev. Mus. Paul.,

¹ Cf. Zimmer, 1932, Amer. Mus. Novit., No. 558, p. 16, on the intermediacy of birds from the right bank of the Rio Tapajós, between *persimilis* and *hoffmannsi*.

XXII, p. 471, part, Brazil, Rio Amazonas (Teffé, Rio Purús).

No specimens collected.

RANGE.—Northeastern Brazil, in states of Pará [Santo Antonio do Prata, Utinga, Igarapé, Peixe-Boi, Providencia, Ananindeua, Benevides, Santa Isabel, Rio Guamá, Rio Capim (Resacca)]; Rio Amazonas (Teffé, Rio Purús); Rio Tocantins (Mazagão, Cameté, Baião, Arumatheua); Maranhão (Tury-assú, Alto de Algeria).

Specimens Examined

BRAZIL

Pará:

Santo Antonio

do Prata 2 ♂ ad. 2 ♀ ad. Roths. Coll.

Utinga 1 ♂ ad. 1 ♀ ad. Collins-Day
Exp.

Igarapé-Assú 1 ♀ ad. Roths. Coll.

Maranhão:

Tury-assú (Alto

de Algeria) 2 ♂ ad. 1 ♀ ad. Field Mus.

Myrmotherula gularis (Spix)

Thamnophilus gularis SPIX, 1825, Av. Bras., II, p. 30, Pl. xli, fig. 2 (no locality given; type lost; see Hellmayr, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, p. 663. Hellmayr designates Rio de Janeiro as type locality).

Myiothera cinerea WIED, 1831, Beitr. Naturg. Bras., II, p. 1093 (se. Brazil, no locality specified; see Allen, 1889, Bull. Amer. Mus. Nat. Hist., I, p. 252).

Myrmothera gularis MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 476, Pl. II, fig. 2 (Rio de Janeiro et "Minas Geraës").

Rhopoterpe gularis BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 56, Rio de Janeiro (New Freiburg).

Myrmotherula gularis SCLATER, 1858, P. Z. S. London, XXVI, p. 235 (monogr.; se. Brazil).—PELZEELN, 1868, Orn. Bras., II, p. 81, Rio de Janeiro; São Paulo (Ypanema).—BERLEPSCH AND IHERING, 1885, Zeits. ges. Orn., II, p. 150, Rio Grande do Sul (Taquara).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 233 (monogr.; se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 239, São Paulo (Piquete, Iporanga); idem, 1899-1900, Anuario Est. Rio Grande do Sul, XVI, p. 130 (Mundo Novo); idem, 1907, Cat. Faun. Braz., I, p. 205, São Paulo (Alto da Serra Ubatuba, Iporanga, Ilha de São Sebastião, Paraná (Ourinho).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 141, southeastern Brazil, from Rio de Janeiro to Rio Grande do Sul.—SZTOLCZMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 148, Paraná (Rio Ivahy, Barra do Rio Bom, Porto

Mendes, Rio Paraná).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 472, São Paulo (Piquete, Iporanga, Alto da Serra, Ubatuba, Ilha São Sebastião, Estação do Rio Grande); Paraná (Jacarézinho).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Santa Catharina: Salto Pirahy (alt. 450 ft.), 4 ♂ ad., 3 ♀ ad., May 21–22–27, June 3–6, 1929.

RANGE.—Southeastern Brazil, from Minas Gerais to Rio de Janeiro (Nova Friburgo) and São Paulo (Alto da Serra, Ubatuba, Piquete, Iporanga, Ilha de São Sebastião, Estação do Rio Grande, Fazenda Cayoá, Salto Grande, Rio Parapanema, Ypanema) south to Paraná (Ourinho, Rio Ivahy, Barra do Rio Bom, Porto Mendes, Rio Paraná, Jacarézinho) to Santa Catharina (Salto Pirahy); Rio Grande do Sul (Mundo Novo, Taquara, Lago dos Patos).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Santa Catharina:				
Salto Pirahy	4 ♂	52.9	29.6	13

Other Specimens Collected

BRAZIL				
São Paulo:				
S. Sebastião	1 ♂ ad.			Roths. Coll.
" "	1 ♂ ad.			" "
Faz. Cayoá, Salto Grande, Rio Parapanema	1 ♂ ad.			" "

The female is similar to the male but the spots on the throat are much larger.

Myrmotherula erythronotos¹ (Hartlaub)

Formicivora erythronotos HARTLAUB, 1852, Rev. Mag. Zool., (2nd Ser.), IV, p. 4 (Brasilia; type in Hamburg Museum; = ♂).

Formicivora erythronota BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 75, Prov. Rio de Janeiro ("Neu Freiburg," Prov. Rio; descr. ♂ ad. and imm.).

Myrmotherula erythronota SCLATER, 1858, P. Z. S. London, XXVI, p. 236 (se. Brazil, Prov. Rio de Janeiro; descr. ♂, ♀); idem, 1890, Cat. B. Brit. Mus., XV, p. 237 (se. Brazil).—IHERING, 1907, Cat. Faun. Braz., I, p. 206, Prov. Rio de Janeiro (Novo Friburgo, Prov. Rio).

Myrmotherula erythronotos HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 147, southeastern Brazil (Prov. Rio de Janeiro).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 474, Rio de Janeiro (Nova Friburgo).

No specimens collected.

RANGE.—Southeastern Brazil, Prov. of Rio de Janeiro (Nova Friburgo).

Specimens Examined

BRAZIL
Rio de Janeiro 1 ♂ ad. Roths. Coll.

Myrmotherula axillaris luctuosa Pelzeln

Myrmotherula luctuosa PELZELN, 1868, Orn. Bras., II, pp. 82, 153 (part, descr. of ♂ only; types in Vienna Museum examined by E. M. B. N.; Bahia, e. Brazil).

Myiothera fuliginosa (not of Lichtenstein) WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1067 (se. Brazil; descr. ♂, ♀).

Myiothera axillaris (not of Vieillot) MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 478 (Rio de Janeiro; descr. ♂, ♀).

Formicivora axillaris (errore) BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 76 (Rio de Janeiro; descr. ♂).

Myrmotherula melanogastra (not of Spix) PELZELN, 1868, Orn. Bras., II, p. 81, Rio de Janeiro (Sapitiba).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 240, e. Brazil (Pernambuco, Bahia).—HARTERT, 1891, Kat. Samml. Mus. Senckenb. Ges. Frankfurt, p. 112 (Brazil; descr. ♀).

Myrmophila melanogastra CABANIS, 1874, Journ. Ornith., XXII, p. 86, Rio de Janeiro (Cantagallo).

Myrmotherula melanogaster (errore) IHERING, 1900, Rev. Mus. Paul., IV, p. 158, Prov. Rio de Janeiro (Cantagallo).

Myrmotherula axillaris luctuosa HELLMAYR, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, pp. 664, 665 (crit.; descr. ♂, ♀, e. Brazil, from Pernambuco to Rio de Janeiro).—IHERING, 1907, Cat. Faun. Braz., I, p. 206, Espirito Santo (Porto Cachoeiro, Páó Gigante²); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 148, eastern Brazil (Pernambuco, Bahia, Espirito Santo, Rio de Janeiro).—PINTO, 1935, Rev. Mus. Paul., XIX, p. 175, Bahia (Rio Gongogy and Rio de Contas, Rio Jucuruú, Braço do Sul, Cachoeira Grande, Caravellas, Ilhéus); idem, 1938, *op. cit.*, p. 475, Bahia (Caravellas, Ilhéus, Belmonte, Rio Jucuruú); Espirito Santo (Porto Cachoeiro, Pau Gigante).

Myrmopagis axillaris luctuosa LIMA, 1920, Rev. Mus. Paul., XII (2), p. 98, s. Bahia (Ilhéos-Belmonte).

¹ For description see 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 147.

² Equal also to Pau Gigante.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Cajazeiras on the Rio Grungogy, 5 ♂ ad., June 12, 14, 20, 25, 1928. Minas Geraës: Resplendor (Rio Doce, alt. 92 meters), 2 ♂ ad., 3 ♀ ad., Jan. 10, 12, 13, 1930; São Benedicto (Rio Manhuassú, alt. 110 meters), 1 ♀ ad., Jan. 20, 1930. Espírito Santo: Baixo Guandú (Rio Guandú, alt. 213 ft.), 1 ♂ ad., 1 ♀ ad., Dec. 26, 28, 1929; Lagôa Juparanã (alt. 400 ft.), 8 ♂ ad., 7 ♀ ad., Oct. 30, Nov. 1-28, 1929.

RANGE.—Eastern Brazil in states of Pernambuco, Bahia (Cajazeiras on the Rio Grungogy, Rio das Contas, Ilhéos-Belmonte, Caravellas, Braço do Sul, Cachoeira Grande, Rio Jucuruçú); Minas Geraës [Resplendor (Rio Doce), São Benedicto (Rio Manhuassú)]; Espírito Santo [Baixo Guandú (Rio Guandú), Lagôa Juparanã, Porto Cachoeiro, Pau Gigante]; and Rio de Janeiro (Canta-gallo).

Measurements

	SEX	WING	TAIL	EXP. CUL- MEN
BRAZIL				
Bahia:				
Cajazeiras	5 ♂ ad.	51.2	35.8	14.4
Espírito Santo:				
Lagôa Juparanã	8 ♂ ad.	52.0	37.5	14.3
" "	7 ♀ ad.	51.2	36.6	13.8

Other Specimens Examined

BRAZIL			
Espírito Santo	1 ♀ ad.		
Bahia (skin)	1 ♂ ad.	Roths.	Coll.
" "	1 ♂ ad.		

This is the first record from Minas Geraës.

Myrmotherula axillaris axillaris
(Vieillot)

Myrmothera axillaris VIEILLOT, 1817, Nouv. Dict. d'Hist. Nat., nouv. éd., XII, p. 113 ("La Guyane"—Cayenne).—D'ORBIGNY, 1838, Voyage Amer. mérid., Ois., p. 183, Bolivia (Yuracares).

Myiothera fuliginosa LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 45 (part; spec. ex. Cayenne).

Thamnophilus melanogaster SPIX, 1825, Av. Bras., II, p. 31, Pl. XLIII, fig. 1 (= ♂), north Brazil (Curupa = Gurupa, delta of the Amazon; see Hellmayr, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, p. 664).

Myrmotherula axillaris PELZELN, 1868, Orn. Bras., II, p. 82, Matto Grosso [Villa Maria (= San Luis de Cáceres), Engenho do Gama]; west Matto Grosso (S. Vicente); Borba, Rio Madeira.

Myrmotherula axillaris axillaris HELLMAYR, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, p. 665 (crit.; part, Guianas, Amazonia); idem, 1906, Nov. Zool., XIII, p. 368, Pará (S. Antonio do Prata); idem, 1907, op. cit., XIV, p. 22, Rio Tapajóz (Itaituba), p. 69 (Teffé), p. 383 (Humaythá, Borba, Rio Madeira); idem, 1910, op. cit., XVII, p. 349 (Maroins, Rio Machados); idem, 1912, op. cit., Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 46 (Peixe-Boi, Ipitanga), p. 92 (Pará localities); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 149, part, Trinidad; eastern Venezuela (Caura Valley); Guianas; northern Brazil (north bank of the Amazon); west as far as Rio Jamundá; south of the river from Maranhão west to eastern Peru (Yurimaguas, lower Huallaga; Ucayali), south to western Matto Grosso (Rio Guaporé); idem, 1929, op. cit., XII, p. 370, Maranhão (Tury-assú); Goyaz (Santo Antonio).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 474, Amazonas (Rio Jurúá, Rio Manacapurú, Silves); Pará (Obidos); Matto Grosso (Rio das Mortes).

No specimens collected.

RANGE.—Trinidad; eastern Venezuela, from the Guianan boundary south to northern Maranhão (Tury-assú), northern Goyaz (Santo Antonio), and Matto Grosso, west apparently to the Rio Negro and Rio Madeira.

Other Specimens Examined

BRAZIL			
Maranhão:			
Tury-assú	1 ♂ ad.	2 ♀ ad.	Field Mus.
Goyaz:			
Santo Antonio	1 ♀ ad.		" "

Birds from Bolivia and southeastern Peru have been shown by Zimmer (1932, Amer. Mus. Novit., No. 524, p. 9) to be separable as *Myrmotherula a. lafresnayana* D'Orbigny.

Myrmotherula minor Salvadori

Myrmotherula minor SALVADORI, 1864, Atti. Soc. Ital. Sci. Nat., VII, p. 157 (Brazil).—HELLMAYR, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, p. 665 (Crit.), p. 666 (Rio de Janeiro, São Paulo).—IHERING, 1907, Cat. Faun. Braz., I, p. 207, São Paulo (São Sebastião, Ubatuba).

Formicivora brevicauda (not of Swainson) SCLATER, 1857, P. Z. S. London, XXV, p. 131

(Brazil, descr. ♂, ♀; excl. hab. "Bahia" ex Swainson).

Myrmotherula brevicauda (errore) SCLATER, 1858, P. Z. S. London, XXVI, p. 237 (Rio de Janeiro; descr. ♂, ♀); idem, 1890, Cat. B. Brit. Mus., XV, p. 242, se. Brazil (= Rio de Janeiro, descr. ♂, ♀).—IHERING, 1900, Rev. Mus. Paul., IV, p. 158, Rio de Janeiro (Cantagallo); idem, 1905, *op. cit.*, VI, p. 354, São Paulo (São Sebastião).

Myrmophila brevicauda (errore) CABANIS, 1874, Journ. Ornith., p. 86, Prov. Rio de Janeiro (Cantagallo).

Myrmotherula melanogaster (not of Spix) IHERING, 1902, Rev. Mus. Paul., V, p. 275, São Paulo (São Sebastião).

Myrmotherula minor HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 157, coast region of southeastern Brazil [Rio de Janeiro, São Paulo (São Sebastião, Ubatuba, Alto da Serra)].—PINTO, 1938, Rev. Mus. Paul., XXII, p. 477, São Paulo (São Sebastião, Ubatuba).

No specimens collected.

RANGE.—Coastal region of southeastern Brazil in states of Rio de Janeiro (Cantagallo) and São Paulo (São Sebastião, Ubatuba, Alto da Serra).

Specimens Examined

BRAZIL.—São Paulo: Ubatuba, 2 ♂ ad., Roths. Coll.

Myrmotherula unicolor (Ménétrières)

Myrmotherula unicolor Ménétrières, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 480, Pl. II, fig. I (no definite locality; the type is from Rio de Janeiro; see Chrostowski, 1921, Ann. Zool. Mus. Polon. Hist. Nat., I, p. 22).

Formicivora unicolor BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 77 (descr. ♂ ex Ménétrières).

Myrmotherula unicolor PELZELN, 1868, Orn. Bras., II, Sept., p. 82, Rio de Janeiro (Registro do Sai).—BERLEPSCH AND LEVERKÜHN, 1890, Ornith., VI, p. 26, in text (Santa Catharina).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 243 (se. Brazil; descr. ♂).—IHERING, 1902, Rev. Mus. Paul., V, p. 276, São Paulo (Iguapé); idem, 1907, Cat. Faun. Braz., I, p. 208, São Paulo (Iguapé, Ubatuba).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 159, southeastern Brazil in states of Rio de Janeiro (Registro do Sai), São Paulo (Iguapé, Ubatuba) and Santa Catharina (Blumenau).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 477, São Paulo (Iguapé, São Sebastião, Ubatuba).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Santa Catharina: Salto Pirahy (near Joinville, alt. 450 ft.), 1 ♀ ad., 1 ♂ juv.

Rio Grande do Sul: Lagôa da Forno (near Torres, alt. 50 meters), 2 ♂ ad., 1 ♀ ad., Oct. 30, Nov. 1, 1928.

RANGE.—Southeastern Brazil in states of Rio de Janeiro (Registro do Sai), São Paulo (Iguapé, Ubatuba, São Sebastião), Santa Catharina (Salto Pirahy Blumenau), and Rio Grande do Sul (Lagôa da Forno, near Torres).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Santa Catharina:				
Salto Pirahy	1 ♀ ad.	44.0	34.5	11.0
" "	1 ♂ juv.	49.0	36.0	11.0
Rio Grande do Sul:				
Lagôa da Forno	1 ♂ ad.	50.5	38.5	11.0
" "	1 ♂ ad.	52.5	39.0	10.5
" "	1 ♀ ad.	48.0	36.0	11.5

Other Specimens Examined

BRAZIL

São Paulo:

Ubatuba 1 ♂ ad. 1 ♂ juv. 1 ♀ ad.
Roths. Coll.

The juvenal male is easily recognizable as it partially resembles the male and the female. It is brighter, more fulvous brown above than the female, with the pileum and hind neck more grayish as in the male and not olivaceous as in the female. The throat is paler gray than that of the male, with a faint indication of a black gular patch and without any dusky vermiculations as in the adult female. The breast is also pale gray, the flanks and under tail-coverts are paler fulvous than those of the female, washed with gray instead of olivaceous.

Rio Grande do Sul signifies some extension of range to the south.

Myrmotherula urosticta (Sclater)

(?) *Formicivora brevicauda* SWAINSON, 1825, Zool. Journ., II, No. 6, July, p. 148, Bahia (Humildez; descr. ♂; type lost, formerly in Coll. W. Swainson).

Myrmotherula urosticta SCLATER, 1858, P. Z. S. London, XXVI, p. 238 (Brazil; descr. ♂); idem, 1890, Cat. B. Brit. Mus., XV, p. 242 (Bahia; descr. ♂).—HARTERT, 1891, Kat. Samml. Mus. Senckenb. Ges., p. 111, note 202 (Brazil = Bahia).—HELLMAYR, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, pp. 664,

666 (Bahia; descr. ♂, ♀); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 160, southeastern Brazil in states of Bahia and Espirito Santo.—IHERING, 1907, Cat. Faun. Braz., I, p. 207, Espirito Santo (Páó Gigante).—LIMA, 1921, Rev. Mus. Paul., XII, (2), p. 99, Ilhéos (Fazenda Pontal), Itabuna (Fazenda Ditosa), Belmonte (Fazenda Santiago).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 477, Bahia (Ilhéos, Itabuna); Espirito Santo (Pau Gigante).

Myiothera fuliginosa LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 45, No. 483 (part; Brazil).

Myrmotherula luctuosa (nec Pelzeln) PELZELN, 1868, Orn. Bras., II, Sept., pp. 82, 153 (part; ♀, Bahia).

SPECIMENS COLLECTED
(Kaempfer Collection)

BRAZIL.—Bahia: Cajazeiras, on the Rio Grungogy (alt. 1000 ft.), 2 ♂ ad., 2 ♀ ad., June 20–24, 1928. Minas Geraës: São Benedicto, on the Rio Manhuassú (alt. 110 meters), 2 ♀ ad., Jan. 20, 1930. Espirito Santo: Baixo Guandú (Rio Guandú, alt. 213 ft.), 2 ♂ ad., Dec. 23–26, 1929; Lagôa Juparanã (alt. 400 ft.), 1 ♂ ad., 1 ♀ ad., Nov. 3–9, 1929.

RANGE.—Southeastern Brazil in states of Bahia (Cajazeiras on the Rio Grungogy, Ilhéos [Fazenda Pontal], Itabuna [Fazenda Ditosa], Belmonte [Fazenda Santiago]); Minas Geraës (São Benedicto on the Rio Manhuassú) and Espirito Santo (Baixo Guandú, Rio Guandú, Lagôa Juparanã, Páó Gigante).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Bahia:				
Cajazeiras	1 ♂ ad.	51.5	29.0	12
"	1 ♂ ad.	51.0	31.5	13
"	1 ♀ ad.	51.0	31.0	13
"	1 ♀ juv.	51.0	35.0	14
Minas Geraës:				
São Benedicto	1 ♀ ad.	51.0	35.0	13
"	1 ♀ ad.	52.0	31.0	13
Espirito Santo:				
Baixo Guandú	1 ♂ ad.	51.5	31.5	12
"	1 ♂ ad.	49.5	31.0	13
Lagôa Juparanã	1 ♂ ad.	51.0	31.5	13
"	1 ♀ ad.	51.5	32.0	12

Other Specimens Examined

BRAZIL		
Bahia:	1 ♂ ad.	1 ♀ ad.

This is a first record for this species from Minas Geraës.

Myrmotherula ménétrièrei omissa Todd

Myrmotherula ménétrièrei omissa TODD, 1927, Proc. Biol. Soc. Wash., XL, p. 158. Brazil: Pará (Benevides).

Myrmotherula cinereiventris HELLMAYR, 1905, Nov. Zool., XII, p. 286, Pará (Igarapé-Assú); idem, 1907, *op. cit.*, XIV, p. 304 (Borba, Rio Madeira).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 285, Pará (Santo Antonio do Prata); idem, 1914, Bol. Mus. Goeldi, VIII, p. 286 [part; Pará (Providencia, Santo Antonio do Prata)].

Myrmotherula cinereiventris cinereiventris HELLMAYR, 1906, Nov. Zool., XIII, p. 368, Pará (Santo Antonio do Prata).

Myrmotherula ménétrièrei cinereiventris HELLMAYR, 1912, Abhandl. math. naturw. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 45 [part; ♂♂, No. 1, pp. 165–166 (Peixe-Boi)]; Rio Tocantins (Alcobaça); Pará localities.

Myrmotherula ménétrièrei omissa HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, part 3, p. 371, Rio Tapajoz east into northern Maranhão (Tury-assú).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 479, Rio Tapajoz, Rio Tocantins, Pará (Rio Guamá, Igarapé-Assú, etc.); Maranhão (Tury-assú).

No specimens collected.

RANGE.—Northern Brazil, south of the Amazon, from northern Maranhão (Tury-assú) west to the lower Rio Madeira (Borba).

Specimens Examined

BRAZIL		
Rio Tapajoz:		
Tauaryá	1 ♂ ad.	4 ♀ ad.
Rio Madeira:		
Igarapé Auará		
near Borba	1 ♀ ad.	
Maranhão:		
Tury-assú	1 ♂ ad.	Field Mus.

Myrmorchilus strigilatus strigilatus

(Wied)

Myiothera strigilata WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1064 (Prov. Bahia; descr. ♂, ♀).

Formicivora strigilata MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 493 (ex Wied).—SCLATER, 1858, P. Z. S. London, XXVI, p. 242 (se. Brazil).—PELZELN, 1868, Orn. Bras., II, p. 84, note 2 (Bahia).—SCLATER AND SALVIN, 1869, Exot. Ornith., p. 159, Pl. 80 (♂, ♀; Bahia).—ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 254 (Wied's types).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 251 (Bahia).—IHERING, 1907, Cat. Faun. Braz., I, p. 210 (part; Bahia).—REISER, 1910, Denkschr. math. naturw. Kl. Akad. Wiss. Wien, LXXVI, p. 66, Bahia (Barra do Rio Grande, Fazenda da Serra) and southern Piahy (Parnaguá).—SNETHLAGE, 1926, Bol.

Mus. Nac. Rio de Janeiro, II, No. 6, p. 45 (Ceará).

Myrmorchilus strigilatus strigilatus HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII; part 3, p. 170 (campos region of eastern Brazil in states of Bahia, Ceará and Piahy); idem, 1929, *op. cit.*, XII, p. 371, campos region of northeastern Brazil in states of Bahia (Barra do Rio Grande, Fazenda da Serra), Ceará (Juá, near Iguatú and Varzea Formosa); Piahy (Parnaguá, Arára).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 480, northern Bahia (Joazero, Cidade da Barra), Piahy, Ceará.

Myrmorchilus strigilatus suspicax WETMORE, 1922, Journ. Wash. Acad. Sci., XII, No. 14, p. 327, Argentina (Riacho Pilaga, Kilometro 182, Gob. de Formosa).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 170, southwestern Matto Grosso (Urucúm near Corumbá), western Paraguay (Chaco) and northern Argentina (Terr. de Formosa, Rio Vermejó, and Jujuy).

