## AMERICAN MUSEUM NOVITATES

Number 160

Published by The American Museum of Natural History New York City

Feb. 26, 1925

59.82(8)

# DESCRIPTIONS OF NEW BIRDS FROM COLOMBIA, ECUADOR, PERU, AND ARGENTINA

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Like its predecessors in Novitates, this paper is a by-product of the study of our collections from Ecuador and faunally related countries designed to determine not only the names of the birds but also their relationships. It is offered with a request that any criticisms or comments it may inspire will be sent to the author for use in connection with the preparation of a memoir on Ecuadorean birds.

## Turdus fuscater quindio, new subspecies

Subspecific Characters.—Next to *Turdus fuscater ockendeni* Hellmayr of southeastern Peru, the darkest known race of the species; much darker throughout than *T. f. gigantodes* (Cabanis) of central and northern Peru; the upperparts in fresh plumage dark mouse-gray rather than deep mouse-gray; the underparts deep mouse-gray rather than mouse-gray; the entire plumage with a slight olivaceous cast. In general color differing from *T. f. gigas* (Fraser) of the Bogota region even more pronouncedly than it does from *gigantodes*. The plumage of the latter, both above and below, has a brownish cast lacking in both *gigantodes* and *quindio*.

Type.—No. 109,119, Amer. Mus. Nat. Hist.; of ad.; Laguneta, alt. 10,300 ft., Central Andes, Colombia; May 18, 1911; Chapman and Fuertes.

RANGE.—Humid Temperate Zone; Central and West Andes of Colombia; northwestern and East Andes of Ecuador.

#### SPECIMENS EXAMINED

Turdus fuscater quindio.—Colombia: Santa Elena, Barro Blanco, Rio Toché, Laguneta, Santa Isabel, Almaguer, Central Andes, 20; Paramillo, Cerro Munchique, Cocal, West Andes, 14. Ecuador: Mojanda Mts., 2; Pichincha, 4; Pallatanga, 2; upper Sumaco, Rio Upano, Oyacachi, below Papallacta, above Baeza, East Andes, 21.

Turdus fuscater gigas.—Colombia: Bogotá region, 16.

Turdus fuscater pallidiventris.—Venezuela: Mérida region, 1.

Turdus fuscater gigantodes.—Peru, Dept. Junin: Maraynioc, 3 (topotypes); Rumicruz, 2; Chipa, 8; El Tambo, west of Payta, 5. Ecuador: El Chiral, 3; San Bartolo, 6; Taraguacocha, 4; Guachanamá, 2; Celica, 1 (specimens from West Andes are not typical); El Paso, 4; Bestion, 6; Loja, 5.

Turdus fuscater ockendeni.—Peru: Occobamba Valley, above Urubamba Cañon, 2; Limbani, east of Tirapata, 2; Oconeque, near Limbani, 1.

Turdus fuscater fuscater.—Bolivia: Cuchacancha, 11,000 ft., near Cochabamba, 8.

The thrushes of the Semimerula group are subject to much geographic variation which, however, can be so easily confused with their pronounced seasonal variations that comparable series are required properly to distinguish the two. I formerly referred specimens from the Central and West Andes of Colombia to gigantodes but the subsequent acquisition of much additional material, including topotypes of gigantodes, shows that there are well-marked and constant differences between Colombian and Peruvian specimens. The fact that the Temperate Zone passes from Ecuador into Peru over the western Andes doubtless accounts for the range of gigantodes, while the faunal affinities of the Central Colombian Andes are with eastern, rather than with western Ecuador.

In the preceding list of specimens I provisionally refer a series from the Temperate Zone near Cochabamba to fuscater Lafresnaye and d'Orbigny, a name which Dr. Hellmayr has shown¹ to be applicable to the Bolivian representative of this group, rather than to the smaller, darker Bolivian and Argentine bird, for which he uses the name anthracinus Burmeister.

In default of typical specimens of fuscater, I am not in a position to discuss its relationships to anthracinus. It does not, however, seem to me that the latter is a representative of chiquanco. True chiquanco, I may add, I should restrict to the Pacific coast region, while Temperate Zone specimens from Ecuador to Titicaca I refer to chiquanco conradi. The two forms are to be distinguished only by size, conradi being the larger with a longer tail.