SPECIMENS COLLECTED
(Kaempfer Collection)

BRAZIL.—Piahy: Parnaguá (alt. over 1300 ft.), 3 ♂ ad., 1 ♀ ad., June 20, 21, 1927. Pernambuco: Granahuns (alt. 3000 ft.), 2 ♂ ad., Feb. 5, 7, 1927; Rio Branco (town, alt. 665 meters), Feb. 24, 1927. Bahia: Barro do Rio Grande (alt., sea level), 3 ♂ ad., April 15, 20, 1927; Giguy (alt. 2000 ft.), 1 ♂ ad., Oct. 15, 1927; Santa Rita do Rio Preto (alt. 1600 ft.), 2 ♂ ad., 1 ♀ ad., May 19, Aug. 9, 1927; Sincora (alt. 1500 ft.), 1 ♀ ad., Oct. 11, 1927; Tambury (alt. 1100 ft.), 3 ♂ ad., 1 ♀ ad., Oct. 4, 5, 22, 1927.

PARAGUAY.—Chaco (80 kilom. west of Puerto Pinasco, alt. 100–400 meters), 1 ♂ ad., April 15, 19, 1931.

RANGE.—Campos region of eastern Brazil, in states of Piahy (Parnaguá), Pernambuco (Garanhuns, Rio Branco), Ceará (Juá, near Iguatú), Bahia (Lamarão, near city of Bahia, Cidade do Barra [Barra do Rio Grande], Joazeiró, Fazenda da Serra, Giguy, Santa Rita do Rio Preto, Sincora, Tambury); southwestern Matto Grosso (Urucúm, near Corumbá); western Paraguay (Chaco, 80 kilom. from Puerto Pinasco); Argentina (Prov. of Salta, Rio Bermejo, Rio Seco, Riacho Pilaga, 182 kilom. from Gob. de Formosa).

Other Specimens Examined

BRAZIL			
Bahia (Wied's types):	1 ♂ ad.	1 ♀ ad.	
Cidade do Barra	1 ♂ ad.	1 ♀ ad.	
Lamarão	1 ♂ ad.	1 ♀ ad.	Roths. Coll.
Bahia skins	1 ♂ ad.		“ “

Matto Grosso:

Urucúm, near

Corumbá 1 ♂ ad. 1 ♀ Roths. Coll.

ARGENTINA

Prov. Salta:

Rio Bermejo 1 ♂ ad.

Rio Seco 2 ♀ ad. “ “

Having seen a large series of *Myrmorchilus strigilatus*, I fail to see the differences in birds from the campos region of eastern Brazil and those from southwestern Matto Grosso, western Paraguay, and northern Argentina. These differences have been pointed out by Dr. Wetmore and Hellmayr¹ but I believe they did not have as large a series as I have. Following Dr. Hellmayr's description of *Myrmorchilus strigilatus suspicax* Wetmore,² I see no difference in the blackish suffusion on the forehead between birds from Pernambuco and Bahia on one side and those from Paraguay and Argentina on the other. No difference in the color of the auriculars from specimens of these regions, which are a brownish russet, no difference in the superciliary stripe which I consider a variable character as it is sometimes decidedly buff and sometimes decidedly white. (Specimens No. 243001 from Bahia [Tambury, Kaempfer Coll.] and No. 490729, also from Bahia [Lamarão, Rothschild Coll.], have the superciliary stripe buff instead of white, while No. 490732, an adult male from Rio Bermejo, Salta, north Argentina, has the superciliary stripe white, fully as white as a male from Bahia [Giguy, alt. 2000 ft.]).

I can see no difference in the color of the upper parts and none in the color of the flanks of the males from these regions, which are deep ochraceous buff.

The females from Argentina and Paraguay that I have examined are deeper rufous above and deeper buff coloration on foreneck and breast. As these characters are just the opposite ones to those of *M. strigilatus suspicax* as described by both Dr. Wetmore and Hellmayr,³ I

¹ Hellmayr, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 170.

² Wetmore, 1922, Journ. Wash. Acad. Sci., XII, No. 4, p. 32.

³ *Op. cit.*, “females duller and less rufous above and generally paler buff coloration of foreneck and breast.”

feel quite certain they are those of individual variation and I therefore regard *Myrmorchilus strigilatus suspicax* Wetmore as a synonym of *Myrmorchilus strigilatus strigilatus*.

These birds are found in forests, also on coffee plantations and in regions where there are no forests, such as Parnaguá.

Herpsilochmus pileatus Lichtenstein

Myiothera pileata LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 44 (Bahia).—WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1078 (e. Brazil, no locality specified; descr. ♂, ♀).

Formicivora pileata MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 485, ex Wied.

Herpsilochmus pileatus PELZELN, 1868, Ornith. Bras., II, p. 80 (Bahia: "Cuyabá?" errore).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 245 (Bahia).—IHERING, 1907, Cat. Faun. Braz., I, p. 209 (part; Bahia).

Herpsilochmus pileatus pileatus HELLMAYR, 1908, Nov. Zool., XV, p. 70, in text [part; Bahia (Lamarão)]; idem, 1921, *op. cit.*, XXVIII, p. 206 (coast district of Bahia); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 171, eastern Brazil, coast district of State of Bahia (the only ascertained locality being Lamarão).—PINTO, 1932, Rev. Mus. Paul., XVII, (2), p. 755, Bahia (Villa Nova = Bomfim); idem, 1936, *op. cit.*, XX, p. 87 (Bomfim, Bahia).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Barra do Rio Grande (alt. 1400 ft.), 1 "♂" ad., 2 ♀, April 15, 1927.

RANGE.—Bahia (Barra do Rio Grande, Bomfim, Lamarão).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Bahia:				
Barra do Rio Grande				
on São Francisco	"♂"	49.0	44.5	14.0
Barra do Rio Grande	♀	48.5	44.5	12.5
" " "	♀	44.5	1	14.0

Other Specimens Examined

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Bahia:				
Lamarão	♂	48.5	45.0	12.5
(Wied)	♂	49.0	46.0	14.5

¹ Tail moulting.

Mr. Kaempfer found three birds from Barra do Rio Grande (alt. 1400 ft.), in a caatinga forest on the north shore of the Rio Grande, and the Rio São Francisco. These specimens and a single male from Lamarão, in the Rothschild Collection, have a decidedly shorter tail, are less buffy on the forehead and sides of head, and more grayish on the lower parts instead of very buffy ochraceous. I have now decided to consider these specific differences and refer birds from that part of Bahia to *Herpsilochmus pileatus*. Wied's specimen agrees in size and color with the birds from Barra do Rio Grande and Lamarão, though the bill is slightly heavier.

However, up to the present time, all authors have considered this whole problem most puzzling and, as there is a difference in the specimens from this portion of Brazil, I think it will help the situation, which remains as obscure as before, to consider *Herpsilochmus pileatus* a species ranging at two or three isolated spots in the heart of the range of *atricapillus* even though these specimens among themselves may show a little individual variation.

As far as measurements of wing for *atricapillus* are concerned two specimens fall within the figures of *pileatus* and *atricapillus* which according to my figures run for both from 12 1/2 to 14 mm., only two out of twenty-five measuring 15 mm., while one from Morro do Chapeó (*atricapillus*) has only 12 mm. The only difference in size that holds is length of tail which is invariably longer in *atricapillus*.

Herpsilochmus atricapillus Pelzeln

Herpsilochmus atricapillus PELZELN, 1868, Orn. Bras., II, pp. 80, 150, n. São Paulo (Porto do Rio Paraná); city of Goyaz.—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 246 (Pernambuco; Goyaz).—MÉNÉGAUX AND HELLMAYR, 1906, Bull. Soc. Philom. Paris, (9th Ser.) VIII, p. 43 (Goyaz).—IHERING, 1907, Cat. Faun. Braz., p. 209, n. São Paulo (Itapura, Bebedouro).—REISER, 1910, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXXVI, p. 66, nw. Bahia (Porto da Pedra, Rio Preto); Piauhy (Lagôa do Passão, Lake of Missão, near Parnaguá; São Gonçalinho, Rio Parnahyba).

Herpsilochmus pileatus atricapillus HELLMAYR

MAYR, 1908, Nov. Zool., XV, p. 69, Goyaz (Rio Thesouras, Faz. Esperança, city of Goyaz); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 172, tableland of central Brazil, in states of northern São Paulo (Paraná-Tiété region), Goyaz (western), Minas Geraës (Lagôa Santa, Agua Suja near Bagagem), extending east to northwestern Bahia (Rio Preto), Pernambuco (Macuca, Garanhuns), Ceará, and Piauh; idem, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 374, northwestern Bahia and the extreme south of Piauh and Maranhão.—PINTO, 1932, Rev. Mus. Paul., XVII, (2), p. 755, São Paulo (Valparaizo) and Matto Grosso (Sant' Anna do Paranahyba); idem, 1936, *op. cit.*, XX, p. 87, Goyaz (Jaraguá, Rio das Almas, Rio Méia Ponte); idem, 1938, *op. cit.*, XXII, p. 481, São Paulo (Bebedouro, Itapura, Valparaizo, Porto Tibiriça), Minas Geraës; Goyaz (Rio das Almas, Inhumás); northeastern Bahia; southern Piauh; Maranhão.

Formicivora pileata (not of Lichtenstein) BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 78 ["Novo Friburgo," Prov. of Rio de Janeiro, locality doubtless erroneous, probably Minas Geraës (Lagôa Santa)].—REINHARDT, 1870, Vidensk. medd. naturhist. Foren. Kjoben., p. 365, Minas Geraës (Lagôa Santa, Sete Lagôas).

Herpsilochmus pileatus FORBES, 1881, Ibis, p. 347, Pernambuco (Garanhuns).—SNETHLAGE, 1926, Bol. Mus. Nat. Rio de Janeiro, II, No. 6, p. 45 (Ceará)].

Herpsilochmus pileatus pileatus HELLMAYR, 1908, Nov. Zool., XV, p. 70 [part; Minas Geraës (Lagôa Santa); Province of Rio de Janeiro ("Novo Friburgo")].

Herpsilochmus sp. inc., FORBES, 1881, Ibis, p. 347, Pernambuco (Macuca).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: As Mangueras (Flores), alt. 50 meters, 2 ♂ ad., May 9-14, 1926; Tabocas (alt. 700 ft.), 1 ["♂"], July 26, 1926. Piauh: Corrente (alt. 1500 ft.), 1 ["♂"] ad., June 2, 1927; Parnaguá (alt. 1000 ft.), 1 ♂ ad., June 19, 1927; Therezina (alt. 50 meters), 1 ♂ ad., 1 ♀ ad., May 1, 26, 1926. Ceará: Viçosa (Serra da Ibiapaba, alt. 2400 ft.), 4 ♂ ad., 2 ♀ ad., Oct. 28, Nov. 4, 5, 1926.

PARAGUAY.—Colonia Independencia (alt. ?), 1 ♂ ad., 1 ♀ ad., Oct. 5-11, 1930.

RANGE.—Tableland of central Brazil, in states of Matto Grosso (Sant' Anna do Paranahyba, Urucúm, near Corumbá), northern São Paulo (Tiété region, Porto do Paraná, Bebedouro, Itapura, Valparaizo, Porto Tibiriça), Goyaz (Rio das Almas, Inhumás, Rio Meia Ponte, Fazenda Esperança, Rio Thesouras, Rio Araguaya),

western Minas Geraës¹ (Lagôa Santa; Agua Suja, near Bagagem), extending east to northwestern Bahia (Rio Preto, Santa Rita, Boa Nova, Ituassú, Morro do Chapeó, Tambury, Iracema, Giguy), Pernambuco (Macuca, Garanhuns), Ceará (Viçosa, Serra Baturité, Varzea Formosa), extreme south and through northern Piauh (Corrente, Parnaguá, Therezina, São Gonçalinho), west to central Maranhão (Barra do Corda, Grajahú and As Mangueras [Flores], Tabocas, Tranqueira); eastern Bolivia (Chiquitos, Santa Cruz de la Sierra, Vermejo); western Argentina (Prov. Jujuy [Cafetal, Ledesma, Rio São Francisco]); Paraguay (Colonia Independencia).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Maranhão:				
As Mangueras (Flores)	♂	51.0	50.0	13.0
As Mangueras (Flores)	♂	50.0	51.5	15.0
Tabocas	♂	52.5	57.0	14.0
Piauh:				
Corrente	"♂"	53.5	57.0	14.0
Parnaguá	♂	54.0	59.0	14.0
Therezina	♀	51.0	52.5	14.0
"	♀	51.5	50.0	14.5
Ceará:				
Viçosa	♂	54.5	55.5 ²	13.0
"	["♂"]	53.0	55.5	15.0
"	["♂"]	53.0	55.5	13.0
"	["♂"]	53.0	50.0	12.5
"	["♀"]	55.0	54.0	14.5
"	["♀"]	50.0	56.0	14.0
Pernambuco:				
Garanhuns	♂	55.0	56.5	14.0
"	["♀"]	54.0	55.5	14.5
"	["♀"]	54.0	54.5	14.0
Bahia:				
Giguy	"♂"	53.0	60.0	14.5
Iracema	♀	48.0	51.5	13.0
Tambury	♀	50.5	52.0	³
"	♀	55.5	58.5	13.0
Morro do Chapeó	"♂"	53.0	54.0	13.0
" " " "	"♀"	55.0	60.0	12.0
Santa Rita do Rio Preto				
Boa Nova	♀	55.0	59.0	14.5
Ituassú	♀	47.0	50.0	13.0
"	♂	53.0	55.0	14.0
"	♂	54.5	54.0	13.0

¹ I have seen no specimens from here.

² Tail moulting.

³ Bill broken.

	SEX	WING	TAIL	EXP. CUL-MEN
PARAGUAY				
Colonia Independencia	♂	54.5	60.5	14.5
Colonia Independencia	♀	53.5	55.0	14.0

Other Specimens Examined

BRAZIL				
Maranhão:				
Barra do Corda	2 ♂ ad.	2 ♀ ad.	Field Mus.	
Tranqueira	2 ♂ ad.	1 ♀	"	"
Matto Grosso:				
Urucúm (near Corumbá)	1 ♂ ad.	1 ♀ ad.		
Goyaz:				
Fazenda Esperança	1 ♂ ad.	1 ♀ ad.	Roths. Coll.	
Rio Theouras	1 ♂ ad.		"	"
Rio Araguaya	1 ♂ ad.		"	"
Goyaz		2 ♀ ad.	"	"
BOLIVIA				
Santa Cruz de la Sierra	1 ♂ ad.		"	"
Vermejo		1 ♀ ad.		
ARGENTINA				
Jujuy:				
Rio São Francisco	1 ♂ ad.		"	"
Rio São Francisco		1 ♀ ad.	"	"

With a great deal of material at hand, the range of *Herpsilochmus atricapillus* is now extended to Ceará, northern Piauh, Maranhão, Pernambuco, and Paraguay. These specimens are separable from 4 specimens I have seen from Bahia (Barro do Rio Grande, Lamarão), as they are decidedly longer in the measurement of the tail. In the plateau of central Bahia I find a series of specimens that not only approach the coloration of *Herpsilochmus atricapillus* but also are larger than *Herpsilochmus pileatus*. These specimens I am therefore referring to *Herpsilochmus atricapillus*. The coloration of the under parts in the male sex is more cinereous on the sides of the chest, showing less whitish admixture on the abdominal line than in *H. pileatus*. The female of *H. atricapillus* has darker ochraceous spots on the forehead and brighter buff on the under parts.

These birds are found in a region of Chapada country with dense underbrush and very little high forest.

They occur in southern Piauh in Ceará and in central Maranhão where the tail is shorter than in the Goyaz bird but still considerably longer than in the specimens from eastern Brazil (Barra do Rio Grande and Lamarão) which fact, after due consideration and much study, has made me decide to regard birds from that part of Brazil as a full species. I have seen no birds from São Paulo, but Dr. Hellmayr has written me that females from São Paulo birds are decidedly buffier beneath than a female of *pileatus* from Bahia.

Herpsilochmus pectoralis Sclater

Herpsilochmus pectoralis SCLATER, 1857, P. Z. S. London, XXV, p. 132 (locality unknown. Hellmayr suggests Bahia, e. Brazil; descr. ♂); idem, 1858, *op. cit.*, XXVI, p. 233 (Brazil; descr. ♂).—PELZELN, 1868, Orn. Bras., II, p. 80, note 5 (Bahia).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 247 (Bahia; descr. ♂).—IHERING, 1907, Cat. Faun. Braz., I, p. 209 (Bahia).—HELLMAYR, 1908, Nov. Zool., XV, p. 71 (Bahia; crit.; descr. ♀); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 176, coast district of eastern Brazil (in states of Bahia and Maranhão); idem, 1929, *op. cit.*, Zool. Ser., XII, p. 371, Maranhão (Codó, Cocos, Primeira Cruz).—PINTO, 1935, Rev. Mus. Paul., XIX, p. 176, Bahia (Corupéba, near the Island of Madre de Deus); idem, 1938, *op. cit.*, XXII, p. 482, Bahia (Rencocavo, Corupéba), Maranhão (Codó, Primeira Cruz, Bôa Vista).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: Rosario (alt. 13 meters), 1 ♂ ad., April 16, 1926.

RANGE.—Coast district of eastern Brazil, in states of Bahia (Rencocavo, Corupéba) and Maranhão (Rosario, Primeira Cruz, Bôa Vista, Codó, Cocas).

Measurements

	SEX	WING	TAIL	EXP. CUL-MEN
BRAZIL				
Maranhão:				
Rosario	♂ ad.	53.5	36.5	14.0

Other Specimens Examined

BRAZIL

Maranhão:

Codó, Cocas 1 ♂ ad. 1 ♀ ad. Field Mus.
Primeira Cruz 1 ♂ juv. Roths. Coll.

Bahia:

"Bahia skin" 1 ♂ ad. " "

Herpsilochmus longirostris Pelzeln

Herpsilochmus longirostris PELZELN, 1868, Orn. Bras., II, Sept., pp. 80, 150, n. São Paulo (Porto do Rio Paraná), Goyaz (Rio Araguaya), Matto Grosso (Cuyabá and Rio Guaporé); Hellmayr accepts Cuyabá as type locality.—IHERING, 1907, Cat. Faun. Braz., I, p. 209, n. São Paulo (Barretos).—HELLMAYR, 1908, Nov. Zool., XV, p. 71, Goyaz (Faz. Esperança, Rio Araguaya); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 176, tableland of Brazil, in northern São Paulo (Paraná-Tiété district), in states of Matto Grosso (Rio Guaporé, Poconé, Cuyabá, Chapada), Goyaz (Rio Araguaya, Faz. Esperança near city of Goyaz) and southern Piauhy (Santa Philomena); idem, 1929, *op. cit.*, XII, p. 372, Piauhy (Santa Maria, Santa Philomena).—REISER, 1910, Denkschr. math. natur. Kl. Akad. Wiss. Wien, LXXXVI, p. 66, southern Piauhy [Santa Maria (on the way from San Antonio de Gilbués to Santa Philomena), Santa Philomena].—MÉNÉGUAX, 1917, Rev. Franc. d'Orn., No. 96, p. 55, Matto Grosso (Poconé).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 482, Matto Grosso (Campo Grande, Miranda, Coxim, Rio Crystalino, Rio das Mortes); Goyaz; São Paulo (Rio Grande do Norte de Barretos, Porto Tibiriçá); Piauhy.

No specimens collected.

RANGE.—Tableland of Brazil in northern São Paulo (Paraná-Tiété district, Rio Grande do Norte de Barretos, Porto Tibiriçá), in states of Matto Grosso (Rio Guaporé, Poconé, Cuyabá, Chapada, Miranda, Coxim, Rio Crystalino, Rio das Mortes), Goyaz (Rio Araguaya, Faz. Esperança, near city of Goyaz), and southern Piauhy (Santa Philomena, Santa Maria).

Herpsilochmus rufimarginatus rufimarginatus (Temminck)

Myiothera rufimarginata TEMMINCK, 1822, Rec. Pl. col., livr. XXII, May, Pl. 132, fig. 1 (♂), 2 (♀) ("Brésil." Hellmayr suggests Rio de Janeiro as type locality).

Dendrooecia erythroptera BERTONI, 1901, Av. Nuev. Parag., p. 138, Paraguay (Alto Paraná).

Herpsilochmus rufimarginatus PELZELN, 1868, Orn. Bras., II, p. 80 (part); Rio de Janeiro; Ypanema, São Paulo).—CABANIS, 1874, Journ. Ornith., XXII, p. 86, Rio de Janeiro

(Cantagallo).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 247 (se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 240, São Paulo (Rincão, Ubatuba, Iguapé); Paraguay (Puerto Bertoni).—CHUBB, 1910, Ibis, p. 521, Paraguay (Sapucay).—DABBENE, 1914, Bol. Soc. Physis, I, p. 327, Paraguay (Iguazú).

Herpsilochmus rufimarginatus rufimarginatus HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 178, southeastern Brazil, in the states of Rio de Janeiro, São Paulo; Paraguay.—PINTO, 1932, Rev. Mus. Paul., XVII, (2), p. 756, São Paulo (Valparaizo); idem, 1938, *op. cit.*, XXII, p. 483, Bahia, Espírito Santo, Rio de Janeiro, São Paulo (Iguapé, Itatiba, Rincão, Rio Feio, Ubatuba, Ituverava, Valparaizo, Tabatinguara, Cananéa), Paraguay (Puerto Bertoni); northeastern Argentina.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Foz do Iguassú (alt. 300 ft.), 5 ♂ ad., 3 ♀ ad., May 19–30, 1930; Porto Mendes (Rio Paraná, alt. 400 ft.), 1 ♂ ad., May 30, 1930.

PARAGUAY.—Upper Rio Iguassú (alt. 1000 ft.), 2 ♂ ad., 1 ♀ ad., Jan. 11, 1931.

RANGE.—Southeastern Brazil in states of Rio de Janeiro (Cantagallo), São Paulo (Valparaizo, Iguapé, Itatiba, Rincão, Rio Feio, Ubatuba, Ituverava, Ypanema, Tabatinguara, Cananéa, Faz. Cayoá), Paraná (Foz do Iguassú, Porto Mendes, Rio Paraná), and Paraguay (upper Rio Iguassú, Sapucay, Alto Paraná, Puerto Bertoni, Iguazú).

Measurements¹

BRAZIL	SEX	WING	TAIL	EXP.
				CUL- MEN
Paraná:				
Foz do Iguassú	♂ ad.	53.0	55.0	13.0
" " "	♂	50.5	49.0	13.0
" " "	♂	50.5	52.5	13.0
" " "	♂	50.5	52.5	2
" " "	♂	50.5	52.5	15.0
Porto Mendes	["♂"]	50.5	50.5	13.5
Foz do Iguassú	♀	48.5	51.0	13.5
" " "	♀	52.5	51.5	13.0
" " "	["♀"]	52.0	52.5	14.0

¹ Measurements sent to me by Dr. Hellmayr are as follows:

São Paulo: Faz. Cayoá	wing of adult male	51
	female	48, 50, 51
Paraguay: Sapucay	male	50, 53, 53, 52
" " "	female	50, 51, 51, 52, 52
Rio de Janeiro	male	50, 53
	female	53

² Culmen broken.

³ Tail feathers incomplete.

	SEX	WING	TAIL	EXP. CUL-MEN
PARAGUAY				
Upper Iguassú River	♂	50.5	52.0	13.5
" " "	♂	51.0	52.5	14.5
" " "	♀	50.5	51.0	13.0

Other Specimens Examined

BRAZIL				
São Paulo:				
Faz. Cayoá, Salto Grande, Rio Parapanema				
	1 ♂ ad.	Roths. Coll.		
	1 ♀ ad.	" "		
PARAGUAY				
Sapucay	1 ♂	" "		

The birds from Paraná and Paraguay (upper Rio Iguassú, Sapucay, etc.) are nearly uniform yellow (straw-yellow to Baryta yellow) underneath, without any ochraceous or buffy tinge across the chest, and all of them have more or less white suffusion on chin and upper throat, though not as extensively white as in Bahia skins.

The black admixture in the back of males is a variable character.

Herpsilochmus rufimarginatus frater

Sclater and Salvin

Herpsilochmus frater SCLATER AND SALVIN, 1880, P. Z. S. London, p. 159, e. Ecuador (Sarayacu).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 285 (Marajó); idem, 1914, Bol. Mus. Goeldi, VIII, p. 287, Pará (Peixe-Boi); Marajó.

Herpsilochmus rufimarginatus frater HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 179, eastern Ecuador; eastern Colombia (east slope of eastern Andes; "Bogotá" collections); Venezuela (north coast near San Esteban; Suapure, Caura Valley; El Callao, Rio Yuruari; Upata, south of the lower Orinoco); northeastern Brazil (Peixe-Boi, Pará district; Isl. of Marajó (Santa Ana, Maguary); Maranhão (Tury-assú); idem, 1929, *op. cit.*, XII, p. 374, Maranhão (Tury-assú).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 483, Matto Grosso (Rio Guaparé), Pará (Marajó, Peixe-Boi, etc.); Maranhão (Tury-assú).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Pernambuco: Palmares (alt. 600 ft.), 1 ♀ ad., March 4, 1927.

RANGE.—Eastern Ecuador (Rio Napo, Zamora, below San José de Sumarco, Boca, Rio Curaray); eastern Colombia (east slope of eastern Andes; "Bogotá" collections); Venezuela (north coast near

San Esteban Valley, Suapure, Caura Valley, Caripé, El Callao, Rio Yuruari, Upata, south of the lower Orinoco); northeastern Brazil (Peixe-Boi, Pará district, Santa Ana, Maguary, Island of Marajó); Maranhão (Tury-assú); Matto Grosso (Rio Guaporé).

Measurements

BRAZIL				
Pernambuco:				
	SEX	WING	TAIL	EXP. CUL-MEN
	♀ ad.	51.5	45.0	14.0

Other Specimens Examined

VENEZUELA.—Suapure, Caura, 3 ♂ ad., 1 ♀ ad., Caura, 1 ♂ ad., Inland of Pto. Cabello, San Esteban Valley, 1 ♀ ad., Caripé, 1 ♂ ad., 1 ♀ ad. (Roths. Coll.).

COLOMBIA.—("Bogotá" skins), 3 ♂ ad. (Roths. Coll.).

BRAZIL.—Maranhão: Tury-assú, 1 ♂ ad., 1 ♀ ad., Field Museum.

ECUADOR (East).—Rio Napo, 1 ♂ ad., 1 ♀ ad. (Roths. Coll.); Zamora, Prov. de Loja, 2 ♀ ad.; below San José de Sumarco, 1 ♂ ad., 2 ♀ ad.; Boca, Rio Curaray, 1 ♂ ad.

Herpsilochmus rufimarginatus scapularis

(Wied)

Myiothera scapularis (Lichtenstein Ms.) WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1083, Prov. Bahia.

Herpsilochmus rufimarginatus rufimarginatus HELLMAYR, 1915, Verhandl. Orn. Ges. Bay., XII, No. 2, p. 147, Espirito Santo (Braço do Sul).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Pernambuco: Palmares (alt. 600 ft.), 1 ♀ ad., March 4, 1927. Bahia: Jaguaquara (alt. 2500 ft.), 2 ♂ ad., 1 ♀ ad., Sept. 5, 1927; Jequié (alt. 1500 ft.), 1 ♂ ad., Sept. 13, 1927. Minas Geraës: Resplendor (alt. 400 ft., Rio Doce, north shore), Jan. 10, 1930. Espirito Santo: Lagôa Juparaná (alt. 400 ft.), 1 ♂ ad., 2 ♀ ad., Nov. 6-15, 1929.

RANGE.—Eastern Brazil from Pernambuco (Palmares) and Bahia (Jaguaquara, Jequié) to Minas Geraës (Resplendor, Rio Doce) and Espirito Santo (Lagôa Juparaná and Braço do Sul).

¹ I have seen no specimens from the Pará district or the Island of Marajó.

Measurements¹

	SEX	WING	TAIL	EXP. CUL- MEN
BRAZIL				
Pernambuco:				
Palmares	♀	51.5	45.0	14.0
Bahia:				
Jequié	♂	49.0	44.5	12.0
Jaguaquara	♂	51.5	47.0	13.0
"	♀	50.0	48.0	13.0
Espírito Santo:				
Lagôa Juparaná	♂	49.5	44.5	13.0
"	♂	49.0	45.0	14.0
"	♀	50.5	47.0	14.0
"	♀	48.0	45.0	13.0
"	♀	48.0	49.0	14.0
Minas Geraës:				
Resplendor	♀	49.0	45.0	13.0

I am referring the bird from Pernambuco (Palmares, alt. 600 ft.) to *Herpsilochmus rufimarginatus scapularis*, though it resembles in many ways *Herpsilochmus rufimarginatus frater*. The bird from Pernambuco has the throat always pure white as in Bahia females, but the chest is tinged with buffy (chamois to honey-yellow) and the abdomen of a more buffy yellow than in Bahia and Paraguayan birds. The Pernambuco female may possibly be a buff-chested variation of the Bahia form, and so, for the time being, until more material is available, I will refer it to *Herpsilochmus rufimarginatus scapularis*.

Birds from this region, Bahia, etc., must be kept separate because of a slightly more grayish (less olivaceous) dorsal surface in the males, and more purely white throat and paler yellow under parts. Their name should be *Herpsilochmus rufimarginatus scapularis* (Wied) (type from Bahia). By the whiter throat this form leads to *Herpsilochmus rufimarginatus frater* which is found as far south as northern Maranhão, at Tury-assú as recorded by Hellmayr.² *Herpsilochmus rufimarginatus scapularis* extends south to Espírito Santo and Minas Geraës, as the birds collected by Emil Kaempfer are referable to this subspecies. However, it is certain that specimens from Rio de

Janeiro are the southern form (*rufimarginatus* typical). Both Hellmayr and Zimmer³ discuss birds from Matto Grosso and Peru (the latter have been separated as *Herpsilochmus r. flaviventris* by Carriker⁴).

Formicivora iheringi (Hellmayr)

Formicivora iheringi HELLMAYR, 1909, Rev. Franç. d'Orn., I, No. 7, Nov., p. 98. Bomfim, Serra da Tiuba,⁵ Prov. Bahia, e. Brazil.

Neorhophias iheringi HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 184, interior of State of Bahia, eastern Brazil.

Formicivora iheringi PINTO, 1938, Rev. Mus. Paul., XXII, p. 484, Bahia (Bomfim [= Villa Nova da Rainha]).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Giguy (alt. 2000 ft.), Oct. 15, 1927; Jaguaquara (alt. 2500 ft.), 2 ♂ ad., Sept. 2, 1927; Iracema (alt. 2300 ft.), 1 ♂ (?), Oct. 8, 1927; Boa Nova (alt. 2600 ft.), 1 (?), June 3, 1928.

RANGE.—Eastern Brazil in interior of State of Bahia (Bomfim, Giguy, Jaguaquara, Iracema, Boa Nova).

Measurements

	SEX	WING	TAIL	EXP. CUL- MEN
BRAZIL				
Bahia:				
Giguy	♂	52.0	51.5	11.5
"	♂	51.0	51.0	12.5
Jaguaquara	"♂"	55.0	52.0	12.0
"	♂	52.0	54.0	13.0
Boa Nova	"♂"	51.5	50.5	12.0
Iracema	♂	51.0	49.0	11.0

Only two specimens (adult males) from Boa Nova and Iracema have the lores more whitish, cheeks and auriculars paler slate gray streaked with silvery white, with feathers of throat and breast conspicuously edged with whitish or slate gray. The other specimens are strikingly like *Myrmotherula axillaris luctuosa* Pelzeln in general coloration, lacking, however, all the whitish feathers on the throat,

³ Zimmer, 1932, Amer. Mus. Novit., No. 538, p. 3 (*Herpsilochmus rufimarginatus* subsp.).

⁴ Carriker, M. A., 1935, Proc. Acad. Nat. Sci., Phila., LXXXVIII, p. 322. Bolivia: Dept. La Paz (Teoponte, Rio Kaka, a few miles below Hanay).

⁵ Formerly Villa Nova da Rainha, south of Joazeiro in northeastern Bahia.

¹ Measurements sent to me by Dr. Hellmayr: Bahia; wing of adult male, 49 1/2; of female, 49, 49, 50.

² Hellmayr, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 374.

and with much fewer on the lores and with cheeks and auriculars darker. Tails much longer than that of *Myrmotherula*.

There are no specimens of this evidently rare genus in the Rothschild Collection, nor in the collection of The American Museum of Natural History. The above specimens are therefore a very valuable addition.

Mr. Kaempfer found these specimens in the caatinga region, in a low thorny forest with many cacti, wild pineapple, dwarf palms, and in a region with hardly any water.

Formicivora grisea grisea Boddaert¹

Turdus griseus (*sic*) BODDAERT, 1783, Tabl. Pl. enl., Dec., p. 39 (based on "Le Grisin, de Cayenne," Daubenton, Pl. enl. 643, fig. 1 (= ♂); Cayenne).

Myiothera superciliaris LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 44 ("Brasilia, Cayana"; descr. ♂, ♀).

Formicivora nigricollis SWAINSON, 1825, Zool. Journ., II, No. 6, July, p. 147, Prov. Bahia (caatinga woods of Humildez).

Formicivora grisea FORBES, 1881, Ibis, p. 384, Pernambuco (Quipapá, Recife) and Parahyba.—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 249, Pernambuco and Bahia.—REISER, 1910, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXXVI, p. 66 (part; No. 92, City of Bahia, No. 1240, Piauhuy (Ilha São Martin, Rio Parnahyba)).

Neorhophias grisea grisea HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 375, Maranhão (São Luiz, Barra do Corda, Grajahú, Codó, Cocos, Rosario, Miritiba, São Francisco, Rio Parnahyba, Tranqueira, Carolina), Rio Tocantins, Piauhuy (Ilha São Martin, Rio Parnahyba).—PINTO, 1935, Rev. Mus. Paul., XIX, p. 177, Bahia (Aratuhype, Ilha de Madre de Deus, Corupeba, Ilha dos Frades, Caravellas).

Formicivora grisea grisea PINTO, 1938, Rev. Mus. Paul., XXII, p. 484, Maranhão (Primeira Cruz, Boa Vista), Bahia (Caravellas, Aratuhype, Ilha de Madre de Deus, Ilha dos Frades), and Goyaz (Rio Araguaya).

¹ *Neorhophias grisea deluzae* Ménétrières

Known only from the type in the Leningrad Museum. This, a female, differs very little from *N. grisea grisea*. It is rather singular that the bird has never been found again in the vicinity of Rio de Janeiro, and this locality is likely to be wrong, since mistakes of this kind occur in Ménétrières' paper in one or two other cases (e.g., *Conopophaga aurita*).

Dr. Hellmayr consulted for me his notes on the type made many years ago. He says: "The type is a female in worn plumage, which accounts, no doubt, for the restriction of the buffy apical markings on the upper wing-coverts. I am nearly convinced the locality is wrong and *F. deluzae* merely *grisea* female."

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: Ilha de São Luiz, São Jose (sea level), 2 ♂ ad., 3 ♀ ad., Jan. 25–27, Feb. 5, 1926; Ilha Itauna² (Ilha de São Luiz), 1 ♂ ad. (sea level), Feb. 11, 1926; Rosario (alt. 13 meters), 2 ♂ ad., 3 ♀ ad., March 13, 21, 24, 1926; Santa Filomena (Rosario, alt. 13 meters), 1 ♂ ad., March 28, 1926, Richão (São João dos Patos, alt. 700 ft.), 1 ♂ ad., July 23, 1926; Tabocas (alt. 700 ft.), 1 ♀ ad., Aug. 21, 1926. Piauhuy: Corrente (alt. 1500 ft.), 1 ♂ ad., June 1, 1926; Therezina (Catharina, alt. 50 meters), 1 ♀ ad., June 3, 1926; Urussuhuy (alt. 124 meters), 1 ♂ ad., Aug. 15, 1926. Pernambuco: Rio Branco (alt. 665 meters), 1 ♂ ad., Feb. 20, 1927.

RANGE.—Northern Brazil from Amapá west to the upper Rio Negro, Rio Içanna, Faro (Rio Jamunda)³ and south of the Amazon Valley from Pará (Utinga, Prata, Arumatheua, Boim) west to the Rio Madeira (Borba, Santa Isabel, Rio Preto, Porto Velho), south to western Matto Grosso (Tapiropoan, Utiarity) and Goyaz (Rio Araguaya, Rio Thesouras) and through Maranhão (Ilha de São Luiz, São José, sea level, Ilha Itauna, Rosario, Miritiba, Santo Filomena, Riachão, São João dos Patos, Tabocas, Tranqueira, Grajahú, Barra do Corda, São Francisco), Piauhuy (Corrente, Therezina, Catharina, Urussuhuy), Pernambuco (Rio Branco) to Bahia (Aratuhype, Ilha de Madre de Deus, Corupeba, Ilha dos Frades, Caravellas, Santo Amaro, Oróbo); French Guiana (Cayenne), British Guiana (Rio Rupununi, Limão, Frechal⁴), and Dutch Guiana, Venezuela (Mt. Duida, Valle de los Monos).

Measurements

BRAZIL	SEX	WING	TAIL	MEN	EXP.
					CUL-
Maranhão:					
Ilha de São Luiz (São José de Riba Mar)	♂	55.0	49.0	15.0	
Ilha de São Luiz (São José de Riba Mar)	♂	56.5	45.5	14.5	
Ilha de São Luiz (São José de Riba Mar)	♀	55.5	50.5	14.5	

² Not located.

³ North of the Amazon.

⁴ These two localities, Limão and Frechal, are on the confines of British Guiana near Roraima.

	SEX	WING	TAIL	EXP. CUL-MEN
Iha de São Luiz (São José de Riba Mar)	♀	55.0	47.0	15.0
Iha de São Luiz (São José de Riba Mar)	♀	53.0	50.0	15.0
Iha Itauna (São Luiz ¹)	♂	55.0	46.5	14.0
Kelrú (Rosario)	♂	53.0	48.0	15.0
" "	♂	54.0	45.0	15.0
" "	♀	54.0	48.0	13.0
" "	♀	54.0	46.0	13.0
" "	♀	51.0	46.0	15.0
Santa Filomena (Rosario)	♂	56.0	48.5	14.0
Riachão	♂	55.0	55.0	13.0
Tabocas	♀	51.5	49.0	13.0
Pernambuco, Rio Branco	♂	53.0	55.5	13.0
Piauhuy:				
Therezina	♂	54.0	2	13.5
"	♀	50.0	47.5	13.5
Urussuhy	♂	55.5	50.0	13.5
Corrente	♂	49.0	53.0	14.5
Bahia:				
Oróbo	♂	51.0	43.0	13.5
"	♀	51.0	47.5	13.0
"	♀	51.0	48.5	14.0

Other Specimens Examined

FRENCH GUIANA ³				
Cayenne	6 ♂	9 ♀		Roths. Coll.
BRITISH GUIANA				
Rio Rupununi	1 ♂			" "
VENEZUELA				
Mt. Duida (Valle de Los Monos)	2 ♂	2 ♀		
BRAZIL				
Maranhão:				
Miritiba	1 ♂ ad.			Roths. Coll.
Barra do Corda				
Corda	1 ♂ ad.			
São Francisco	1 ♂ juv.	2 ♀		Field Mus.
Tranqueira	1 ♀			" "
Granjeira	1 ♂ ad.	1 ♀ ad.		" "
Grajahú	1 ♀ ad.			" "
Pará:				
Marajó, Chaves	1 ♂ ad.			
Fazenda Teso				
São José	1 ♀ ad.			
NE. BRAZIL				
Utinga, near Pará				
Pará	1 ♂ ad.			
Prata, near Pará				
Pará	3 ♂ ad.	3 ♀ ad.		Roths. Coll.
Rio Tocantins, Arumatheua				
Arumatheua	1 ♀ ad.			
Rio Tapajoz, Boim				
Boim	1 ♂ ad.			

¹ See Naumburg, 1935, Bull. Amer. Mus. Nat. Hist., LXVIII, Art. 6.² Tail imperfect.³ Birds from eastern Brazil are identical with the Guianan specimens.

NORTH BRAZIL	
Limão, Rio Cotinga	1 ♂ ad.
Frechal, Rio Surumu	1 ♂ ad. 3 ♀ ad.
Rio Amazon:	
Villa Bella Imperatrix	1 ♂ ad. 1 ♀ ad.
Faro (Rio Jamunda)	4 ♂ ad. 2 ♀ ad.
Santarem	2 ♀ ad. Roths. Coll.
Rio Madeira:	
Borba	2 ♂ ad. 2 ♀ ad.
Santa Isabel	
Rio Preto	2 ♂ ad. 3 ♀ ad. " "
Porto Velho	1 ♀ ad.
Goyaz:	
Rio Araguaya	3 ♂ ad. " "
Rio Thesouras	1 ♂ juv. 1 ♀ ad. " "

Formicivora serrana Hellmayr

Neorhopias serrana HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, p. 377, Minas Geraës (Sete Lagôa).

Formicivora nigricollis (not of Swainson) MÉNÉTRÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 482, Pl. III, fig. 1 (part, ♂ ad.; sur les bords du Rio Balcalhão, Prov. Minas Geraës).

? *Formicivora melanogastra* (not of Pelzeln) REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben., p. 364, Minas Geraës (Lagôa Santa, Sete Lagôa) and Rio de Janeiro (Aldea da Pedra, Rio Parahyba).

Formicivora rufatra (not of Lafresnaye and D'Orbigny) CABANIS, 1874, Journ. Ornith., XXII, p. 86, Rio de Janeiro (Cantagallo).

Formicivora grisea (not of Boddaert) IHERING, 1907, Cat. Faun. Braz., I, p. 210 (part), Minas Geraës (Vargem Alegre).

Neorhopias grisea nigricollis SNETHLAGE, 1927, Journ. Orn., LXXIV, p. 372, Espirito Santo (Baixo Guandú) and Minas Geraës (Fazenda Taveira, valley of the Rio Gualaxú, upper Rio Doce, near Marianna).

Formicivora serrana PINTO, 1938, Rev. Mus. Paul., XXII, p. 485, Minas Geraës (Vargem Alegre, Rio Matipó, Rio Sacramento).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Minas Geraës: Serro do Caparaó, Fazenda Emerick (alt. 3300 ft.), 1 ♂ ad., 1 ♀ ad., Sept. 14, 19, 1929, Resplendor; Rio Doce (alt. 400 ft.), 1 ♀ ad., January 11, 1930.

RANGE.—Southeastern Brazil in states of Minas Geraës (Rio Bacalhão, Vargem Alegre, near Marianna, Rio Matipó, Rio Sacramento, Resplendor [Rio Doce], Fazenda Taveira [valley of the Rio Gualaxú], Sete Lagôa, Lagôa Santa), Es-

pirito Santo (Baixo Guandú), and Rio de Janeiro (Organ Mts., valley of the Parahyba [Aldea de Pedra] and Cantagallo).

This species is easily recognizable by the mars brown instead of slaty brownish upper parts and by the superciliaries being much widened posteriorly.

The males have the sides of the breast and flanks smoky gray, the feathers of the flanks suffused with whitish and buffy brown. The tertials along the outer edge of the web are narrowly edged with russet instead of broadly edged with white as in *F. melanogaster*.

The female underneath is deeper ochraceous; bill is stronger and thicker.

Measurements

BRAZIL	SEX	WING	TAIL	EXP.
				CUL-MEN
Minas Geraës:				
Faz. Emerick	♂ ad.	52.5	54	13.0
Fazendinha	♀ ad.	52.5	55	12.0
Rio Doce (north shore)	♀ ad.	51.5	54	13.5

Formicivora melanogaster melanogaster Pelzeln

Formicivora melanogaster PELZELN, 1868, Orn. Bras., II, Sept., pp. 83, 154, Goyaz (City of Goyaz).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 248, note (Goyaz).—IHERING, 1907, Cat. Faun. Braz., I, p. 210, São Paulo (Avanhandava).

Formicivora melanogastra IHERING, 1905, Rev. Mus. Paul., VI, p. 355, north São Paulo (Avanhandava).—HELLMAYR, 1908, Nov. Zool., XV, p. 72, Goyaz (Rio Araguaia).

Microrhopias melanogastris (sic) iliaca TODD, 1917, Proc. Biol. Soc. Wash., XXX, Jan., p. 5, se. Bolivia (Villa Montes, Rio Pilcomayo, Prov. Tarija—type in the Carnegie Museum).

Neorhopias melanogaster HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 190, part Goyaz (City of Goyaz, Rio Araguaia), Matto Grosso (Urucúm near Corumbá), south to northern São Paulo (São Jeronymo-Avanhandava, Tiété district); eastern Bolivia in depts. of Santa Cruz (Monte de Basílico, Guanacos, Prov. Cordillera), Chuquisaca (Macheriti), and Tarija (Villa Montes, Rio Pilcomayo).

Formicivora melanogaster melanogaster PINTO, 1938, Rev. Mus. Paul., XXII, p. 485, São Paulo (São Jeronymo).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Tambury (alt. 1100 ft.), 1 ♂ juv., Oct. 5, 1927; Iracema (alt. 2300 ft.), 2 ♂ ad., Oct. 6–8, 1927; Ituassú (alt. 3000 ft.), 1 ♂ ad., July 4, 1928; Boa Nova (alt. 2600 ft.), 1 ♂ ad., June 5, 1928.

RANGE.—Eastern Bolivia in depts. of Santa Cruz (Monte de Basílico, Guanacos, Prov. Cordillera); Chuquisaca (Macheriti) and Tarija (Villa Montes, Rio Pilcomayo); central and southeast Brazil in Matto Grosso (Urucúm, Tapirapoan, Salto Bello), Goyaz (Goyaz City, Rio Araguaia), central Bahia (Andarahy, Macaco Secco, Boa Nova, Iracema, Ituassú, Tambury), and São Paulo (São Jeronymo-Avanhandava, Tiété district).

Measurements

BRAZIL	SEX	WING	TAIL	EXP.
				CUL-MEN
Bahia:				
Boa Nova	♂	52.0	58.0	13.0
Iracema	♂	53.0	58.5	14.0
"	♂	58.0	60.0	13.5
Ituassú	♂	52.0	58.0	13.0
Tambury	♂ juv.	52.0	55.0	13.0

Other Specimens Examined

BRAZIL	SEX	WING	TAIL	ROTHS.	COLL.
Goyaz:					
Rio Araguaia	1 ♂ ad.				
"	1 ♂ ad.	2 ♀ ad.			
"	1 ♂ ad.	1 ♀ ad.			
Matto Grosso:					
Tapirapoan	2 ♂ ad.	3 ♀ ad.			
Uturity near Salto Bello	1 ♂ ad.	1 ♀ ad.			
Urucum		1 ♀ ad.			

The type of *Formicivora melanogaster melanogaster* comes from Goyaz City, that of *Formicivora melanogaster bahiae* from Lamarão, Bahia.

Kaempfer's localities, Iracema, Tambury, Ituassú, are in the vicinity of Macaco Secco and Andarahy and Dr. Hellmayr writes me that a specimen from Andarahy is inseparable from typical *melanogaster*.

There are differences between northern birds from Santa Rita (Bahia), Piauihy, and Ceará, and those from southern Bahia (Tambury, Iracema, Ituassú, and Boa Nova). The males from the southern

localities are darker above and have very few if any white feathers on the flanks, whereas there is an extensive white area on the flanks extending up to sides of neck and joining the supercliliary stripe in males from Ceará, Piauhy, and Santa Rita (Bahia), which are also paler brown.

Neorhophias melanogaster bahiae (Hellmayr)

Formicivora melanogastra bahiae HELLMAYR, 1909, Bull. Brit. Orn. Cl., XXIII, p. 65, Bahia (Lamarão, near Bahia City).

Formicivora grisea pallascens SNETHLAGE, 1925, Journ. Ornith., LXXIII, p. 271, Ceará (Serra de Ibiapaba), type in Berlin Museum.