#### Myospiza aurifrons zamoræ, new subspecies

Subspecific Characters.—Similar to Myiospiza aurifrons aurifrons (Spix) of Brazil, but very much darker above, the streaks on the crown and back broader, blacker, better defined and more continuous, their brown margins deeper; remiges and rectrices darker; lower parts grayer.

Type.—No. 168,146, Amer. Mus. Nat. Hist; A ad.; Zamora, Rio Zamora, eastern Ecuador; November 26, 1920; George K. Cherrie.

Range.—Tropical Zone; southeastern Colombia to central Peru.

#### SPECIMENS EXAMINED

Myospiza aurifrons zamoræ.—Colombia: La Morelia, 4, 1 juv.; Florencia, 4, 1 juv. Есилров: Zamora, 11, 2 juv. Реки: Perico, Rio Chinchipe, 1; Monte Alegre, 1 juv.; La Merced, Junin, 2; Perené, Junin, 1.

Myospiza aurifrons aurifrons.—Brazil: Faro, Rios Jamundá and Amazon, 2; Arumanduba, Amazon, 1; Rio Jamauchim, Tapajoz, 1; Porto Velho, Madeira, 4, 1 juv. Bolivia: Yungas de Cochabama, 4; Todos Santos, Rio Chimoré, 1; Tres

<sup>11921,</sup> Nov. Zool., XXVIII, p. 230 et seq.

Aroyas, Espiritu Santo, 1 juv. Southeastern Peru: Rio Tavara, 3; Rio Inambari, 1; La Pampa, 3; Candamo, Santa Ana, 1.

In commenting on the grayer colors of specimens of this species from southeastern Peru (which I incorrectly called peruana)1 I accepted specimens from eastern Ecuador as typically representing aurifrons aurifrons. A more thorough revision of the group, with additional material, leads to the belief that specimens from the lower Amazon and Falls of the Madeira are much more likely to be true aurifrons than are our birds from the slopes of the Andes. This opinion is confirmed by the fact that Hellmayr (who suggested Fonteboa as type-locality for aurifrons<sup>2</sup>) refers specimens from the Madeira<sup>3</sup> as well as from the lower Amazon to aurifrons. In the publication last referred to he comments on the resemblance of lower Amazonian to southeast Peruvian birds, a resemblance fully confirmed by our series from southeastern Peru as well as examples from Bolivia. Mr. Todd4 has described a form from the Rio Surutu, Bolivia, as Myospiza aurifrons meridionalis, but he gives us no information in regard to the number of specimens on which it is based or whether he had topotypical material of true aurifrons for comparison.

Signs of intergradation of aurifrons with zamoræ are shown by some of our examples from southeastern Peru, but La Merced and Perené birds agree with those from Ecuador.

Specimens from southeastern Colombia average browner than topotypes of zamoræ but the difference is fully bridged by individual variation. It is worthy of note that the characters separating zamoræ from aurifrons are more pronounced in juvenal than in adult plumage.

## Incaspiza watkinsi, new species

Specific Characters.—Resembling Incaspiza læta (Salvin) of Cajabamba. Peru, in size, resembling Incaspiza pulchra personata (Salvin) of Cajamarca, Peru, in facial pattern; differing from both in having the back streaked instead of plain.

Type.—No. 182,239, Amer. Mus. Nat. Hist.; o ad.; Perico, arid Tropical Zone: Rio Chinchipe: August 15, 1923; H. Watkins.

DESCRIPTION OF TYPE.—Region about the base of the bill backward to the eye black, cut squarely across the chin and cheeks, where sharply defined from the neutral gray of the breast, the sides of the head, and neck; black on forehead narrower than on chin; a suggestion of a fine gray superciliary; crown and nape neutral gray tinged with tawny; back and scapulars tawny, brighter laterally, browner centrally, where lightly streaked with black; rump like center of back; upper tail-coverts gray;

<sup>&</sup>lt;sup>1</sup>See Hellmayr, 1908, Novit. Zool., p. 36, where *peruanus* (Bonap.) is shown to be a synonym of *Myospiza manimbe* (Licht.).