Formicivora melanogastra (not of Pelzeln) REISER, 1910, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXVI, p. 66, Piauhy (Pé do Morro, near Parnaguá).

Formicivora grisea (not *Turdus griseus* Boddaert) REISER, 1910, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXVI, p. 66, part; No. 434,459, ♂♂, nw, Bahia (Fazenda da Serra, Rio Grande), No. 714, Piauhy (Parnaguá).

Neorhophias melanogaster HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 189, eastern and central Brazil, in states of Piauhy, Ceará, Bahia (Lamarão, Macaco Secco, near Andarahy, Cidade da Barra, Joazeiro, Rio São Francisco; Rio Grande).

Neorhophias (Formicivora) melanogastra REISER, 1925, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXVI, p. 143, Bahia (Fazenda da Serra, Rio Grande), Piauhy (Pé do Morro).

Neorhophias melanogaster bahiae HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 375, Piauhy (Arára, Parnaguá), Ceará (Juá).

Formicivora melanogaster bahiae PINTO, 1938, Rev. Mus. Paul., XXII, p. 485, Bahia (Cidade da Barra).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Ceará: Lavras (alt. 800 ft.), 1 ♀ juv., Dec. 13, 1926, Viçosa, Serra da Ibiapaba (alt. 2500 ft.), Nov. 4, 1926. Piauhy: Parnaguá (alt. over 1300 ft.), 1 ♂ ad., June 19, 1927. Bahia: Morro do Chapeó (alt. 3600 ft.), 3 ♂ ad., May 2, 6, 8, 1928; Santa Rita do Rio Preto (alt. 1600 ft.), 5 ♂, 1 ♂ ad., May 16, 17, August 9, 1927.

RANGE.—Eastern and Central Brazil in states of Piauhy (Pé do Morro, near Burity, Parnaguá, Arará); Ceará (Lavras, Viçosa); Bahia (Santa Rita do Rio Preto, Morro do Chapeó, Cidade da Barra, Joazeiro, Rio São Francisco, Fazenda da Serra, Rio Grande).

Measurements

	SEX	WING	TAIL	EXP. CULMEN
BRAZIL				
Ceará:				
São Domingos	♂ juv.	54.0	53.0	13.0
Lavras	♂	52.0	51.0	15.0
"	♂	52.0	55.0	15.5
Viçosa	♀	54.0	56.5	12.0
Piauhy:				
Parnaguá	♂	55.0	64.0	13.5
Santa Rita do				
Rio Preto	5 ♂	54.0	60.0	12.4
Santa Rita do				
Rio Preto	♀	51.0	58.0	12.5
Morro do Chapeó	♂	54.0	56.0	14.0
" " "	♂	54.0	54.0	13.5
" " "	♂	57.0	63.0	12.0

Other Specimens Examined

BRAZIL

Bahia: Lamarão 1 ♂¹ 1 ♀ Roths. Coll.

Birds from Ceará, Piauhy, and Santa Rita are *Formicivora melanogaster bahiae*, whereas those from Morro do Chapeó, being from an intermediate location, are nevertheless nearer the Santa Rita specimens, in the paler brown, less sooty color above, and in the extent of white on the flanks and sides of the neck. I therefore allocate these specimens to the northern race *Formicivora melanogaster bahiae*.

Formicivora rufa rufa Wied²

Myiothera rufa WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1095, interior of Bahia.³

Tamnophilus rufater LAFRESNAYE AND D'ORBIGNY, 1837, Syn. Av., I, in Mag. Zool., VII, cl. 2, p. 12 (Prov. Chiquitos, Moxos, e. Bolivia).—SCLATER, 1858, P. Z. S. London, XXVI, p. 239 (part; Bolivia).

Formicivora rufatra PELZELN, 1868, Orn. Bras., II, p. 83, part, n. São Paulo (Rio das Pedras), Matto Grosso (Cuyabá).—REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben, p. 363, west Minas Geraës (Lagôa Santa), n. São Paulo (São Bento de Araraquara).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 250, Matto Grosso (Chapada).—SALVADORI, 1900,

¹ Type of *F. m. bahiae* Hellmayr.

² If, as Mr. Zimmer claims (1932, Amer. Mus. Novit., No. 538, p. 7), *M. rufa* Wied, 1831, and *Tamnophilus rufater* Lafres. and d'Orb., 1837, are the same, Wied's name has priority.

³ I can only conclude after a thorough study that the types of *M. rufa* came from Minas Geraës border of Bahia, and that the interior is occupied by the western form which Dr. Hellmayr called *rufatra* but which, according to Mr. Zimmer, becomes *rufa rufa*, ranging from eastern Bolivia right through Brazil to the border of Bahia.

Boll. Mus. Torino, XV, No. 378, p. 9, sw. Matto Grosso (Urucúm).

Formicivora rufa ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 253 (Bahia), two ♀ in coll. A. M. N. H.

Formicivora rufa (not of Wied) MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 497, Pl. ix, fig. 1, Matto Grosso (Cuyabá).—ALLEN, 1893, Bull. Amer. Mus. Nat. Hist., V, p. 121, Matto Grosso (Chapada).—IHERING, 1907, Cat. Faun. Braz., I, p. 210, north São Paulo (Jaboticabal, Rincão, Itapúra, Bebedouro, Avanhandava).—HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 377, part, Goyaz (Philadelphia).

Neorhopias rufa rufatra PINTO, 1932, Rev. Mus. Paul., XVII, (2), p. 756, Matto Grosso (Tres Lagôas, Aquidauana); idem, 1936, *op. cit.*, XX, p. 86, Goyaz (Rio das Almas, Rio Meia, Ponte); idem, 1938, *op. cit.*, XXII, p. 486, São Paulo (Jaboticabal, Rincão, São Jeronymo, Bebedouro, Itapura, Franca), Matto Grosso (Coxim, Campo Grande, Aquidauana).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: southern Matto Grosso (São Francisco Ranch (alt. 1200 ft.), 1 ♂ ad., July 3, 1930; Campanario, 1 ♂ ad., July 9, 1930); Espirito Santo: Lagôa Juparaná, 1 ♂ ad., Nov. 6, 1929.

RANGE.—Bolivia; Paraguay; Brazil [Bahia; Matto Grosso (Coxim, Campo Grande, Aquidauana, Chapada, Caceres, Cuyabá, Urucum, Descalvados, Tapira-pouan, Palmira, Rio Taquary, São Francisco Ranch, Campanario); Goyaz (Rio Araguaya, Rio Thesouras, Rio das Almas, Rio Meia, Ponte); São Paulo (Jaboticabal, Rincão, São Jeronymo, Bebedouro, Itapura, Avanhandava, Franca, São Bento de Araraquara); west Minas Geraes (Lagôa Santa) and Espirito Santo (Lagôa Juparaná)].

Formicivora rufa chapmani Cherrie

Formicivora rufa chapmani CHERRIE, 1916, Bull. Amer. Mus. Nat. Hist., XXXV, p. 396 (Altar do Chão, Rio Tapajoz).

Formicivora rufa REISER, 1910, Denkschr. math. naturw. Kl. Ak. Wiss. Wien, LXXVI, p. 66, Piauhy (Santa Philomena, Serra de Santa Philomena, Santa Maria, Corrientes, Rio Parnahyba).—SNETHLAGE, 1913, Journ. Ornith., LXI, p. 529 (Santarem, Monte Alegre); idem, 1914, Bol. Mus. Goeldi, VIII, p. 288 (Rio Acará; Monte Alegre; Serra do Ereré; Rio Maecurú).

Drymophila rufa HELLMAYR, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 92 (Rio Acará).

Neorhopias rufa rufa HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 377, part, Maranhão (Ponto [Canella], Tranqueira, Fazenda Inhuma); Piauhy.—PINTO, 1938, Rev. Mus. Paul., XX, p. 486, Pará (Santarem); Minas Geraes¹ (Pirapora).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Piauhy: Gilbúes (alt. 1500 ft.), 2 ♂ ad., July 11, 13, 1927.

RANGE.—South and eastern Brazil: Pará, Maranhão (Tranqueira, Ponto [Canella]), Alto Parnahyba, Fazenda Inhuma, Piauhy (Santa Philomena, Gilbúes).

Other Specimens Examined

BRAZIL

Maranhão:

Tranqueira	2 ♂ ad.	3 ♀ ad.	Field Mus.
Ponto (Canella)	1 ♂ juv.	1 ♀ ad.	“ “
Inhuma, Alto Parnahyba	1 ♂		“ “
Santarem (type)	1 ♂ ad.		
Santarem (type)		1 ♀ ad.	

The females may at once be recognized by the very much heavier black streaking on the under parts. The feathers on the throat are black with white edges, whereas in birds from Matto Grosso (*Formicivora rufa rufa*) they are white with black shaft streaks. The males are darker rufescent above than either the series of specimens from Chapada or Goyaz. I have seen the type specimen (♀) of *Formicivora rufa chapmani* from Santarem in the Amer. Mus. Nat. Hist. and have compared it with females from Piauhy and Maranhão and all these specimens from northern Brazil are much more broadly and heavily striped beneath than the southern specimens from Goyaz,² São Paulo, and Matto Grosso and are also more broadly and heavily striped beneath than Wied's types from Bahia. The birds from northern Brazil are what Mr. Zimmer calls *Formicivora rufa chapmani*.

However, Pinto (1936, Rev. Mus. Paul., XX, p. 86) insists on the heavy streaking

¹ I have seen no specimens from Minas Geraes.

² Birds from Goyaz appear under *Formicivora rufa rufa* though I believe them to be intergrades.

in the female from Goyaz and (*op. cit.*, XXII, 1938) refers females from Minas Geraës¹ (Pirapora) to the heavily streaked form (he also had some from Santarem) which is *Formicivora rufa chapmani*.

I believe birds from Goyaz and the Rio Madeira to be intergrades and provisionally refer them to *Formicivora rufa rufa*, as the black streaking underneath in the specimens I have examined is narrower and lighter than in *Formicivora rufa chapmani*. These specimens from Goyaz and the Rio Madeira, though they are intermediate in character, are possibly nearer *Formicivora rufa rufa*.

Other Specimens Examined

BRAZIL			
Bahia	2 ♀ ad.	Wied Coll.	
"	3 ♂ ad.	(types)	Roths. Coll.
Matto Grosso:			
Chapada	4 ♂ ad. 1 ♀		Snethlage Coll.
Urucúm	3 ♂ ad. 4 ♀ ad.		Roosevelt Coll.
Descalvados	1 ♂ ad.		"
Tapirapoan	1 ♂ ad.		"
Palmira on the Rio Taquary	1 ♀		"
Goyaz:			
Rio Thesouras	♀ ad.	Roths. Coll.	
Rio Araguaya	♀ ad.	"	"

The female from Goyaz is somewhat intermediate between *Formicivora rufa rufa* and *Formicivora rufa chapmani*. It has the black streaking underneath narrower than *rufa chapmani*, but not as narrow as *rufa rufa*. The feathers of the rectrices are darker than *rufa rufa* but not as blackish as *rufa chapmani* where the blackish color practically extends to the base of the feather. The females of this entire group are more strikingly different from the males and may at once be recognized.

Dr. Hellmayr says that after reading Pinto's paper and weighing all evidence he is now convinced the types² of *M. rufa* never came from Bahia. The birds I have seen from Goyaz, Rio Thesouras, Rio

Araguaya, and Rio Madeira, Humaytha, have the upper parts rufous brown, not as rufous as the birds from Parahyba, Piauhy, and lower Amazonia. The black streaking underneath is narrower and lighter and is intermediate between *Formicivora rufa rufa* and *Formicivora rufa chapmani*.

This form seems to range across southern Brazil and Bolivia. The female has the black streakings underneath considerably narrower, especially on the breast, though not less extended on the abdomen. Wied's types which I have carefully examined agree in the narrow streaking of the under parts with specimens from Matto Grosso and are very distinct from the broadly streaked form from Santarem, which is *Formicivora rufa chapmani*.

Drymophila ferruginea (Temminck)

Myiothera ferruginea TEMMINCK, 1822, Rec. Pl. col., livr. XX, May, Pl. 132, fig. 3 (= ♂ ad.) ("Bresil," Hellmayr suggests Rio de Janeiro).

Myiothera ferruginea LICHTENSTEIN, 1823 Verz. Doubl. Berliner Mus., p. 44 (Bahia; descr. ♂).

Formicivora ferruginea MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 488, Rio de Janeiro (Serra dos Orgãos).—PELZELN, 1868, Orn. Bras., II, p. 83, São Paulo (Mattodentro, Capitão Mor, Ypanema).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 252, se. Brazil (Bahia).—IHERING, 1899, Rev. Mus. Paul., III, p. 241, São Paulo (Alto da Serra, Iguapé); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo); idem, 1907, Cat. Faun. Braz., I, p. 211, São Paulo (Alto da Serra, Iguapé, Rio Feio, Ubatuba); Paraná (Ourinho).—HELLMAYR, 1915, Verhandl. Orn. Ges. Bayr., XII, No. 2, p. 148, Espírito Santo (Victoria).—DABBENE, 1910, Anal. Mus. Nac. B. Aires, XVIII, p. 285 (Alto Paraná); idem, 1914, Bol. Soc. Physic., I, p. 264 (Paraguay).

Drymophila variegata SUCH, 1825, Zool. Journ., I, No. 4, Jan., p. 559, Prov. Rio de Janeiro (vicinity of Goaytacazes = Campos).

Formicivora rubricollis BERTONI, 1901, Av. Nuev. Parag., p. 140 (Alto Paraná, Puerto Bertoni).

Ellipura ferruginea BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 71, Rio de Janeiro (Serra dos Orgãos).—CABANIS, 1874, Journ. Ornith., XXII, p. 86, Rio de Janeiro (Cantagallo).

Drymophila ferruginea BERTONI, 1914, Faun. Parag., p. 50, Paraguay (Puerto Bertoni).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 195, wooded region of southeastern Brazil, from southern Bahia

¹ I have seen no females from Minas Geraës.

² I do not believe either Dr. Hellmayr nor Mr. Pinto ever saw Wied's types from Bahia, which are in The American Museum of Natural History and which I have carefully examined and which are easily separable from *F. rufa chapmani* from Santarem.

to Paraná and adjoining portions of Paraguay (Puerto Bertoni) and Misiones, northeastern Argentina.—SZTOLCMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 148, Paraná (Fazenda Concordia, Fazenda Durski, Cará Pintada, Vermelho, Therezina, Candido de Abreu).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 295, Serra do Itatiaya (Itatiaya).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 487, São Paulo (Iguapé, Alto da Serra, Ubatuba, Rio Feio, Ituverava, Itatiba, Glycerio, Sylvania, Tabatinguara, Cananéa).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Jequié (alt. 180 meters), 1 ♂ ad., Sept. 14, 1927. Minas Geraës: Fazenda Emerick, Rio do Caparaó (alt. 3500 ft.), 1 ♂ ad., Sept. 13, 1929; Rio do Caparaó (alt. 3000 ft.), 2 ♂ ad., July 26, 27, 1929, 1 ♀ ad., Aug. 3, 1929; Santa Barbara do Caparaó (alt. 3000 ft.), 2 ♂ ad., 1 ♀ ad., Oct. 4, 5, 1929. Paraná: Rio Iguassú, Porto Almeida (alt. 2000 ft.), 1 ♂, 1 ♀ juv., April 1, 1930. Santa Catharina: Hansa (alt. 250 ft.), 2 ♂ ad., 2 ♀ ad., July 2, 1929; Palmital (São Francisco, alt. sea level), June 20, 21, 24, 1929.

RANGE.—Wooded region of southeastern Brazil, from southern Bahia (Jequié) and Minas Geraës (Fazenda Emerick, Rio Caparaó, Santa Barbara do Caparaó), south through Rio de Janeiro (Serra dos Orgãos, Campos, Cantagallo, Therezopolis, Organ Mts., Serra do Itatiaya [Monte Serrat, Ponte Maromba, Macieiras, Alto da Serra]), São Paulo (Rio Feio, S. Sebastião, Victoria, Piquete, Capitão Mor, Mattodentro, Ipanemá, Alto da Serra, Iguapé, Ubatuba, Araçatuba, Ituverava, Itatiba, Glycerio, Sylvania, Tabatinguara, Cananéa), Paraná (Ourinho, Fazenda Concordia, Fazenda Durski, Cará Pintada, Vermelho, Therezina, Candida de Abreu, Porto Almeida, Rio Iguassú), to Santa Catharina (Hansa, Palmital, São Francisco); Paraguay (Puerto Bertoni); northeastern Argentina (Misiones).

Other Specimens Examined

BRAZIL.—São Paulo: S. Sebastião, 1 ♂ ad., Victoria, 2 ♂ ad., 1 ♀ ad., Piquete, 1 ♀ ad. (Roths. Coll.), Alto da Serra, Rio Feio, 2 ♂ ad.; Victoria, 3 ♀ ad., Araçatuba, 1 ♀ ad., Field Mus., Chicago. Rio de Janeiro: Therezopolis, Organ Mts., 1 ♀ ad., Monte Serrat, 2 ♂ ad., Ponte Maromba, 1 ♂ ad., Macieiras, 1 ♂ ad. (Serra do Itatiaya).

This species distributed over southeastern Brazil shows a considerable amount of individual variation. It is found in the dry region of the caatinga forest, in the higher altitudes of the Serra do Caparaó which now, due to the cutting down of trees, appears like a campos region. It is found also in Santa Catharina, at sea level.

The male and female from Paraná (Porto Almeida) and one adult female from Rio de Janeiro (Therezopolis) are less ferruginous below than the series from Minas Geraës collected by Mr. Kaempfer. The male and female from Paraná are moulting and appear to be young birds, while the female from Therezopolis is in fullest adult plumage.

Drymophila genei (Filippi)

Fornicivora genei FILIPPI, 1847, Mus. Mediolan., I, p. 31 ("Brasilia?").—PELZELN, 1874, Nunquam otios., II, p. 291 (crit.); Rio de Janeiro [Novo Friburgo].

Fornicivora genei SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 253 (se. Brazil; descr. ♂).—IHERING, 1900, Rev. Mus. Paul., IV, p. 158, Rio de Janeiro (Novo Friburgo).

Fornicivora erythrocerca IHERING, 1907, Cat. Faun. Braz., I, p. 211, Rio de Janeiro (Itatiaya, descr. ♀).—LÜDERWALDT, 1909, Zool. Jahrb., Abt. Syst., XXVII, No. 4, p. 350, Rio de Janeiro (Campos do Itatiaya).

Drymophila genei HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 195, southeastern Brazil, in State of Rio de Janeiro (Novo Friburgo, Campos do Itatiaya).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LXII, p. 295, Serra do Itatiaya (Itatiaya, alt. 3800–7500 ft.).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 487, Rio de Janeiro (Campos do Itatiaya).

SPECIMENS EXAMINED

(Kaempfer Collection)

BRAZIL.—Minas Geraës: Campos do São Domingos (alt. 6500 ft.), 2 ♂ ad., 3 ♂ ad., Aug. 12, 17, 19, 1929; Cachoeira da Fumaça (Campos do São Domingos, alt. 6000 ft.); Casa Queimada (Campos do São Domingos, alt. 7200 ft.), 3 ♂ ad., 1 ♀ ad., Aug. 31, 1929; Gruta da Pedra Menina (alt. 6000 ft.), 2 ♂ ad., Aug. 23, 24, 1929; Varzea das Congonhas (Campos do São Domingos, alt. 1840 meters), 1 ♂ ad., Aug. 24, 1929.

RANGE.—Southeastern Brazil in State of Rio de Janeiro (Nova Friburgo, Campos do Itatiaya, Macieiras, Alto do Itatiaya [Serra do Itatiaya]) and Minas Geraës

(campos do São Domingos [Cachoeira da Fumaça, Casa Queimada, Gruta da Pedra Menina, Varzea das Congonhas]).

Other Specimens Examined

BRAZIL.—Rio de Janeiro: Mt. Itatiaia (Roths. Coll.), 1 ♂ ad.; Serra do Itatiaia (Macieiras) (Holt Coll.), 2 ♂ ad., 9 ♀ ad.

In the immature females the foreneck and chest show faint olive freckles, whereas the adult female is uniform olive fulvous on the foreneck, chest, and abdomen, with a faint white patch on the upper part of the foreneck.

This species is found in a wide valley crossed by small streams, in patches of forest and swamp, bushes, and other low vegetation-like brush.¹

This is the first record of this species from Minas Geraës proper.

Drymophila ochropyga Hellmayr

Formicivora malura (not of Temminck) MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 496 (part, ♀), Minas Geraës (Diamantina).²

Formicivora genei (not of Filippi) SCLATER, 1858, P. Z. S. London, XXVI, p. 239 (descr. ♂, ♀; se. Brazil).—PELZELN, 1868, Orn. Bras., II, p. 83, São Paulo (Ypanema).

Formicivora striata (not *Thamnophilus striatus* Spix) SCLATER, 1862, Cat. Coll. Amer. B., p. 182 (Brazil, "Bahia").—IHERING, 1899, Rev. Mus. Paul., III, p. 242, São Paulo (Alto da Serra, Iguapé); idem, 1907, Cat. Faun. Braz., I, p. 211, São Paulo (Ypiranga, Iguapé, Alto da Serra).

Formicivora ochropyga PELZELN, 1874, Nunquam otios., II, p. 291 (nom. nud.).—HELLMAYR, 1906, Abhandl. Kl. Bayr. Ak. Wiss., XXII, No. 3, p. 663 (nom. nov. for *Formicivora striata* [not of Spix]).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 252, São Paulo (Ypanema).

Drymophila richmondi CORY, 1919, Auk, XXXVI, p. 88 (new name for *Formicivora striata* Sclater (nec Spix), 1890, Cat. B. Brit. Mus., XV, p. 252).

Drymophila ochropyga HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 196, forest region of southeastern Brazil, in states of São Paulo (Ypanema, Victoria, Ypiranga, Iguapé, Alto da Serra) and Rio de Janeiro.—SZTOLCMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 148, Paraná (Candido Abreu, Therezina, Salto de Ubá).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVIII, p. 297, Serra do Itatiaia (Itatiaia, 2900–3800

ft.).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 488, São Paulo (Ypiranga, Alto da Serra, Mogy das Cruzes, Iguapé).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Minas Geraës: Serra do Caparaó, Rio Caparaó (alt. 3200 ft.) [1 "♀" ad.], Aug. 3, 1929; Serra do Caparaó, Fazenda Emerick (alt. 3200 ft.) [1 "♀" ad.], Sept. 16, 1929.

RANGE.—Forest region of southeastern Brazil in states of São Paulo (Ypanema, Victoria, Ypiranga, Iguapé, Alto da Serra, Mogy das Cruzes) and Rio de Janeiro (Therezopolis, Ponte Maromba, Monte Serrat).

Other Specimens Examined

BRAZIL		
São Paulo:		
Victoria	4 ♂ ad.	Roths. Coll.
Alto da Serra	2 ♂ ad.	
Rio de Janeiro:	1 ♂ ad.	" "
Therezopolis,		
Organ Mts.	1 ♂ ad.	
Monte Serrat,		
Serra do		
Itatiaia	2 ♀ ad.	
Ponte Maromba	1 ♀ ad.	

These birds were found in country devastated by forest fires.

Drymophila malura (Temminck)

Myiothera malura (Natterer MS.) TEMMINCK, 1825, Rec. Pl. col., livr. LIX, June, Pl. 353, fig. 1 (♂), 2 (♀) ("au Brésil, dans le district d'Ypanema," Prov. São Paulo).

Formicivora malura MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 496 (part; descr. of ♂ = ♂ juv.; Minas Geraës [Diamantina], locality doubtless erroneous).—SCLATER, 1858, P. Z. S. London, XXVI, p. 241, São Paulo (Ypanema, descr. ♂, ♀).—PELZELN, 1868, Orn. Bras., II, p. 83, São Paulo (Ypanema); idem, 1874, Nunquam otios., II, p. 291, Rio de Janeiro (Novo Friburgo).—BERLEPSCH AND IHERING, 1885, Zeits. ges. Orn., II, p. 150, Rio Grande do Sul (Taquara).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 254 (se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 243, São Paulo (Piquete, Iporanga, Ypiranga); idem, 1900, *op. cit.*, p. 158, Rio de Janeiro (Novo Friburgo); idem, 1899–1900, Anuario Est. Rio Grande do Sul, p. 130 (Mundo Novo); idem, 1907, Cat. Faun. Braz., I, p. 212, São Paulo (Piquete, Ypiranga, Estação do Rio Grande, Iporanga, Itararé, Alto da Serra).—BERTONI, 1906, Seg. Contrib. Ornit. Parag. Nuev. Espec. Parag., p. 7, Paraguay;

¹ See: Naumburg, 1935, Bull. Amer. Mus. Nat. Hist., LXVIII, p. 459, etc.

² Possibly secured in the vicinity of Rio de Janeiro. See: Hellmayr, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 196.

Argentina (Misiones); Brazil.—CHUBB, 1910, Ibis, p. 522, Paraguay (Sapucay).

Ellipura malura BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 68, Rio de Janeiro (Novo Friburgo).

Formicivora Arechaveletae BERTONI, 1901, Av. Nuev. Parag., p. 141, Paraguay (Alto Paraná = ♂ juv.).

Drymophila malura BERTONI, 1914, Faun. Parag., p. 50, Paraguay (Puerto Bertoni, Iguassú).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 200, forest region of southeastern Brazil, from Rio de Janeiro to Rio Grande do Sul; Paraguay (Sapucay, Puerto Bertoni, Alto Paraná, and adjoining parts of Misiones), northeastern Argentina.—SZTOLCMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 148, Paraná (Fazenda Ferreira, Fazenda Durski, Castro, Cará Pintada, and Salto de Ubá).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 488, São Paulo (Piquete, Iporanga, Alto do Ypiranga, Estação do Rio Grande, Itararé, Alto da Serra, Mogy das Cruzes) and Paraná (Castro).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Corvo (Serra da Graciosa, alt. 2700 ft.), 3 ♂ ad., 3 ♂ juv., 5 ♀ ad., Feb. 10, 14, 19, 21, 1930; Rio Iguassú (alt. 3000 ft.), 1 ♂ ad., March 24, 1930. Santa Catharina: Ilha Redonda in the Rio Uruguay (alt. 500 ft.), 1 ♂ juv., Jan. 22, 1928; Palmitos (alt. 1500 ft.), 1 ♂ juv., Jan. 18, 1929. Rio Grande do Sul: Erebangó (alt. 2500 ft.), 1 ♂ juv., March 26, 1929; Nonohay (alt. 2000 ft.), 1 ♂ ad., March 11, 1929.

RANGE.—Forested region of southeastern Brazil, from Rio de Janeiro (Nova Friburgo) through São Paulo (Ypanema, Piquete, Victoria, Estação do Rio Grande, Alto do Ypiranga, Iporanga, Itararé, Alto da Serra, Mogy das Cruzes) to Paraná (Corvo, Rio Iguassú, Fazenda Ferreira, Fazenda Durski, Cará Pintada and Salto de Ubá, Castro) to Santa Catharina (Ilha Redonda in the Rio Uruguay, Palmitos) and Rio Grande do Sul (Taquara, Mundo Novo, Nonohay, Erebangó); Paraguay (Sapucay, Puerto Bertoni, Alto Paraná); northeastern Argentina (Misiones).

Other Specimens Examined

BRAZIL.—São Paulo: Victoria, 1 ♂ ad., 4 ♀ ad. (Roths. Coll.). Paraná: Castro, 1 ♂ ad.

In the series of specimens collected by Mr. Kaempfer, both in pine forests and in country covered with deciduous trees,

there are several juvenal males in very fresh plumage. They are going into the first annual plumage.

The head and neck are not quite as blackish and the light striations are brownish instead of white. Above they are brownish instead of plumbeous gray; a large dorsal spot is white tipped with brownish instead of black, however showing some black just before the brown tip of each feather. In the moulting bird the wing-coverts are the only part of the adult dress which these specimens have already acquired. They are black with white tips. Beneath throat and breast fulvous, showing numerous though faintly marked brownish instead of black striations. Belly brownish, though not as dark as the upper parts and somewhat darker than the throat and breast. Under wing-coverts pale fulvous instead of white as in the adult male bird.

Drymophila squamata Lichtenstein

Myiothera squamata LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 44 (Bahia; descr. ♂, ♀).

Formicivora maculata SWAINSON, 1825, Zool. Journ., II, No. 6, July, p. 147 ("Mining District of Brazil"; descr. ♂).—MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 494, Pl. v, fig. 1 (Rio de Janeiro).

Ellipura squamata BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 70, Rio de Janeiro.—CABANIS, 1874, Journ. Ornith., XXII, p. 86, Rio de Janeiro (Cantagallo).

Formicivora squamata SCLATER, 1858, P. Z. S. London, XXVI, p. 241 (se. Brazil; descr. ♂, ♀).—PELZELN, 1868, Orn. Bras., II, p. 84, Bahia, Rio de Janeiro (Sapitiba).—REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben, p. 364, Rio de Janeiro (Aldea da Pedra).—PELZELN, 1874, Nunquam otios., II, p. 291, Rio de Janeiro (Novo Friburgo).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 254, Bahia.—IHERING, 1899, Rev. Mus. Paul., III, p. 243, São Paulo (Iguapé); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo, Novo Friburgo); idem, 1907, Cat. Faun. Braz., I, p. 213, São Paulo (Iguapé, Ubatuba); Espirito Santo (Rio Doce).—LIMA, 1920, Rev. Mus. Paul., XII, (2), p. 90, s. Bahia (Ilhéos to Belmonte).

Formicivora stictocorypha BOUCARD AND BERLEPSCH, 1892, The Humming Bird, II, No. 6, June, p. 44, Rio de Janeiro (Porto Real).

Formicivora squamata stictocorypha MÉNÉGAUX AND HELLMAYR, 1906, Bull. Soc. Philom. Paris, (9th Ser.) VIII, p. 38, Rio de Janeiro (Porto Real, type).—IHERING, 1907, Cat. Faun. Braz.,

I, p. 213, Rio de Janeiro (Porto Real); ("Rio Tocantins, State of Goyaz," errore).

Dryophila squamata squamata HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 200, coast region of State of Bahia, eastern Brazil, from Ilhéos south at least to Caravellas; Minas Geraës (?).—PINTO, 1935, Rev. Mus. Paul., XIX, p. 179, Bahia (Rio Gongogy, Caravellas, Ilhéos); idem, 1938, *op. cit.*, XXII, p. 489, Bahia (Caravellas, Ilhéos, Itabuna, Rio Gongogy), Minas Geraës (Rio Matipó); Espírito Santo (Porto Cachoeiro); São Paulo (Iguapé, Ubatuba, Ilha do Cardozo, Tabatinguara, Cananéa).

Dryophila squamata stictocorypha HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 200, coast region of south-eastern Brazil, in states of Espírito Santo, Rio de Janeiro, and São Paulo.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Ituassú (alt. 3000 ft.), 3 ♂ ad., 1 ♀ ad., July 4, 5, 1928. Minas Geraës: Resplendor (Rio Doce, north shore, alt. 400 ft.), 1 ♂ ad., 2 ♀ ad., Jan. 10, 12, 1930; São Benedicto (Rio Manhuassú, alt. 600 ft.), Jan. 18, 20, 1930. Santa Catharina: Palmital (São Francisco, alt. sea level), 2 ♂ ad., June 18, 21, 1929; Salto Pirahy (Joinville, alt. 450 ft.), 6 ♂ ad., 2 ♀ ad., May 26, 30, June 1, 2, 4, 1929.

RANGE.—Coast region of Bahia, eastern Brazil (Ituassú, Ilhéos, Itabuna, and Belmonte south to Caravellas, Rio Grungogy) and adjoining parts of Minas Geraës (Resplendor, Rio Doce, São Benedicto, Rio Manhuassú, Rio Matipó), Espírito Santo (Porto Cachoeiro), Rio de Janeiro (Cantagallo, Nova Friburgo, Sapitiba, Aldea da Pedra, Porto Real); São Paulo (Iguapé, Ubatuba, Ilha do Cardozo, Tabatinguara, Cananéa); Santa Catharina (Palmital, Salto Pirahy).

Measurements

	SEX	WING	TAIL	EXP. CULMEN
BRAZIL				
Bahia:				
Ituassú	♂	56.0	49.5	14.5
"	♂	57.5	57.5	14.5
"	♂	55.0	54.0	15.0
"	♀	53.5	52.5	13.5
Minas Geraës:				
Resplendor	♂	54.5	55.0	14.0
"	♀	51.5	50.0	13.0
"	♀	51.0	48.0	13.0
São Benedicto	♂	53.5	53.0	13.0
"	♂	53.5	53.5	14.0

Santa Catharina:

Salto Pirahy	6 ♂	55.2	56.0	13.9
"	1 ♀	51.0	48.0	12.0
"	1 ♀	52.5	51.0	14.0
Palmital	1 ♂	55.5	54.0	14.0
"	1 ♂	55.0	54.0	14.5

Other Specimens Examined

BRAZIL.—Bahia: 1 ♂, 1 ♀ ad.—Minas Geraës: 2 ♂ ad. (Roths. Coll.).—São Paulo: Ubatuba, 1 ♂, 1 ♀.

Pinto,¹ who lists many specimens from Bahia to São Paulo, claims *stictocorypha* to be inseparable, the variation of the crown markings being individual rather than racial. He has seen males both from Ilhéos (Bahia) and São Paulo with plain black pileum and others with white spots all over the crown.

Some specimens from Minas Geraës have the crown black, though two skins, one from São Benedicto and one from Resplendor, No. 318153, No. 318157, are intermediates.

After going over all specimens again, I am inclined to agree with Pinto that the distinction between *Dryophila squamata squamata* and *Dryophila squamata stictocorypha* cannot be maintained and that, henceforth, this species will be known as *Dryophila squamata* Lichtenstein.

Terenura maculata (Wied)

Terenura maculata WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1088 (Rio de Janeiro; descr. ♂, ♀).

Ramphocaenus maculatus BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 73 (Rio de Janeiro).

Terenura maculata SCLATER, 1862, Cat. Coll. Amer. B., p. 183 (Brazil).—PELZELN, 1868, Orn. Bras., II, p. 84, Rio de Janeiro (Registo do Sai).—CABANIS, 1874, Journ. Ornith., XXII, p. 85, Rio de Janeiro (Cantagallo).—ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 254 (Wied's types).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 257 (se. Brazil).—IHERING, 1907, Cat. Faun. Braz., I, p. 213, São Paulo (S. Sebastião, Avanhandava, Rio Feio, Ubatuba); Espírito Santo (Rio Doce); Paraguay.—BERTONI, 1914, Faun. Parag., p. 51 (Puerto Bertoni).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 201, wooded region of south-eastern Brazil from Espírito Santo to Santa Catharina (Blumenau) and adjoining districts of eastern Paraguay (Alto Paraná) and Misiones,

¹ 1938, Rev. Mus. Paul., XXII, p. 488.

northeastern Argentina (Iguazú).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 296, Serra do Itatiaya, Itatiaya, alt. 3100 ft.—PINTO, 1938, Rev. Mus. Paul., XXII, p. 489, São Paulo (São Sebastião, São Jeronymo, Ubatuba, Rio Feio), Espírito Santo (Pau Gigante); Paraguay (Puerto Bertoni).

Phyllobates erythronotus BERTONI, 1901, Av. Nuev. Parag., p. 142, eastern Paraguay (Alto Paraná).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Minas Geraës: Resplendor, Rio Doce, north shore (alt. 400 ft.), 1 ♂ ad., 1 ♀ ad., Jan. 9, 10, 1930. Paraná; Foz do Iguassú (alt. 300 ft.), 1 ♂ ad., 1 ♀ ad., May 26, 1930. Santa Catharina: Salto Pirahy (Joinville, alt. 450 ft.), 1 ♀ ad., May 26, 1929.

PARAGUAY.—Colonia Independencia, east of Villarica (alt. 800 ft.), 1 ♂ ad., 2 ♀ ad., Oct. 6, 1930.

RANGE.—Wooded region of southeastern Brazil from Rio de Janeiro (Cantagallo, Serra do Itatiaya, Monte Serrat) to Minas Geraës (Resplendor, Rio Doce) and Espírito Santo (Rio Doce, Pau Gigante) to São Paulo (São Sebastião, São Jeronymo, Avanhandava, Rio Feio, Ubatuba), south to Paraná (Foz do Iguassú) and Santa Catharina (Blumenau, Salto Pirahy to Joinville). Eastern Paraguay (Alto Paraná, Puerto Bertoni, Colonia Independencia). Northeastern Argentina (Misiones).

Other Specimens Examined

BRAZIL			
Wied's types	1 ♂ ad.	1 ♀ ad.	
São Paulo:			
(Rio Feio)	1 ♂ ad.		
(S. Sebastião)	1 ♂ ad.		Roths. Coll.
Rio de Janeiro:			
(Serra do Itatiaya, Monte Serrat)	1 ♀ ad.		
(Rio skin)	1 ♂ ad.		Roths. Coll.

The three specimens from Paraguay (known heretofore as *Phyllobates erythronotus* Bertoni) agree with the birds from Rio and São Paulo as well as with those collected by Mr. Kaempfer. This species has not previously been recorded from Minas Geraës.

Psilorhamphus guttatus (Ménétrières)

Leptorhynchus guttatus MÉNÉTRIÈRES, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2

(Sci. Nat.), p. 516, Pl. x, fig. 1 ("Cuyabá,¹ coll. Langsdorff").—CHROSTOWSKI, 1921, Ann. Zool. Mus. Polon. Hist. Nat., I, p. 24 (note on type).

Ramphocaenus guttatus BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 73 (ex Ménétrières).

Psilorhamphus guttatus SCLATER, 1858, P. Z. S. London, XXVI, p. 243 ("Cuyabá"; descr.); idem, 1862, Cat. Coll. Amer. B., p. 183 (Brazil); idem, 1890, Cat. B. Brit. Mus., XV, p. 259 (se. Brazil).—IHERING, 1907, Cat. F. Braz., I, p. 214 ("Matto Grosso").—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 204, wooded region of southeastern Brazil, in states of Rio de Janeiro, São Paulo and (?) Minas Geraës.—PINTO, 1938, Rev. Mus. Paul., XXII, p. 491, São Paulo (Alto do Ypiranga).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Corvo (Serra da Graciosa, alt. 2700 ft.), 1 ♀ ad., Feb. 21, 1930.

RANGE.—Wooded region of southeastern Brazil, in states of Minas Geraës (Cuyabá), Rio de Janeiro, São Paulo (Alto do Ypiranga), and Paraná (Corvo, Serra da Graciosa).

This is the only specimen collected by Kaempfer and the only example of this species in The American Museum of Natural History.

This monotype is certainly peculiar in form. It has a very long thin bill, smooth tarsi, and a long and graduated tail. It also has long elongated nostrils.

Heretofore the female has been entirely unknown and it is a sad fact that Mr. Kaempfer was able to obtain only one specimen. Following are the characters of the one adult female I now have before me: head and upper parts cinereous; the back and rump slightly washed with rufous; head, back, and rump marked with small, round, white specks which are slightly margined with black; tail feathers grayish brown, tipped with white and spotted on each web with small marginal spots of pale fulvous. Beneath: pale grayish buff; deeper buff washed with brown on the middle of the belly which is thickly spotted with triangular-shaped black specks. Flanks and crissum deeper buff

¹ According to Hellmayr (1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 204) this probably refers to the gold mine, "Cuyabá," near Sabará in Minas Geraës and not to the capitol of Matto Grosso.

washed with brown, with narrow black cross bands. Under tail-coverts same as crissum and flanks. Bill above hazel-brown; beneath pale willish.

This is the only specimen I have seen and I have not been able to examine other material.

Measurements

BRAZIL Paraná: Corvo	SEX	WING	TAIL	EXP.
				CUL- MEN
	1 ♀ ad.	50	58.5	19

Cercomacra cinerascens iterata

Zimmer

Cercomacra cinerascens iterata ZIMMER, 1932, Amer. Mus. Novit., No. 558, p. 19, Caxiricatuba, Rio Tapajoz, Brazil.

Cercomacra sclateri HELLMAYR, 1905, Nov. Zool., XII, p. 228, part, Pará (Igarapé-Assú); Rio Madeira (Borba, Salto do Girao); Matto Grosso (Villa Bella de Matto Grosso); idem, 1906, *op. cit.*, XIII, p. 370, Pará (Santo Antonio do Prata); idem, 1907, *op. cit.*, XIV, p. 18, Rio Tapajoz (Itaituba); idem, 1910, *op. cit.*, XVII, p. 362, Rio Madeira (Calama); Rio Machados (Jamarysinho); idem, 1912, Abhandl. math. phys. Bayr. Ak. Wiss., XXVI, No. 2, p. 92 (Pará localities); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 214, part, Rio Solimoës (Teffé), western Brazil south to western Matto Grosso (Villa Bella, Cachoeira) east to Maranhão (Tury-assú).—IHERING, 1907, Cat. Faun. Braz., I, p. 214 (range in part).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 286, (Rio Guamá, Rio Capim); idem, 1908, *op. cit.*, LVI, p. 17 (Bom Lugar, R. Purús, Rio Guamá, Capim), p. 512 (Villa Braga, Rio Tapajoz); idem, 1914, Bol. Mus. Goeldi, VIII, p. 308 (Ourém, Rio Guamá, Rio Capim); Rio Tocantins (Baião, Arumatheua); Rio Tapajoz (Boim, Villa Braga); Rio Jamauchim; Rio Purus.—HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 378, Maranhão (Tury-assú).

Cercomacra caeruleascens (not *Myrmothera caeruleascens* Viellot) PELZELN, 1868, Orn. Bras., II, p. 84, Rio Madeira (Borba, Salto Girao); Matto Grosso (Villa Bella de Matto Grosso).—ALLEN, 1893, Bull. Amer. Mus. Nat. Hist., V, p. 121, w. Matto Grosso (Cachoeira).

No specimens collected.

RANGE.—Brazil: Rio Solimoës (Teffé); Rio Purús (Bom Lugar, Hyutanhan, Arimã, Nova Olinda) to western Brazil, Rio Madeira (Calama, and Borba, Salto do Girao), Rio Machados (Jamarysinho), Rio Tapajoz (Santarem, Villa Braga,

Itaituba, Igarapé Brabo, Piquiatuba, Caxiricatuba), Rio Tocantins (Baião, Arumatheua); Pará (Santo Antonio do Prata, Igarapé-Assú). South to western Matto Grosso (Villa Bella de Matto Grosso, Cachoeira), east to Maranhão (Tury-assú).

Specimens Examined

BRAZIL			
Rio Solimoës:			
Teffé	1 ♂ ad.		Roths. Coll.
Rio Madeira:			
Calama	4 ♂ ad. 1 ♀ ad.		" "
Lower Amazons:			
Santarem	1 ♂ ad.		" "
Pará:			
Prata	1 ♂ ad.		" "
Igarapé-Assú		1 ♀ ad.	" "
Rio Tapajoz:			
Igarapé Brabo	4 ♂ ad. 3 ♀ ad.		Olalla Coll
Piquiatuba	4 ♂ ad. 2 ♀ ad.		" "
Caxiricatuba	1 ♂ ad. 2 ♀ ad.		" "
Rio Madeira:			
Borba	2 ♂ ad.		" "
Rio Tocantins:			
Baião	1 ♂ ad. 1 ♀ ad.		" "
Rio Purus:			
Hyutanhan	3 ♂ ad. 1 ♀ ad.		Klages Coll. Carnegie Mus.
Arimã	3 ♂ ad. 1 ♀ ad.		Klages Coll. Carnegie Mus.
Nova Olinda	3 ♂ ad. 1 ♀ ad.		Klages Coll. Carnegie Mus.

Other Specimens Examined

Cercomacra cinerascens sclateri

PERU			
Santa Rosa:			
Upper Ucayali	3 ♂ ad.	2 ♀	
Lagarto	3 ♂ ad.	5 ♀ ad.	
Rio Seco, west of			
Moyobamba	1 ♂ ad.	1 ♀ ad.	

Chayavetas
(= Chayavitas) 1 ♂ ad. (type) Roths. Coll.

Mr. Zimmer (*loc. cit.*) has shown birds from the Rio Madeira eastward to Maranhão to be separable and named them *C. c. iterata*. He tentatively gave the range as extending west to the Rio Madeira, but it may prove to be more extensive. Birds from Teffé and the Rio Purús have been studied and I include them in the range of *iterata*.

Birds from Calama and Borba, on the Rio Madeira, average slightly darker than

birds from the Rio Tapajoz, while Matto Grosso specimens are lighter in color.

Cercomacra brasiliiana Hellmayr

Cercomacra brasiliiana HELLMAYR, 1905, Nov. Zool., XII, p. 289, Rio de Janeiro [type] (foot of Serra d'Estrella).—IHERING, 1907, Cat. F. Braz., I, p. 214 (Rio de Janeiro).

Formicivora caerulescens (not *Myrmothera caerulescens* Vieillot) MÉNÉTRIÈRES, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 499, Pl. VI, fig. 1 (♂), 2 (♀) (foot of Serra d'Estrella, Prov. Rio).

Ellipura caerulescens BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 67 (environs of Rio de Janeiro; descr. ♂, ♀).

Cercomacra caerulescens SCLATER, 1858, P. Z. S. London, XXVI, p. 244 (Rio de Janeiro; descr. ♂, ♀); idem, 1890, Cat. B. Brit. Mus., p. 264 (se. Brazil).

Cercomacra caerulescens HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 216, southeastern Brazil (Prov. Rio de Janeiro).

No specimens collected.

RANGE.—Southeastern Brazil (Prov. Rio de Janeiro).

No specimens examined.

Cercomacra tyrannina laeta Todd

Cercomacra tyrannina laeta TODD, 1920, Proc. Biol. Soc. Wash., XXXIII, Dec., p. 73, Pará district (Benevides).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 494, Amazonas (Itacoatirara, Silves), Pará (Lago Grande, Obidos, Lago Cuipeva).

Cercomacra tyrannina (not of Sclater) PELZELN, 1868, Orn. Bras., II, p. 84, Pará (part; "Rio Negro" [= Manáos]).—LAYARD, 1873, Ibis, p. 387 (Pará).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 265, Pará (part; spec. *t'-v*, "Rio Negro" (= Manáos)).—HELLMAYR, 1905, Nov. Zool., XII, p. 286 (Igarapé-Assú); idem, 1906, *op. cit.*, XIII, p. 370 (Santo Antonio do Prata); idem, 1907, *op. cit.*, XIV, p. 32 (Obidos).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 286, Pará (Santo Antonio); idem, 1913, *op. cit.*, LXI, p. 529 (in text Pará, Faro); idem, 1914, Bol. Mus. Goeldi, VIII, p. 308, Pará district (Pará, Providencia, Ananindeuba, Santa Isabel, Peixe-Boi, Quati-purú, Santo Antonio do Prata); Rio Guamá (Santa Maria do São Miguel, Ourém); Rio Tocantins (Mazagão, Baião); Rio Jary (Santo Antonio da Cachoeira); Monte Alegre, Rio Maecurá, Obidos; Rio Jamundá (Faro).

Cercomacra tyrannina tyrannina (errore) HELLMAYR, 1912, Abhandl. math. phys. Bayr. Ak. Wiss., XXVI, No. 2, p. 47 (Peixe-Boi, Ipitinga), p. 93 (Pará localities).

Cercomacra tyrannina laeta HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 219, northern Brazil, Maranhão,

Pará district (east of the Tocantins) and on the north bank of the lower Amazon, from the Rio Jary west to Itacoatirá and Manáos, near the mouth of the Rio Negro; idem, 1929, *op. cit.*, XII, p. 378, Maranhão (Tury-assú).

No specimens collected.

RANGE.—Northern Brazil, Maranhão (Tury-assú), and Pará district (Igarapé, Santo Antonio do Prata), also on the north bank of the lower Amazon (Obidos) from the Rio Jary west to Itacoatirá and Manáos (Campo Salles) near the mouth of the Rio Negro (Mirapinima, Cacáo Pereira, Igarapé).

Other Specimens Examined

BRAZIL

Maranhão:

Tury-assú: 4 ♂ ad. 1 ♀ ad. Field Mus.

Pará district:

Igarapé 4 ♂ ad. 2 ♀ ad. Roths. Coll.

Prata 4 ♂ ad. 3 ♀ ad. " "

Lower Amazon:

Obidos 1 ♀ ad. " "

Manáos:

Campo Salles 9 ♂ ad. 10 ♀ ad.

Rio Negro:

Mirapinima 4 ♂ ad. 4 ♀ ad.

Cacáo Pereira,

Igarapé 7 ♂ ad. 11 ♀ ad.

Birds from the north bank of the Amazon (Obidos, Manáos) and also specimens from Rio Negro are identical in coloration with the birds from the Pará district and from Maranhão (Tury-assú) but average slightly larger.

Pyriglena leucoptera leucoptera (Vieillot)

Turdus leucopterus VIEILLOT, 1818, Nouv. Dict. d'Hist. Nat., nouv. éd., XX, p. 272 ("Brésil") = neighborhood of Rio de Janeiro; cotypes in Paris Museum.

Lanius domicella LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mu., p. 47 (Bahia).

Drymophila trifasciata SWAINSON, 1825, Zool. Journ., II, No. 6 p. 152 (s. Brazil); idem, 1829, Zool. Ilus., (2), I, text to Pl. XXVII (inscribed "M. bicincta") ("forests of Pitangua, Bahia").

Lanius notodelos (Cuvier MS.) PUCHERAN, 1855, Arch. Mus. d'Hist. Nat., Paris, VII, livr. 3, p. 326 (descr. ♂, ♀; types from Rio de Janeiro).

Myiothera domicella WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1058 (e. Brazil).

Formicivora domicella MÉNÉTRIÈRES, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 503, Pl. VII, figs. 1 (♂), 2 (♀) (Brazil).

Pyriglena domicella BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 59 (descr. ♂, ♀, Brazil).

Pyriglena leucoptera PELZELN, 1868, Orn. Bras., II, p. 85, Rio de Janeiro (Registo do Sai); São Paulo (Mattodentro, Ypanema).—REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben., p. 363, Minas Geraës (Lagoa Santa).—BERLEPSCH, 1873, Journ. Ornith., p. 254, Santa Catharina (Blumenau).—CABANIS, 1874, Journ. Ornith., p. 85, Rio de Janeiro (Cantagallo).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 269, se. Brazil (Bahia, Rio de Janeiro, São Paulo).—BOUCARD AND BERLEPSCH, The Humming Bird, 1892, II, p. 44, Rio de Janeiro (Porto Real).—IHERING, 1899, Rev. Mus. Paul., III, p. 244 (São Paulo localities); idem, 1900, Rev. Mus. Paul., IV, p. 158, Rio de Janeiro (Cantagallo, Novo Friburgo); idem, 1907, Cat. Faun. Braz., I, p. 215, São Paulo (Ypiranga, Piracicaba, S. José de Rio Pardo, Iguapé, São Sebastião, Itararé, Ubatuba).—BERTONI, 1914, Faun. Parag., p. 51 (Puerto Bertoni; Iguassú).—HELLMAYR, 1915, Verh. Orn. Ges. Bay., XII, No. 2, Espirito Santo (Victoria).—LIMA, 1920, Rev. Mus. Paul., XII (2), p. 99, Bahia (Ilhéos to Belmonte).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 225, southeastern Brazil from southern Bahia and Minas Geraës (Lagoa Santa, Rio Jordão near Araguay) to Santa Catharina and adjoining portions of Paraguay (Alto Paraná) and Argentina (Misiones).—SZTOLCMAN, 1926, Annal. Mus. Polon., V, No. 3, p. 149, Paraná (Therezina, Candido de Abreu, Salto das Bananeiras, Salto Guayra).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 296, Serra do Itatiaya (Itatiaya, alt. 3100–3800 ft.).—PINTO, 1932, Rev. Mus. Paul., XVII, (2), p. 68, São Paulo (Valparaizo); idem, 1935, *op. cit.*, XIX, p. 178, Bahia (Aratuhye, Rio Grungogy, Bomfim, and Ilhéos); idem, 1938, *op. cit.*, XXII, p. 496, Bahia (Bomfim, Ilhéos, Rio Grungogy); Minas Geraës (Maria da Fé) and São Paulo (São Sebastião, Rio das Pedras, Iguapé, Alto do Ypiranga, São José do Rio Pardo, Cubatão, Itararé, Ubatuba, Alto da Serra, Piassaguera, Alecrim, Valparaizo, Serra da Cantareira, Ilha do Cardozo, Tabatinguara, and Sylvania).

Thamnophilus leuconotus (not of Spix, 1825), BERTONI, 1901, Av. Nuev. Parag., p. 134 [descr. ♂, ♀; Paraguay (Alto Paraná)].

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Baixão (alt. 1300 ft.), 2 ♂ ad., 1 ♀ ad., Sept. 19, 22, 1927; Cajazeiras (alt. 1000 ft.), 3 ♂ ad., 1 ♂ juv., 4 ♀ ad., June 14, 19–21, 1928; Ituassú (alt. 3000 ft.), 2 ♂ ad., 1 ♀ ad., July 3, 4, 1928; Jaguaquara (alt. 2500 ft.), 1 ♂ ad., Sept. 6, 1927. Minas Geraës: Fazendinha, Serro do Caparaó (alt. 3500 ft.), 1 ♂ ad., Sept. 18, 1929; Rio do Caparaó (alt.

3500 ft.), Sept. 10, 1929; Resplendor, Rio Doce (alt. 92 meters), 1 ♂ ad., Jan. 9, 1930; Santa Barbara do Caparaó (alt. 3000 ft.), 3 ♀ ad., Sept. 25, 26, Oct. 3, 1929; São Benedicto (alt. 110 meters), 1 ♂ ad., 1 ♀ ad., Jan. 18, 20, 1930. Espirito Santo: Lagoa Juparaná (alt. 400 ft.), 1 ♂ ad., Nov. 24, 1929, 1 ♂ ad., Dec. 4, 1929. Paraná: Foz do Iguassú (alt. 300 ft.), 1 ♂ ad., 1 ♀ ad., May 18, 30, 1930; Guayra, (Rio Paraná, alt. 600 ft.), 5 ♂ ad., 2 ♀ ad., April 14, 20, 21, June 11, 1930; Porto Britania (Rio Paraná, alt. 400 ft.), 2 ♂ ad., May 8, June 11, 1930; Porto Mendes (Rio Paraná, alt. 400 ft.), 1 ♂ ad., May 1, 1930; Tibagy (alt. 1804 ft.), 1 ♀ ad., March 10, 1930. Santa Catharina: Palmital (São Francisco, alt. sea level), 3 ♂ ad., 1 ♀ ad., June 24, 25, 1929; Salto Pirahy (alt. 450 ft.), 1 ♂ ad., 4 ♀ ad., May 21, 28, June 6, 10, 1929. Matto Grosso: Campanario (São Francisco Ranch, alt. 1200 ft.), 1 ♂ ad., July 11, 1930.

RANGE.—Southeastern Brazil, from southern Bahia (Baixao, Cajazeiras, Rio Grungogy, Ituassú, Jaguaquara, Bomfim, Ilhéos to Belmonte, forests of Pitangua) and Minas Geraës (Lagoa Santa, Rio Jordão near Araguay, Maria da Fé, Fazendinha, Serro do Caparaó, São Benedicto) through Rio de Janeiro (Metropolis, Therezopolis, Organ Mts., Ponte Maromba, Serra do Itatiaya, Monte Serrat), Espirito Santo (Lagoã Juparaná) and São Paulo (Alto da Serra, Victoria, Piquete, São Sebastião, Fazenda Cayóa, Salto Grande do Rio Parapanema, Rio das Pedras, Iguapé, Alto do Ypiranga, São José do Rio Pardo, Cubatão, Itararé, Ubatuba, Piassaguera, Alecrim, Valparaizo, Serra da Cantareira, Ilha do Cardozo, Tabatinguara, Sylvania) to Paraná (Foz do Iguassú, Guayra, Rio Paraná, Porto Britania, Porto Mendes, Tibagy), Santa Catharina (Palmital, São Francisco, Salto Pirahy) and the adjoining portions of Paraguay (Alto Paraná), Matto Grosso (Campanario, São Francisco Ranch) and Argentina (Misiones, Puerto Segundo).

Other Specimens Examined

BRAZIL

São Paulo:

Alto da Serra	1 ♂ ad.	
Victoria	4 ♂ ad.	Field Mus.
"	2 ♂ ad.	1 ♀ Roths. Coll.
Fazenda		
Cayoá	6 ♂ ad.	1 ♀ ad. Field Mus.
Fazenda		
Cayoá	1 ♂ ad.	1 ♀ Roths. Coll.

S. Sebastião	1 ♂ ad.	Field Mus.
" "	1 ♂ ad.	Roths. Coll.
Piquete	1 ♂ ad. 2 ♀	" "
Rio de Janeiro:		
Petropolis	2 ♂ ad. 1 ♀ ad.	" "

In the good series at hand from eastern and southern Brazil I can find no sub-specific differences in the white border on the alula and outer primary-coverts. I can in no way distinguish northern Bahia specimens (the *Lanius domicella* Lichtenstein and *Drymophila trifasciata* Swainson) from the southern Brazilian *Turdus leucopterus* Vieillot.

The wing bands are variable in width and in some specimens the lower band is only faintly visible. The extent of white between the shoulders is also a variable character, very large in some specimens and reduced in others where the tips of the feathers have more black and the base has more gray. The females show no differences at all.

The northern Bahia birds and those from southern Matto Grosso are an extension of the known range of this form.

Pyriglena leucoptera leuconota (Spix)

Pyriglena leuconota SPIX, 1824, Av. Bras., I, p. 72, Pl. LXXII, fig. 2 (= ♀), Pará; type in Munich Mus. examined by E. M. B. N.

Thamnophilus leuconotus SPIX, 1825, Av. Bras., II, p. 28, Pl. XXXIX, fig. 2 (= ♂) (Pará).

Pyriglena atra (not of Swainson) SCLATER, P. Z. S. London, 1858, XXVI, p. 246 (part; Pará).—SCLATER AND SALVIN, 1867, P. Z. S. London, p. 576 (Pará).—LAYARD, 1873, Ibis, p. 387 (Pará).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 270 (part; Pará).

Pyriglena maura (not of Ménétrès) PELZELN, 1868, Orn. Bras., II, p. 85 (part; Pará).

Pyriglena leuconota HELLMAYR, 1905, Nov. Zool., XII, p. 290, Pará (Igarapé-Assú).—SNETHLAGE, 1914, Bol. Mus. Goeldi, VIII, p. 309, Pará district (Pará, Mocajutuba, Ananindeuba Benevides, Santa Isabel, Peixe-Boi, Santo Antonio do Prata, Rio Guamá (Sta. Matría de S. Miguel); Rio Tocantins (Cameté, Arumatheua); (?) Rio Curuá, left tributary of the Rio Xingú (Mal de Manoelsinho).

Pyriglena leuconota leuconota HELLMAYR, 1906, Nov. Zool., XIII, p. 370, Pará (Santo Antonio do Prata); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, pp. 47, 93, Pará localities (Souza, Murucutú near Belem, Peixe-Boi, Ipitanga); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 227, northeastern Brazil in states of Maranhão

(Tury-assú) and Pará, ranging west to the Tocantins; idem, 1929, *op. cit.*, XII, p. 378, Maranhão (Tury-assú, Rosario and Miritiba).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 497, Pará (Utinga) and Maranhão (Miritiba).

"*Pyriglena atra* (Sw.) = *P. leuconota* (Spix)" (sic) SNETHLAGE, 1907, Journ. Ornith., LV, p. 286, Pará (S. Antonio).

Pyriglena leuconota (err. typ.) REISER, 1910, Denkschr. math. naturw. Kl. Akad. Wiss. Wien, LXXVI, p. 100, Maranhão (Miritiba).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: Kelrú (alt. 13 meters), 1 ♀ ad., March 20, 1926.

RANGE.—Northeastern Brazil in states of Maranhão (Kelrú, Rosario, Tury-assú, Miritiba) and Pará (Prata, Utinga, Igarapé-Assú, Souza, Murucutú near Belem, Ipitanga, Mocajutuba, Ananindeuba, Benevides, Santa Isabel, Peixe-Boi, Santo Antonio do Prata); Rio Guamá (Sta. Maria de S. Miguel) west to the Rio Tocantins (Cameté, Arumatheua) and (?) Rio Curuá, left tributary of the Rio Xingú (Mal de Manoelsinho).

Other Specimens Examined

BRAZIL

Maranhão:

Miritiba	1	1 ♀ ad.	Roths. Coll.
Rosario	1 ♂ ad.		Field Mus.
Tury-assú	1 ♂ ad.	3 ♀ ad.	" "

Pará:

Utinga		1 ♀ ad.	
Santo Antonio do Prata	3 ♂ ad.	3 ♀	Roths. Coll.
Igarapé-Assú	3 ♂ ad.		" "

Whether this form really extends beyond the Rio Tocantins in a westerly direction remains to be ascertained by the study of more specimens.

Pyriglena leucoptera pernambucensis Zimmer

Pyriglena leucoptera pernambucensis ZIMMER,¹ 1931, Amer. Mus. Novit., No. 509, p. 11, Pernambuco (Brejão).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Pernambuco: Brejão (alt. 2500 ft.), 7 ♂ ad., 3 ♀ ad., Feb. 10, 1927.

¹ Cf. Zimmer's account, where the characters of this form are explained at length.

RANGE.—Eastern portion of the State of Pernambuco, Brazil.

The male is entirely black except for a broad concealed white patch on the mantle and is easily distinguished from *P. leucoptera leucoptera* and nearer to *P. l. leuconota*, but with a longer tail.

The females are like *Pyriglena leucoptera leucoptera* on the lower parts, being distinctly darker and not ochraceous as in *Pyriglena leucoptera leuconota*. On the upper parts they are darker and less reddish than those of *P. leucoptera leuconota* and not as dark above as *P. l. leucoptera*.

Pyriglena atra (Swainson)

Dryophila atra SWAINSON, 1825, Zool. Journ., II, No. 6, July, p. 153, east Brazil: Bahia (Pitangua; descr. ♂ ad.).

Formicivora atra MÉNÉTRIÈS, 1835, Mém. Acad. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 505 (ex Swainson).

Pyriglena atra BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 60 (Bahia; descr. ♂).—HELLMAYR, 1906, Abhandl. 2, Kl. Bayr. Akad. Wiss., XXII, No. 3, p. 622 (Bahia; crit.; descr. ♂, ♀); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 277, eastern Brazil: Province of Bahia (Santo Amaro, near Bahia, Bahia).—IHERING, 1907, Cat. Faun. Braz., I, p. 215 (Bahia).

No specimens collected.

RANGE.—Eastern Brazil: Province of Bahia (Santo Amaro, near Bahia).

Other Specimens Examined

BRAZIL: Bahia 1 ♂ ad. 1 ♀ ad. Roths. Coll.

This species seems to be confined to the coastal forests in the immediate environs of the city of Bahia, the only recorded authentic locality being Amaro.

Rhopornis ardesiaca (Wied)

Myiothera ardesiaca WIED, 1831, Naturg. Bras., III, (2), p. 1055 (se. Brazil, locality not specified; descr. ♂, ♀; male in Amer. Mus. examined by E. M. B. N.).

Formicivora ardesiaca MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 507 (ex Wied).

Hypocnemis myiotherina (not of Spix) ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 255.

Rhopocichla ardesiaca ALLEN, 1891, Bull. Amer. Mus. Nat. Hist., III, Feb. p. 199 (crit.; descr. ♂ type in Amer. Mus. Nat. Hist.).

Rhopornis ardesiaca IHERING, 1907, Cat. F. Braz., I, p. 216 (ex Wied; "Bahia").—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool.

Ser., XIII, part 3, p. 232, southeastern Brazil (exact locality unknown).—NAUMBURG, 1934, Auk, LI, p. 493, Bahia [(crit.) Boa Nova and Ituassú].

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Boa Nova¹ (alt. 2600 ft.), 1 ♀ ad., June 5, 1928; Ituassú (alt. 3000 ft.), 1 ♂ ad., July 4, 1928.

RANGE.—Southeastern Brazil, Bahia (Boa Nova, Ituassú).

Other Specimens Examined

BRAZIL.—Bahia: ♂ ad. (Wied's type in Amer. Mus. Nat. Hist.).

Up to the time of writing, this species was not known from any exact locality, so the Bahia localities are a valuable contribution to our knowledge of the range of *Rhopornis ardesiaca*.

Hypocnemoides maculicauda (Pelzelin)

Hypocnemis maculicauda PELZELN, 1868, Orn. Bras., II, p. 89, Matto Grosso (Villa Maria = São Luiz de Cáceres [type], Engenho do Gama and Villa Bella de Matto Grosso; spec. examined in Vienna Mus. by E. M. B. N.).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 291 (Matto Grosso).—IHERING, 1905, Rev. Mus. Paul., VI, p. 442 (Rio Jurúá); idem, 1907, Cat. F. Braz., I, p. 222 (Rio Jurúá).—SNETHLAGE, 1907, Journ. Ornith., LX, p. 287, Pará district (Santo Antonio do Prata, Rio Acará, Rio Capim); idem, 1908, *op. cit.*, LVI, p. 17 (Cachoeira, Ponto Alegre, Rio Purús), p. 513, Rio Tapajoz (Isl. Goyana); idem, 1914, Bol. Mus. Goeldi, VIII, p. 301, Pará district (Pará, Santo Antonio do Prata, Rio Capim, Rio Acará; Rio Tapajoz (Isl. Goyana); Rio Jmauchim (Tucunará, Boavista); Rio Purús (Cachoeira, Ponte Alegre); Rio Iriri (Santa Julia); idem, 1926, Bol. Mus. Nac. Rio de Janeiro, II, No. 6, p. 65, Maranhão (Tury-assú).

Thamnophilus maculicauda GOELDI, 1903, Ibis, p. 499, Rio Capim.

Hypocnemoides maculicauda HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 246, northern and western Brazil, only south of the Amazon, in states of Pará [Santo Antonio do Prata, Rio Acará, Rio Capim, Rio Iriri, Rio Tapajoz (Ilha Goyana)]; Amazonas (São Paulo d'Oliveira, Rio Solimões, Rio Jurúá, Rio Purús, Maroíns, Rio Machado) and Matto Grosso (Villa Bella de Matto Grosso and Engenho do Gama, Rio Guaporé, Villa Maria = São Luiz de Cáceres, upper Paraguay); idem, 1929, *op. cit.*, XII, p. 379, Maranhão [Tury-assú (ex Snethlage)].

¹ Near Santa Rita do Rio Preto.

No specimens collected.

RANGE.—Northwestern Brazil only south of the Amazon in states of Maranhão (Tury-assú), Pará (Santo Antonio do Prata, Rio Acará, Rio Capim, Rio Iri, Ilha Goyana, Rio Tapajóz), Amazonas (São Paulo d'Oliveira, Rio Solimões, Rio Juruá, Rio Purús, Maroins, Rio Machados, Rio Jamauchim [Tucunaré, Boavista]) and Matto Grosso (Villa Bella de Matto Grosso, Engenho do Gama, Rio Guaporé, Villa Maria, São Luiz de Cáceres, Descalvados, upper Paraguay). Also in northern Peru.

Other Specimens Examined

BRAZIL	
Matto Grosso:	
Descalvados	1 ♂ ad.
Ilha Goyana	1 ♀

Sclateria naevia naevia (Gmelin)

Sitta naevia GMELIN, 1788, Syst. Nat., I, (1), p. 422 (based on "The Wall-creeper of Surinam," Edwards, 1764, Glean. Nat. Hist., III, p. 284, Pl. 346, lower fig. [= ♂ ad.], Surinam).

Heterocnemis naevia SNETHLAGE, 1907, Journ. Ornith., LV, p. 286, Pará district (Santo Antonio do Prata, Rio Acará).

Sclateria naevia HELLMAYR, 1911, Abhandl. math. phys. Kl. Bayr. Akad. Wiss., XXVI, No. 2, pp. 48, 93, Pará localities (Peixe-Boi, Pará, Rio Acará).—SNETHLAGE, 1914, Bol. Mus. Goeldi, VIII, p. 308, Pará (Ilha das Onças, Santo Antonio do Prata, Rio Acará).—HARTERT AND GOODSON, 1917, Nov. Zool., XXIV, p. 499, Maranhão (Miritiba).

Sclateria naevia naevia HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 252, Trinidad; northeastern Venezuela; Orinoco delta; British, Dutch, and French Guiana, south to northeastern Brazil (Pará district east of the Tocantins); State of Maranhão (Miritiba); idem, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 379, Maranhão (Miritiba).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 505, Amazonas (Itacoatiara).

No specimens collected.

RANGE.—Trinidad; northeastern Venezuela; Orinoco delta; British Guiana (Rockstone, Essequibo River, Surinam); French Guiana, Rio Xingú; south to northeastern Brazil (Itacoatiara, Rio Xingú [right bank], Villarinho do Monte); Pará district (Santo Antonio do Prata, Rio Acará); northern Maranhão (Miritiba).

Specimens Examined

BRITISH GUIANA:	
Surinam	3 ♂ ad. 1 ♀ ad. Roths. Coll.
Rockstone,	
Essequibo	
River	1 ♂
FRENCH GUIANA:	
Cayenne	3 ♂ ad. 2 ♀ " "
BRAZIL:	
Rio Xingú	1 ♂ ad.
Maranhão	
(Miritiba)	1 ♀ ad.

Myrmeciza¹ ruficauda (Wied)

Myiothera ruficauda WIED, 1831, Beitr. Naturg. Bras., (2) III, p. 1060 (se. Brazil; no locality specified. Hellmayr² suggests Espirito Santo [Rio Doce]; descr. ♂, ♀).

Myrmeciza marginata SALVADORI, 1864, Atti Soc. Ital. Sci. Nat., VII, p. 158 (Brazil; descr. ♂, ♀).

Myrmeciza ruficauda SCLATER, 1858, P. Z. S. London, XXVI, p. 248 (se. Brazil).—ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 254 (note on Wied's types).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 281 (Bahia).—IHERING, 1907, Cat. F. Braz., I, p. 219, Espirito Santo (Porto Cachoeiro).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 509, Bahia (Rio Jucurucú) and Espirito Santo (Porto Cachoeiro, Paú Gigante, Rio Doce).

Myrmeciza ruficauda PELZELN, 1868, Orn. Bras., II, p. 87, note 3 (Bahia).

Myrmoderus ruficauda HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 272, coast forests of eastern Brazil, in states of Bahia and Espirito Santo (Porto Cachoeira, Rio Doce).—PINTO, 1935, Rev. Mus. Paul., XIX, p. 179, Bahia (Rio Jucurucú, Braço do Sul, Cachoeira Grande).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Cajazeiras on the Rio Grungogy (alt. 1000 ft.), 1 ♂ ad., June 22, 1928. Minas Geraés: Resplendor, Rio Doce, north shore (alt. 92 meters), 1 ♂ ad., Jan. 12, 1930. Espirito Santo: Baixo Guandú (alt. 213 ft.), 2 ♂ ad., 2 ♀ ad., Dec. 25, 28, 1929, and Jan. 2, 1930; Lagôa Juparanã (alt. 400 ft.), 3 ♂ ad., 4 ♀ ad., Oct. 30, Nov. 17, 30, 1929.

RANGE.—Coastal forests of eastern Brazil, in states of Bahia (Cajazeiras on the Rio Grungogy, Rio Jucurucú, Braço do Sul, Cachoeira Grande, Verruga, Rio Pardo); Minas Geraés (Resplendor, Rio

¹ According to Zimmer, 1932, Amer. Mus. Novit. No. 545, p. 12, the genera *Myrmoderus*, *Myrmelastes*, *Myrmophylax*, and *Myrmedestes* are not separable from *Myrmeciza*.

² 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 272.

Doce); Espirito Santo (Porto Cachoeiro, Rio Doce, Baixo Guandú, Lagoa Juparáná, Paú Gigante).

Other Specimens Examined

BRAZIL

Bahia:
(Wied's types) 2 ♂ ad. 2 ♀ ad.
S. Bahia:
Verruga, Rio Pardo 1 ♂ ad.

Myrmeciza squamosa (Pelzeln)

Myrmeciza squamosa PELZELN, 1868, Orn. Bras., II, pp. 87, 162, São Paulo (Ypanema, Mattodentro; type in Vienna Museum examined).

Myrmeciza squamosa BERLEPSH AND IHERING, 1885, Zeits. ges. Orn., II, p. 151, Rio Grande do Sul (Arroio Grande).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 281, São Paulo (Ypanema) and Rio de Janeiro (Nova Friburgo).—IHERING, 1899, Rev. Mus. Paul., III, p. 245, São Paulo (Ypiranga, Piquete, Iguapé, Iporanga); idem, 1907, Cat. F. Braz., I, p. 220, São Paulo (Piquete, Ypiranga, Alto da Serra, Iguapé, Ubatuba); idem, 1899-1900, Annuario Est. Rio Grande do Sul, XVI, p. 130, Rio Grande do Sul (Mundo Novo).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 509, São Paulo (Piquete, Iguapé, Altos de Ypiranga, Alto da Serra, Ubatuba, Tabatinguara).

Formicivora loricata (not of Lichtenstein) MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 490, Pl. iv, fig. 1 (♂), 2 (♀) (Rio de Janeiro).

Myrmoderus squamosus HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 273, southeastern Brazil from State of São Paulo (Victoria, Fazenda Cayoá, Salto Grande, Rio Paranapanema) [and Rio de Janeiro] south to Rio Grande do Sul.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Santa Catharina: Salto Pirahy (near Joinville, alt. 450 ft.), 3 ♂ ad., 3 ♀ ad., May 21, 24, 27, June 7-10, 1929. Rio Grande do Sul: Sapyranga (alt. 100 ft.), Aug. 9, 1928.

RANGE.—Southeastern Brazil from the states of Rio de Janeiro (Nova Friburgo), São Paulo (Victoria, Fazenda Cayoá, São Sebastião, Salto Grande, Rio Paranapanema, Ypanema, Ypiranga, Piquete, Iguapé, Iporanga, Alto da Serra, Ubatuba, Tabatinguara) to Santa Catharina (Salto Pirahy near Joinville); south to Rio Grande do Sul (Mundo Novo, Arroio Grande, Sapyranga).

Other Specimens Examined

BRAZIL

São Paulo:
Ubatuba 1 ♂ ad.
Alto da Serra 1 ♀ ad.
Victoria 2 ♂ ad. 3 ♀ ad. Roths. Coll.
Fazenda
Cayoá 2 ♂ ad. " "
S. Sebastião 1 ♀ ad. " "

In the Catalogue of Birds of the Americas, part III, p. 273, Dr. Hellmayr questioned the localities Rio de Janeiro (Ménétriès) and Nova Friburgo (J. Youde) but has since written me that there are in the British Museum two males and two females that are undoubtedly Rio skins (one from the Gould collection and three sent by Alex. Fry, once British Consul at Rio de Janeiro). In view of the fact that the other species (*M. loricata*) was taken by Robert at São Paulo (Cruzeiro), that is in the range of *M. squamosa*, there is no longer any reason for doubting the co-existence of the two species in part of their ranges. In fact, I fully agree with Dr. Hellmayr in coming to the conclusion that *M. squamosa* was by no means so closely related to *M. loricata* as I assumed. Its affinities are rather with *M. ruficauda* of which it seems to be a southern representative.

M. ruficauda ranges from Bolivia to Espirito Santo, *M. squamosa* from Rio de Janeiro to Rio Grande do Sul. I do not want to reduce *squamosa* to a subspecies because, although agreeing with *ruficauda* in the male sex in color and markings of the throat and chest, it differs markedly by proportions (wings shorter, tail longer); the presence of distinct grayish white superciliaries; pure white (instead of deep buff) apical markings to wing-coverts; reddish brown (not olivaceous) pileum; and deep ochraceous abdomen. The female of *M. squamosa* has the breast feathers broadly margined with white instead of fulvous, the abdomen white instead of ochraceous, the flanks and crissum pale fulvous instead of rufescent, and is brown above without blackish edgings to the feathers of the head and upper back as in *M. ruficauda*. Therefore, I agree with Dr. Hellmayr who suggests

that *M. squamosa* be placed next to *M. ruficauda* with *M. loricata* following at the end of the genus.

Myrmeciza loricata (Lichtenstein)

Myiothera loricata LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 44, e. Brazil (Bahia; descr. ♂, ♀).

Drymophila leucopus SWAINSON, 1825, Zool. Journ., II, No. 6, July, p. 150 (forests of Pitangua, near Bahia; descr. ♂, ♀).

Myrmonax loricatus BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 64, Rio de Janeiro (Novo Friburgo; descr. ♂, ♀).—CABANIS, 1874, Journ. Ornith., XXII, p. 85, Rio de Janeiro (Cantagallo).

Myrmeciza loricata SCLATER, 1858, P. Z. S. London, XXVI, p. 248 (Bahia; descr. ♂, ♀); idem, 1890, Cat. B. Brit. Mus., XV, p. 282, Rio de Janeiro (Novo Friburgo), Bahia.—BOUCARD AND BERLEPSCH, 1892, The Humming Bird, II, p. 44, Rio de Janeiro (Porto Real).—IHERING, 1907, Cat. F. Braz., I, 220, Espirito Santo (Porto Cachoeiro).—HELLMAYR, 1915, Verhandl. Orn. Ges. Bay., XII, No. 2, p. 149, Espirito Santo (Victoria).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 509, Espirito Santo (Porto Cachoeiro).

Myrmecisa loricata PELZELN, 1868, Orn. Bras., II, p. 87, Rio de Janeiro (Registro do Sai).

Myrmoderus loricatus HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 272, eastern Brazil, from Bahia to Espirito Santo (Porto Cachoeiro, Victoria) and Rio de Janeiro (Registro do Sai, Novo Friburgo, Cantagallo, Porto Real).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 296, Serra do Itatiaia (near Monte Serrat, alt. 3100 ft.).

SPECIMENS COLLECTED (Kaempfer Collection)

BRAZIL.—Bahia; Ituassú (alt. 2600 ft.), 2 ♂ ad., 1 ♀ ad., July 3–6, 1928; Jaguaquara (alt. 2500 ft.), 1 ♀ ad., Sept. 7, 1927. Minas Geraës: Rio do Caparaó (alt. 3000 ft.), 2 ♀ ad., July 26, 27, 1929; Santa Barbara do Caparaó (alt. 3000 ft.), 2 ♂ ad., Sept. 28, Oct. 15, 1929.

RANGE.—Eastern Brazil, from Bahia (forests of Pitangua, Ituassú, Jaguaquara), Minas Geraës (Rio do Caparaó, Santa Barbara do Caparaó) and Espirito Santo (Porto Cachoeiro, Victoria) to Rio de Janeiro (Cantagallo, Nova Friburgo, Registro do Sai, Porto Real, Serra do Itatiaia near Monte Serrat, Therezopolis, Organ Mts.) and São Paulo (Cruzeiro).¹

¹ The British Museum, according to information received from Dr. Hellmayr, has, in addition to numerous Bahia specimens, an adult male from Nova Friburgo, two (male and female) specimens from the vicinity of Rio de Janeiro and, what is particularly interesting, an adult male secured by A. Robert, Nov. 20, 1900, at São Paulo (Cruzeiro, alt. 530 meters), constituting a new record for that state.

Other Specimens Examined

BRAZIL

Rio de Janeiro:		
Monte Serrat	2 ♂ ad.	1 ♀ ad.
Serra do Itatiaia (alt. 3100 ft.)	1 ♂ im.	
Therezopolis, Organ Mts. (alt. 3200 ft.)	2 ♂ ad.	5 ♀ ad.
Nova Friburgo	1 ♂ ad.	
"Brazil"	2 ♂ ad.	2 ♀ ad.

*Formicarius colma ruficeps*² (Spix)

Myiathera ruficeps SPIX, 1824, Av. Bras., I, p. 72, Pl. LXXII, fig. 1 (no locality given. Dr. Hellmayr suggests Prov. Rio de Janeiro, se. Brazil).³

Myioturdus tetema (not *Myrmothera tetema* Vieillot) WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1038, n. Espirito Santo (Mucuri).—MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 466 (Rio de Janeiro and Minas Geraës).

Myiothera tetema BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 46 (Novo Friburgo).

Formicarius ruficeps PELZELN, 1868, Orn. Bras., II, p. 90 (part; Bahia, Novo Friburgo).—IHERING, 1907, Cat. F. Braz., I, p. 224, Espirito Santo (Rio Doce), São Paulo (Ubatuba).

Formicarius ruficeps (sic) LIMA, 1920, Rev. Mus. Paul., XII, (2), p. 99, s. Bahia (Itabuna).

Myrmornis ruficeps CABANIS, 1874, Journ. Ornith., XII, p. 85, Rio de Janeiro (Cantagallo).

Formicarius cayanensis RIDGWAY, 1893, Proc. U. S. Nat. Mus., XVI, Nov., p. 670, se. Brazil (Bahia, São Paulo).

Formicarius colma (not of Boddaert) SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 302, se. Brazil (São Paulo, Bahia).—IHERING, 1899, Rev. Mus. Paul., III, p. 245, São Paulo (Iguapé); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo, Novo Friburgo).

Formicarius ruficeps ruficeps HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 278, coast region of southeastern Brazil from Bahia (Caravellas, Ilhéos, Belmonte) through Espirito Santo and Rio de Janeiro to São Paulo (Iguapé, São Sebastião, Ubatuba) and Santa Catharina (Ilha de Santa Catharina).—PINTO, 1932, Rev. Mus. Paul., XIX, p. 180, Bahia [Rio Jucuruçú (Braço do Sul, Cachoeira Grande)], Itabuna; idem, 1938, *op. cit.*, XXII, p. 512, Bahia (Itabuna, Rio Jucuruçú); Espirito Santo (Paú Gigante); Minas Geraës (Rio Matipó) and São Paulo (Iguapé, Ubatuba, Alecrim, Tabatinguara).

² Zimmer, 1932, Amer. Mus. Novit., No. 584, p. 10, has explained the so-called *F. ruficeps orinocensis* as the immature plumage of *F. c. colma*. The supposed co-existence of a rufous-fronted and black-fronted species being thereby disproved, the entire group should stand under the specific name *Colma*.

³ Hellmayr, 1924, Field Mus. Nat. Hist. Publ. Zool. Ser., XIII, part 3, p. 278.

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Jaguaquara (alt. 2500 ft.), 1 (?) , Sept. 6, 1927. Espirito Santo: Baixo Guandú (alt. 213 ft.), 2 ♂ ad., 2 ♀ ad., Dec. 23, 28, 30, 1929, Jan. 3, 1930; Lagôa Juparaná (alt. 400 ft.), 1 ♂ ad., 1 ♀ ad., Nov. 6-21, 1929. Santa Catharina: Salto Pirahy (near Joinville, alt. 450 ft.), 1 ♀ ad., May 23, 1929. Rio Grande do Sul: Lagôa da Forno (near Torres, alt. 50 meters), 1 ♂ ad., Oct. 25, 1928.

RANGE.—Coast region of southeastern Brazil from southern Bahia (Itabuna, Caravellas, Rio Jucurucú, Braço do Sul, Cachoeira Grande, Jaguaquara), through Espirito Santo (Mucuri, Rio Doce, Baixo Guandú, Lagôa Juparaná), Minas Gerais (Rio Matipó), Rio de Janeiro (Nova Friburgo, Cantagallo), and São Paulo (Iguapé, São Sebastião, Ubatuba, Alecrim, Tabatinguara) to Santa Catharina (Ilha de Santa Catharina, Salto Pirahy) and Rio Grande do Sul (Lagôa da Forno).

Other Specimens Examined

BRAZIL			
Bahia	1 ♂	Roths. Coll.	
São Paulo:			
Ubatuba,	♂ ad. 1 ♀ ad.	“	“

Formicarius colma amazonicus Hellmayr

Formicarius ruficeps amazonicus HELLMAYR, 1902, Ornith. Monatsber., X, March, p. 34, Rio Madeira (Borba); Pará; Matto Grosso (Villa Bella de Matto Grosso); idem, 1905, Nov. Zool., XII, p. 292, Pará (Igarapé-Assú).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 287 (Pará).—HELLMAYR, 1907, Nov. Zool., XIV, p. 390, Rio Madeira (Borba); idem, 1910, *op. cit.*, XVII, p. 369 (Borba); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, pp. 50, 93, Pará localities (Peixe-Boi, Ipitinga); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 279, northern Brazil, south of the Amazon, from Maranhão (Tury-assú) west to the Rio Madeira (right bank), southward to western Matto Grosso (Villa Bella, Rio Guaporé).—SNETHLAGE, 1914, Bol. Mus. Goeldi, VIII, p. 315, Pará, Benevides, Santa Isabel; Rio Tocantins (Cameté, Alcobaça, Arumatheua); Rio Iriri (Bocca do Curuá); Rio Tapajoz (Boim, Pinhel, Villa Braga, Pimental); Rio Jamauchim (Tucunaré); idem, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 379, Maranhão (Tury-assú).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 512, Pará (Santarem, Casa Nova, Rio Arapiuns, Piquiatuba).

Formicarius ruficeps (not of Spix) PELZELN, 1868, Orn. Bras., II, p. 90 (part; Pará; Borba;

Matto Grosso [city of Matto Grosso]).—HELLMAYR, 1906, Nov. Zool., XIII, p. 373, Pará (Santo Antonio do Prata).—SNETHLAGE, 1908, Journ. Ornith., LVI, p. 533, Rio Tocantins (Alcobaça).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Maranhão: Kelrú near Rosario (alt. 13 meters), 2 ♂ ad., 1 ♀ ad., March 20, 22, 1926.

RANGE.—Northern Brazil from Maranhão (Tury-assú, Kelrú near Rosario) through the State of Pará (Santo Antonio do Prata, Benevides, Igarapé-Assú, Santa Isabel, Santarem, Casa Nova, Rio Arapiuns, Piquiatuba). South of the Amazon (Villa Bella Imperatrix, south bank), west to the Rio Madeira (right bank) and to the Rio Tapajoz (Igarapé Amarin, Igarapé Brabo, Caxiricatuba, Limoal) to northern Matto Grosso (Villa Bella, Rio Guaporé, Broken Canoe Rapids, Rio Roosevelt).

Other Specimens Examined

BRAZIL			
Maranhão:			
Tury-assú	1 ♂ ad.	Field Mus.	
Para:			
Santo Antonio do Prata	1 ♂ ad.	Roths. Coll.	
Benevides	1 juv.	“	“
Igarapé-Assú	1 ♂ ad.	“	“
Rio Tocantins:			
Baião	2 ♂ ad.	“	“
Villa Bella Imperatrix:			
Rio Amazon (s. bank)	7 ♂ ad. 4 ♀ ad.	“	“
Rio Tapajoz:			
Igarapé Amarin	2 ♂ ad.	“	“
Igarapé Brabo	3 ♂ ad. 3 ♀ ad.	“	“
Caxiricatuba	2 ♂ ad. 2 ♀ ad.	“	“
Limoal	2 ♂ ad. 1 ♀ ad.	“	“
Piquiatuba	1 ♂ ad.	“	“
Tamary	1 ♂ ad.	“	“
Borba:			
Rio Madeira	3 ♂ ad.	“	“
“	2 ♂ ad. 2 ♀ ad.	“	“

Formicarius analis analis
(Lafresnaye and D'Orbigny)

Myiothera analis LAFRESNAYE AND D'ORBIGNY, 1837, Syn. Av., I, in Mag. Zool., VII, cl. 2, p. 14, Bolivia (Yuracares and Chiquitos).
Myiothera analis HARTLAUB, 1854, Journ. Ornith., II, p. 259 (Pará).

Formicarius analis SCLATER, 1858, P. Z. S. London, XXVI, p. 277 (part; Pará).—PELZELN, 1868, Orn. Bras., II, p. 90, Rio Madeira (Salto Girão, Borba).—IHERING, 1905, Rev. Mus. Paul., VI, p. 443 (Rio Juruá); idem, 1907, Cat. F. Braz., I, p. 224 (Rio Juruá).—SNETHLAGE, 1908, Journ. Ornith., LVI, p. 17, Rio Purús (Bom Lugar); p. 513, Rio Tapajoz (Itaituba); p. 533, Rio Tocantins (Aruamatheua); idem, 1914, Bol. Mus. Goeldi, VIII, p. 315, Pará (Mocajutuba, Providencia, Benevides, Maguary); Rio Guamá; Rio Acará; Rio Tocantins (Baião, Arumatheua); Rio Tapajoz (Itaituba); Rio Purús (Bom Lugar, Ponte Alegre).

Formicarius analis HELLMAYR, 1907, Nov. Zool., XIV, p. 73, Rio Solimões (Teffé), p. 391, Rio Madeira (Humaythá, Borba); idem, 1910, *op. cit.*, XVII, p. 369, Rio Madeira (Calama, Santa Isabel); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, p. 50, Pará (Peixe-Boi), p. 93 (Pará localities); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., part 3, p. 282, northern Brazil, south of the Amazon, from Maranhão (Tury-assú) westward to the Solimões and Purús south to the upper Madeira; idem, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 379, Maranhão (Tury-assú).

Formicarius crissalis (not of Cabanis) SCLATER AND SALVIN, 1867, P. Z. S. London, p. 576 (Pará).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 305 (part; Pará).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 288 (part; Pará, Rio Acará, Ourém).

No specimens collected.

RANGE.—Northern Brazil, south of the Amazon, from northern Maranhão, west through Amazonia to eastern Peru, south to northern Matto Grosso and northern Bolivia.

Other Specimens Examined

BRAZIL.—Maranhão: Tury-assú, 1 ♂ ad., 1 ♀ ad., Field Mus.

This is an Amazonian form just entering northern Maranhão at the eastern extremity of its range.

Other Specimens Collected

BRAZIL

Rio Madeira:				
Humaythá	4 ♂ ad.	2 ♀ ad.	Roths.	Coll.
Borba		1 ♀ ad.	"	"
St. Isabel (Rio Preto)	1 ♂ ad.		"	"
Pará:				
Marguary		1 im.	"	"
Rio Solimões:				
Teffé	1 ♂ ad.		"	"

Rio Madeira:

Anará Igarapé	7 ♂ ad.	2 ♀ ad.	Olalla Coll.
Borba	2 ♂ ad.		" "
Rosarinho	2 ♂ ad.	1 ♀	" "

Rio Tocantins:

Arumatheua		1 ♀ ad.	
Baião	1 ♂		

Rio Amazon (s.

bank):			
Villa Bella			
Imperatrix	4 ♂ ad.	2 ♀ ad.	Olalla Coll.

Matto Grosso:

Barão	1 ♂ ad.		Roosevelt Coll.
Melgaço			
Santarem		1 ♀ ad.	Collins-Day Coll.

Maranhão:

Tury-assú	1 ♂ ad.	1 ♀ ad.	Field Mus.
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Chamaeza brevicauda brevicauda (Vieillot)

Turdus brevicaudus VIEILLOT, 1818, Nouv. Dict. d'Hist. Nat., nouv. éd., XX, p. 239 ("Bresil") (the co-types at Paris are from Rio de Janeiro).

Myiothera campanisona LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 43 (São Paulo).

Chamaeza meruloides VIGORS, 1825, Zool. Journ., II, No. 7, Oct., p. 395, note (Brazil).—JARDINE AND SELBY, 1826, Illustr. Ornith., I, part 1, Pl. XI (figure of type stated to have been obtained by Dr. Such in the "Brazils").

Myioturdus marginatus WIED, 1831, Beitr. Naturg., Bras., III, (2), p. 1035, s. Bahia (Araya da Conquista).—MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 465, Pl. I (Rio de Janeiro).

Chamaezosa marginata BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 47 (Bahia, Rio de Janeiro).

Chamaeza tshororo BERTONI, 1901, Av. Nuev. Parag., p. 148, e. Paraguay (Alto Paraná).

Chamaeza brevicauda SCLATER, 1858, P. Z. S. London, XXVI, p. 278 (se. Brazil).—PELZELN, 1868, Orn. Bras., II, p. 91, São Paulo (Mattodentro, Ipanemá), Rio de Janeiro, Paraná (Curyitiba).—BERLEPSCH AND IHERING, 1885, Zeits. ges. Orn., II, p. 151, Rio Grande do Sul (Taquara, Arroio Grande, Linha Pirajá).—ALLEN, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 255 (Wied's types).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 307 (se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 246, São Paulo (Iporanga); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo, Novo Friburgo); p. 250 (Iguapé); idem, 1899–1900, Annuario Est. Rio Grande do Sul, XVI, p. 131, Rio Grande do Sul (Mundo Novo, Pedras Brancas); idem, 1907, Cat. F. Braz., I, p. 225, São Paulo (Alto da Serra, Ilha de São Sebastião, Ubatuba, Itapura, Iporanga, Baurú); Paraná (Ourinho); Rio Grande do Sul (Novo Hamburgo).—DABBENE, 1910, Anal. Mus. Nac. Buenos Aires, XIII, p. 285, Paraguay (Alto Paraná).—CHROSTOWSKI, 1912, Compt. Rend.

Soc. Sci. Varsovie, V, pp. 478, 496, Paraná (Vera Guarany).—DABBENE, 1910, Anal. Mus. Nac. Buenos Aires, XVIII, p. 285, Paraguay (Alto Paraná).

Chamaeza brevicauda brevicauda MÉNÉGAUX AND HELLMAYR, 1906, Bull. Soc. Philom. Paris, (9) VIII, p. 53 [types; Rio de Janeiro (Serra d'Estrella)].—HELLMAYR, 1915, Verhandl. Orn. Ges. Bay., XII, No. 2, p. 150, Espirito Santo (Victoria); Santa Catharina (Serra do Mirador); idem, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 290, forest region of southeastern Brazil, from southern Bahia (Cidade da Conquista) to Rio Grande do Sul; Paraguay (Sapucay, Alto Paraná) and northeastern Argentina (Misiones).—SZTOLCMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 149, Paraná (Fazenda Ferreira, Fazenda Durski, Vermelho, Therezina).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 513, São Paulo (Iguapé, Alto da Serra, Baurú, Itapura, Ilha de São Sebastião, Ubatuba, São Miguel, Archanjo, Tabatinguara).

Chamaeza brevicauda CHUBB, 1910, Ibis, p. 522, Paraguay (Sapucay).

Chamaezosa brevicauda CABANIS, 1874, Ornith. Journ., XXII, p. 85, Rio de Janeiro (Cantagallo).

Chamaeza brevicauda tshororo BERTONI, 1914, Faun. Parag., p. 51, Paraguay (Alto Paraná).

Grallaria campanisona REINHARDT, 1870, Vidensk. Medd. naturhist. Foren. Kjoben, p. 362, Rio de Janeiro (Sumidouro).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Corvo (alt. 2700 ft., Serra da Graciosa), 1 (?), Feb. 10, 1930; Foz do Iguassú (alt. 300 ft.), 1 (?), May 29, 1930; Porto Almeida (alt. 2000 ft.), 1 ♀ ad., March 24, 1930. Santa Catharina: Salto Pirahy (near Joinville, alt. 450 ft., 2 ♂ ad., 1 ♀ ad., June 3, 12, 20, 1929. Rio Grande do Sul: Erebang (alt. 2500 ft.), 1 ♂ ad., April 2, 1929; Sananduva (alt. 2000 ft.), 1 ♂ ad., 1 ♀ ad., Jan. 4, 7, 1929; Sapyranga (alt. 100 ft.), 2 ♂ ad., 1 ♀ ad., Aug. 7, 1928.

PARAGUAY.—Colonia Independencia (alt. 800 ft.), 3 ♂ ad., Oct. 7, 11, 14, 1930.

RANGE.—Forest region of southeastern Brazil from southern Bahia (Cidade da Conquista), Espirito Santo (Victoria), Rio de Janeiro (Cantagallo, Nova Friburgo, Sumidouro, Serra d'Estrella); São Paulo (Mattodentro, Ypanemá, Iporanga, Alto da Serra, Ilha de São Sebastião, Ubatuba, Itapurá, Baurú) to Paraná (Fazenda Ferreira, Fazenda Durski, Vermelho, Therezina, Corvo, Foz do Iguassú, Porto Almeida, Curytiba, Ourinho, Vera Guarany, Roça Nova), Santa Catharina (Serra do Mirador, Salto Pirahy) and Rio

Grande do Sul (Taquara do Mundo Novo, Arroio Grande, Linha Pirajá, Pedras Brancas, Novo Hamburgo, Erebang, Sananduva, Sapyranga); Paraguay (Sapucay, Alto Paraná, Colonia Independencia), and northern Argentina (Misiones).

Other Specimens Examined

BRAZIL

Rio de Janeiro 1 (?)

São Paulo:

Itapura 1 ♀ ad.

Victoria 1 ♂ ad. 2 ♀ ad. Roths. Coll.

Paraná:

Roça Nova,

Serra do Mar 1 ♂ ad. 1 ♀ “ “

PARAGUAY:

Sapucay 1 ♂ ad. “ “

I regret to say that I have seen no fresh birds from Bahia¹ so cannot say whether they agree with specimens from Rio de Janeiro, the type locality.

Chamaeza ruficauda ruficauda

(Cabanis and Heine)

Chamaezosa ruficauda CABANIS AND HEINE, 1859, Mus. Hein., II, p. 6 (no localities. Hellmayr² suggests Rio de Janeiro, se. Brazil).

Chamaeza ruficauda MENÉGAUX AND HELLMAYR, 1906, Bull. Soc. Philom. Paris, (9) VIII, p. 55 (Rio de Janeiro).—IHERING, 1907, Cat. F. Braz., I, p. 225 (ex Menegaux and Hellmayr).

*Chamaeza ruficauda ruficauda*³ HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 294, southeastern Brazil, Prov. Rio de Janeiro (Serra dos Orgãos, Colonia Alpina, near Therezopolis).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 296, Serra do Itatiaya (Alto Itatiaya, alt. 3800–7150 ft.).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 514, Rio de Janeiro (Serra de Macahé).

No specimens collected.

RANGE.—Southeastern Brazil, Prov. Rio de Janeiro (Serra dos Orgãos, Colonia

¹ There are two originals of *Myioturdu marginatus* Wied in the A. M. N. H. They came from Bahia (Cidade da Conquista), but they are too old and faded to be of any use.

² 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 294.

³ Sztolcman, 1926 (Ann. Zool. Mus. Polon. Hist. Nat., V, p. 150), records *C. r. ruficauda* from Paraná (Fazenda Ferreira, Faz. Durski and Cara Pintada) but Dr. Hellmayr drew my attention to the fact that this record may not be reliable. It is singular that this bird has never been found in the intervening State of São Paulo. The species is authentically known only from the Serras in the vicinity of Rio de Janeiro (Serra dos Orgãos, Serra de Macahé, Serra do Itatiaya).

Alpina, near Therezopolis, Alto Itatiaya and Macieras, Serra do Itatiaya).

Hypophylax poecilnota vidua (Hellmayr)

Hypocnemis vidua HELLMAYR, 1905, Nov. Zool., XII, p. 290, ne. Brazil: Pará (Igarapé-Assú, descr. ♀ ad.).—SNETHLAGE, 1906, Ornith. Monatsber., XIV, p. 29 (descr. ♂).

Hypocnemis poecilnota vidua HELLMAYR, 1906, Nov. Zool., XIII, p. 370, Pará (Santo Antonio do Prata), p. 372 [char. ♂, ♀; Pará (Igarapé-Assú, Santo Antonio do Prata)]; idem, 1912, Abhandl. math. phys. Kl. Bayr. Akad. Wiss., XXVI, No. 2, pp. 49, 93, Pará localities (Peixe-Boi).—SNETHLAGE, 1907, Journ. Ornith., LV, p. 287, Pará (Rio Guamá).—IHERING, 1907, Cat. Faun. Braz., I, p. 222 (Pará); idem, 1914, Bol. Mus. Goeldi, VIII, p. 297, Pará localities (Pará, Mocajatuba, Providencia, Ananindeuba, Apehú, Santa Isabel, Peixe-Boi), Rio Guamá (Ourém); Rio Tocantins (Cametá, Baião, Arumatheua); Rio Jamauchim (Tucunaré).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 315, northeastern Brazil, south of the Amazon, in the states of Maranhão (Tury-assú) and Pará.

Hypocnemis poecilnota (not of Cabanis) SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 286 (part; spec. K, Pará).

Hypophylax griseiventris vidua CHAPMAN, 1923, Amer. Mus. Novit., No. 86, p. 7, in text (Pará, Rio Tocantins; Santarem).

Hypophylax poecilnota vidua HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 380, Maranhão (Tury-assú).

No specimens collected.

RANGE.—Northeastern Brazil, south of the Amazon, from northern Maranhão (Tury-assú) through the State of Pará (Utinga, Santo Antonio do Prata, Igarapé-Assú, Peixe-Boi, Providencia, Mocajatuba, Ananindeuba, Apehú, Santa Isabel, Rio Guamá [Ourém]), Rio Tocantins (Cametá, Baião, Arumatheua), west to the Rio Xingú (Villarinha do Monte, Porto do Moz).

Specimens Examined

NE. BRAZIL

Prata, near Pará 4 ♂ ad. 2 ♀ ad. Roths. Coll.

¹ Zimmer, 1934 (Amer. Mus. Novit., No. 703, p. 7), has shown that it is *H. p. nigricola* that inhabits the right bank of the Rio Tapajoz, recording it from Santarem, Tamary and Caxiricatuba (spec. in A. M. N. H.) and that the most westerly certain localities for *H. p. vidua* are on the Rio Xingú. As explained by him, the finding casts serious doubt on Madame Snethlage's record of *vidua* from Tucunaré on the Rio Jamauchim, a westerly tributary of the Xingú.

Pará:

Igarapé-Assú (type) 1 ♀ ad. Roths. Coll.

Rio Xingú:

Porto do Moz 1 ♂ ad. 2 ♀ ad. Olalla Coll.

Villarinho do Monte 2 ♂ ad. 1 ♀ ad. " "

Utinga, near Pará 1 ♀ ad. Collins-Day Exp.

Maranhão:

Tury-assú 1 ♂ juv. 1 ♀ ad. Field Mus.

Phlegopsis nigromaculata paraensis

Hellmayr

Phlegopsis paraensis HELLMAYR, 1904, Ornith. Monatsber., XII, p. 53 (Pará; type in Vienna Museum); idem, 1905, Nov. Zool., XII, p. 291, Pará (Igarapé-Assú).—IHERING, 1907, Cat. Faun. Braz., I, p. 223 (Pará).

Phlegopsis nigromaculata paraensis HELLMAYR, 1907, Nov. Zool., XIV, p. 389 (Pará); idem, 1912, Abhandl. math. phys. Kl. Bayr. Ak. Wiss., XXVI, No. 2, pp. 49, 93, Pará localities (Pará, Murutucú, Ourém, Capim, Igarapé-Assú); idem, 1921, Nov. Zool., XXVIII, p. 212 (range); idem, 1924, Field Mus. Nat. Hist. Publ., Zool., Ser., XIII, part 3, p. 317, northeastern Brazil, in states of Maranhão (Tury-assú) and Pará (Utinga), west to the Tocantins (Cametá); idem, 1929, *op. cit.*, XII, p. 380, Maranhão (Tury-assú).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 521, Pará (Murutucú).

Phlogopsis paraensis SNETHLAGE, 1906, Ornith. Monatsber., XIV, p. 30 (Pará, Ourém); idem, 1907, Journ. Ornith., LV, p. 287 (same localities); idem, 1914, Bol. Mus. Goeldi, VIII, p. 314, Pará localities (Pará, Providencia, Ananindeuba, Benevides, Apehú, Santa Maria do São Miguel and Ourém, Rio Guamá); Rio Tocantins (Cametá).

Phlogopsis nigromaculata (not of Lafresnaye and D'Orbigny) SCLATER AND SALVIN, 1867, P. Z. S. London, p. 576 (Pará).—PELZELN, 1868, Orn. Bras., II, p. 90 (part; Pará).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 299 (part; spec. a, b, Pará).—GOELDI, 1903, Ibis, p. 499 (Rio Capim).

No specimens collected.

RANGE.—Northeastern Brazil in states of Maranhão (Tury-assú) and Pará (Igarapé-Assú, Murutucú, Ourém, Capim, Providencia, Ananindeuba, Benevides, Apehú, Santa Maria do São Miguel and Ourém, Rio Guamá), west to the Rio Tocantins (Baião, Cametá).

Other Specimens Collected

BRAZIL

Pará:

Igarapé-Assú 2 ♂ ad. Roths. Coll.

Baião:

Rio Tocantins 2 ♂ ad. 2 ♀ ad. 1 (?)

Mocajuba	2 ♂ ad.	
Santa Maria do		
São Miguel:		
Rio Guamá	1 ♀ ad.	
Providencia	1 ♂ ad.	
Maranhão:		
Tury-assú	2 ♂ ad. 1 ♀ ad.	Field Mus.

A form peculiar to the Pará region east of the Rio Tocantins and penetrating into the forested area of northern Maranhão.

Grallaria varia intercedens Berlepsch and Leverkühn

Grallaria imperator Lafresnaye subsp. nov. *intercedens* BERLEPSCH AND LEVERKÜHN, 1890, Ornith., VI, p. 27 (Bahia).

Grallaria imperator (not of Lafresnaye) SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 316 (part; spec. a, Bahia).

Grallaria varia intercedens IHERING, 1907, Cat. F. Braz., I, p. 226 (Bahia, Pernambuco).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 340, eastern Brazil, in states of Bahia and Pernambuco.

Myioturdus rex (not of Gmelin) WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1027, Prov. Bahia (Rio Grande de Belmonte).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia (Cajazeiras, Rio Grungogy, alt. 1000 ft.), 1 ♂ ad., June 23, 1928.

RANGE.—Eastern Brazil, in states of Bahia (Rio Grande de Belmonte, Cajazeiras, Rio Grungogy) and Pernambuco (?).¹

Measurements

	SEX	WING	TAIL	EXP.
				CUL- MEN
Bahia: Cajazeiras, Rio Grungogy	♂	120	50	24

NOTE.—[*Myrmornis torquata* (Boddaert). This genus is omitted from the main text and as it ordinarily follows *Phlegopsis nigromaculata paraensis* I am discussing it here:

In the face of other incorrect localities in Ménériés' paper (*Conopophaga aurita*, *Formicivora deluzae*) I am convinced that his record of *Myrmornis torquata* from Bahia, a purely Amazonian and Guianan species, cannot be accepted as reliable. I am therefore omitting this species from the main text and want to state here that Ménériés' record is almost certainly wrong. The present instance of a wrong locality pointed out to me by Dr. Hellmayr strengthens my belief that Ménériés' locality Serra d' Estrella, Rio de Janeiro, for his *Formicivora deluzae*, originated in a similar mistake and that the type probably came from Cayenne instead of from southern Brazil.]

¹ Fide Ihering.

Other Specimens Examined

Grallaria varia varia

	SEX	WING	TAIL	EXP. CUL- MEN
FRENCH GUIANA Tamanoir, Mana River	1 ♂ ad.	111	41.5	22
BRITISH GUIANA Kamakusa	1 ♂ ad.	112	42.0	24
"	1 ♂ ad.	116	45.0	24

Grallaria varia distincta Todd

BRAZIL

Calama, Rio Madeira	1 ♂ juv.	112	39.0	25	Roths. Coll.
Calama, Rio Madeira	1 ♀ ad.	112	41.0	24	Roths. Coll.

Dr. Hellmayr has written me that a toptype from Bahia in the British Museum differs from *imperator* of southern Brazil by shorter wings and tail and somewhat paler buffy rather than ochraceous under parts. The other differences do not hold at all: bill neither shorter nor paler; dusky markings underneath by no means coarser but, if anything, rather more obsolete; wing 121, tail 43, bill 26 (against wing 130–132, tail 48–50, bill 25–26 in *imperator*).

G. v. intercedens in pattern of coloration is like *imperator* but in smaller proportions resembles *varia*.

I do not know where Ihering got the information that this form extends to Pernambuco.

Dr. Hellmayr has seen the specimen listed by Sclater under *G. varia*, i, and says it is not *intercedens* but more nearly resembles Guianan skins of *varia* from which it differs, however, by the peculiar markings on breast and abdomen. It was acquired, according to Dr. Hellmayr, by Craven, whose localities are notoriously unreliable and so I question the locality "Pernambuco." Anyhow it is not *intercedens*, so I am omitting Sclater's reference.

I have seen no birds from Bahia, except the one in the Kaempfer collection from Bahia (Cajazeiras) which is the only

specimen of this subspecies in The American Museum of Natural History.

Grallaria varia imperator Lafresnaye

Grallaria imperator LAFRESNAYE, 1842, Rev. Zool., V, p. 555, se. Brazil, Prov. São Paulo ("Saint Paul" =).—BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 50 (São Paulo, Santa Catharina).—SCLATER, 1858, P. Z. S. London, XXVI, p. 280 (se. Brazil; monogr.); idem, 1877, Ibis, p. 443 (se. Brazil).—PELZELN, 1868, Orn. Bras., II, p. 91, São Paulo (Ypanema).—BERLEPSCH, 1873, Journ. Ornith., XXI, p. 255, Santa Catharina (Blumenau).—BERLEPSCH AND IHERING, 1885, Zeits. ges. Orn., II, p. 151, Rio Grande do Sul (Taquara).—SCLATER, 1890, Cat. B. Brit. Mus., XV, p. 316 (part; se. Brazil).—IHERING, 1899, Rev. Mus. Paul., III, p. 246 (São Paulo); idem, 1900, *op. cit.*, IV, p. 158, Rio de Janeiro (Cantagallo); idem, 1899-1900, Annuario Est. Rio Grande do Sul, XVI, p. 131, Rio Grande do Sul (Mundo Novo).—DABBENE, 1914, Bol. Soc. Physis., I, p. 328 (Paraguay).

Grallaria varia imperator IHERING, 1907, Cat. F. Braz., p. 226, São Paulo (Baurú, Alto da Serra, Itapura); Paraná (Ourinho).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 340, southeastern Brazil, from Rio de Janeiro to Rio Grande do Sul and adjacent portions of Paraguay (Alto Paraná) and Argentina (Misiones).—SZTOLC-MAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, No. 3, p. 150, Paraná (Therezina).—HOLT, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 296, Serra do Itatiaya (alt. 3700 ft.).—PINTO, 1938, Rev. Mus. Paul., XXII, p. 524, São Paulo (Baurú, Alto da Serra, Itapura, Ituverava) and Paraná (Jacarezinho).

Chamaebates rufiventris BERTONI, 1901, Anal. Cient. Parag., 1, (1), p. 150, e. Paraguay (Alto Paraná, Diaguarasapá).

Grallaria varia rufiventris BERTONI, 1914, Faun. Parag., p. 151 (Paraguay).

Myiothera grallaria (not of Latham) LICHTENSTEIN, 1823, Verz. Doubl. Berliner Mus., p. 43 (São Paulo).

Myioturdus rex (not of Gmelin) MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 42, Rio de Janeiro (Serra d'Estrella).

Myiotrichas imperatrix CABANIS, 1874, Journ. Ornith., XXII, p. 85, Rio de Janeiro (Cantagallo).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Santa Catharina: Salto Pirahy (alt. 1000 ft.), 1 ♂ ad., 1 ♀ ad., May 24, June 24, 1929.

RANGE.—Southeastern Brazil from Rio de Janeiro (Cantagallo, Serra d'Estrella, Serra do Itatiaya) and São

Paulo (Victoria, Ypanema, Baurú, Alto da Serra, Itapura, Ituverava); Paraná (Roça Nova, Jacarezinho, Ourinho, Therezina) to Santa Catharina (Blumenau, Salto Pirahy); Rio Grande do Sul (Taquara do Mundo Novo), Paraguay (Alto Paraná, Diaguarasapá), and northeastern Argentina (Terr. Misiones).

Measurements

BRAZIL	SEX	WING	TAIL	EXP.
				CUL-MEN
Santa Catharina:				
Salto Pirahy	1 ♂ ad.	130	57	27
"	1 ♀ ad.	127	56	26

Other Specimens Examined

BRAZIL	SEX	WING	TAIL	MEN	EXP.
					CUL-
São Paulo:					
Victoria	1 ♂ ad.	132.0	54.5	23.0	Roths. Coll.
Paraná:					
Roça Nova	1 ♀ ad.	131.5	54.5	24.0	Roths. Coll.
ARGENTINA					
Misiones:					
St. Ana	1 ♂ ad.	132.0	54.0	25.5	

Grallaria ochroleuca ochroleuca (Wied)

Myioturdus ochroleucus WIED, 1831, Beitr. Naturg. Bras., III, (2), p. 1032, Prov. of Bahia (Arrayal do Conquista), type lost. See Allen, 1889, Bull. Amer. Mus. Nat. Hist., II, p. 256.—MÉNÉTRIÈS, 1835, Mém. Ac. Sci. St. Pétersb., (6th Ser.) III, part 2 (Sci. Nat.), p. 464 (ex Wied).

Chamaezosa ochroleuca BURMEISTER, 1856, Syst. Übers. Th. Bras., III, p. 48 (ex Wied).

Grallaria ochroleuca SCLATER, 1877, Ibis, p. 451 (ditto; Bahia [ex Wied]).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 356 (part), eastern Brazil in State of Bahia (Arrayal do Conquista) and Ceará (Serra do Ibiapaba).—PINTO, 1937, Bol. Biol., III, No. 5, p. 6, Bahia (Bomfim, crit.); idem, 1938, Rev. Mus. Paul., XXII, p. 425, Bahia (Bomfim).

Grallaria martinsi SNETHLAGE, 1925, Journ. Ornith., 72, p. 447, Ceará (Serra do Ibiapaba).—HELLMAYR, 1929, Field Mus. Nat. Hist. Publ., Zool. Ser., XII, p. 380, Ceará (Varzea Formosa).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Bahia: Gigyú (alt. 2000 ft.), 1 ♂ ad., Oct. 17, 1927.

RANGE.—Eastern Brazil in State of Bahia (Arrayal da Conquista, Giguy, Bomfim) and Ceará (Serra do Ibiapaba).

Measurements

SEX	WING	TAIL	EXP.	
			CUL-	MEN
BRAZIL Bahia: Giguy	1 ♂ ad.	77.5	38	16

Other Specimens Examined

Grallaria martinsi

SEX	WING	TAIL	EXP.		
			CUL-	MU- SEUM	
BRAZIL Ceará: Varzea Formosa	♂ ad.	76.0	42.5	17.0	Field
Varzea Formosa	♂ ad.	78.0	42.0	16.0	"
Varzea Formosa	♂ ad.	77.5	44.0	16.5	"

I borrowed the three specimens of *Grallaria martinsi* from Ceará (Varzea Formosa), topotypical skins, from the Field Museum in Chicago and agree with Dr. Hellmayr, Mr. Zimmer (1934, Amer. Mus. Novit., No. 703, p. 21), and Mr. Pinto (1937, Bol. Biol., III, No. 5, May, pp. 6, 7) that there is no doubt as to *Grallaria martinsi* being the same as *Grallaria ochroleuca ochroleuca*.

Besides my specimen from Giguy, Bahia, there is one from Bomfim, Bahia, in the Museum Paulista, three from Ceará at Chicago, and two or three were obtained by Mme. Snethlage. I do not know of any specimens anywhere else.

Grallaria ochroleuca nattereri (Pinto)

Grallaria nattereri PINTO, 1937, Bol. Biol., III, No. 5, May, p. 7, São Paulo (Alto da Serra); idem, 1938, Rev. Mus. Paul., XXII, p. 526, São Paulo (Alto da Serra).

Grallaria ochroleuca (not *Myioturdus ochroleucus* Wied) PELZELN, 1868, Orn. Bras., II, p. 226, São Paulo (Ypanema).—SCLATER, 1877, Ibis, p. 451 (part), São Paulo (ex Nattereri).—IHERING, 1899, Rev. Mus. Paul., III, p. 247, São Paulo; idem, 1907, Cat. Faun. Braz., I, p. 226, São Paulo (Alto da Serra).—BERTONI, 1904, Anal. Cient. Parag., I, No. 3, p. 5, Misiones (Puerto Bertoni).—DABBENE, 1914, Bol. Soc.

Physis., I, p. 328, Misiones (Santa Ana, Iguazú).—HELLMAYR, 1924, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, part 3, p. 356 (part), São Paulo (Ypanema, Alto da Serra) and Misiones (Santa Ana, Iguazú).—SZTOLEMAN, 1926, Ann. Zool. Mus. Polon. Hist. Nat., V, p. 158, Paraná (Marechal Mallet, Rio Claro, Fazenda Firmiano, Fazenda Ferreira, Fazenda Durski, Bahado, Cara Pintada, Vermelho).

SPECIMENS COLLECTED

(Kaempfer Collection)

BRAZIL.—Paraná: Corvo, Serra da Graciosa (alt. 2700 ft.), 1 ♂ imm., Feb. 19, 1930. Rio Grande do Sul: São Francisco de Paula (alt. 3000 ft.), 1 ♂ ad., Nov. 21, 1928.

RANGE.—Wooded region of southeastern Brazil, in states of São Paulo (Ypanema, Alto da Serra), Paraná (Corvo, Serra da Graciosa, Marechal Mallet, Rio Claro, Faz. Firmiano, Faz. Ferreira, Faz. Durski, Bahado, Cará Pintada, Vermelho), Rio Grande do Sul (São Francisco de Paula), and adjoining parts of Argentina (Santa Ana, Iguazú Misiones).

Measurements¹

SEX	WING	TAIL	EXP.		
			CUL-	TAR-	SUS
BRAZIL Paraná: Corvo, Serra da Graciosa	1 ♂ juv.	81	38.0	15.5	39.5
Rio Grande do Sul: São Francisco de Paula	1 ♂ ad.	79	36.5	15.5	40 0

This southern form seems to differ from the typical race by more decidedly olivaceous (less grayish) dorsal surface, by having the entire under parts (except the white throat) deep ochraceous with smaller dusky pectoral spots (while in *martinsi* the under parts, including the lower tail-coverts, are white, the breast more broadly spotted with blackish, these spots being literally edged with ochraceous), and by its longer tarsus (38–40 against 35–36 mm.).

Sztolcman has recorded 14 specimens from various localities in Paraná.

Dr. Hellmayr writes me as follows: He does not know what the bird in the

¹ Measurements sent me by Dr. Hellmayr: 1 ♂ ad., wing 80, tail 35, tarsus 40; 1 ♀ ad., wing 75, tail 33, tarsus 38; both from Ypanema, São Paulo.

Leyden Museum may be, described by Sclater, 1858, P. Z. S. London, XXVI, p. 282, 1877, Ibis, p. 451, "beneath with spots only on the sides of the breast and belly," a characterization which does not fit either *ochroleuca (martinsi)* or *nattereri*.

The matter becomes even more involved

by Sclater (1890, in the key to *Grallaria* in Cat. B. Brit. Mus., XV, p. 320) putting his *Grallaria ochroleuca* with *macularia* in the section having "the breast white with strong black striations" which is in utter disagreement with his description.