<sup>2</sup>1910, Nov. Zool., XVII, p. 281.

<sup>3</sup>1912, Abhandl. Bayern Akad. Wissen. Munich, p. 16.

<sup>4</sup>1920, Proc. Biol. Soc. Wash., XXXIII, p. 71.

central pair of rectrices blackish, three outer pairs with inner web wholly white, the outer pair terminally fuscous on outer web, this color increasing in extent on second and third pairs; fourth pair blackish with a broad white streak through the inner web; primaries and secondaries externally grayish; the tertials margined and tipped with ochraceous-tawny; primary coverts largely black; remaining wing-coverts largely light neutral-gray; center of throat immediately posterior to black chin whitish or buffy; gray of breast clearly defined from light buff abdominal region and crissum; the sides and flanks grayish; feet pale flesh-color; bill bright yellow. 1 3: wing, 65; tail, 47.5; tarsus, 25; culmen, 14.5 mm.

DESCRIPTION OF FEMALE:—Resembles the male but crown browner; dorsal streaks more prominent; four central rectrices without white; ridge of culmen brownish. 5 9: wing, 61-64; tail, 42-46; tarsus, 23-24; culmen, 14-15 mm.

RANGE.—Doubtless arid Tropical Zone in the Marañon Valley, but known only from Perico on the Rio Chinchipe, near its junction with the Marañon.

#### SPECIMENS EXAMINED

Incaspiza watkinsi.—Peru: Perico, 1 ♂, 5 ♀.

Incaspiza læta.—Peru: Cajabamba, 1  $\sigma$  (topotype); Viña, 5000 ft., upper Marañon, 1  $\sigma$ .

Incaspiza pulchra personata.—Peru: Cajamarca, 1 Q (topotype).

Incaspiza pulchra pulchra.—Plate VIII, Ibis, 1886; upper Rimac Valley, Peru.

This is an interesting addition to the small group of finches composing the genus *Incaspiza*, known as yet only from Peru.<sup>1</sup> The species described as *personata* from Cajamarca is so near *pulchra* from above Lima, that I can discover no difference between our topotype of the former and the colored plate of the latter. Salvin doubtless had access to the type of *pulchra* but his remarks concerning its resemblance to *personata* are too vague to be of assistance in determining the birds' real relationships. Certainly, however, they are not specifically distinct. The female in both *personata* and *læta* is described as being similar to the male but in *watkinsi* there is an evident sexual difference.

I have named this well-marked species in honor of its collector, Mr. Harry Watkins, who for years has rendered loyal service to this museum as its representative in Peru, where his labors have added much to our knowledge of the birds of that country.

## Phrygilus unicolor tucumanus, new subspecies

Subspecific Characters.—Male resembling male of *Phrygilus unicolor plumbeus* (Philippi and Landbeck) of the Paramo Zone of Chile, paler (neutral gray rather than deep neutral gray) than the male of *Phrygilus unicolor unicolor* (d'Orbigny and Lafresnaye) of the Paramo Zone of Peru; female and young male much more broadly streaked, both above and below than the female and young male of *P. u. plumbeus*,

<sup>&#</sup>x27;There is, however, a resemblance between Incaspiza pulchra and Junco alticola of Guatemala which suggests a closer relation than is implied by their generic names.

less broadly streaked than the female and young male of P. u. unicolor; averaging smaller throughout than P. u. plumbeus; essentially agreeing in size with P. u. unicolor.

Type.—No. 142,463, Amer. Mus. Nat. Hist.; Q ad.; above Tafi del Valle, 9500 ft., Prov. Tucuman, Argentina; April 4, 1916; Miller and Boyle.

RANGE.—Paramo Zone of the Tucuman region.

#### SPECIMENS EXAMINED

Phrygilus unicolor tucumanus.—Argentina: above Tafi del Valle, 9500 ft., Prov. Tucuman,  $12 \, ^{\circ}$  ad.;  $2 \, ^{\circ}$  im.;  $3 \, ^{\circ}$  2.

Phrygilus unicolor plumbeus.—Chile: Upper Rio Blanco, about 7200 ft., 2  $\sigma$  ad.; 3  $\sigma$  im.; 1  $\circ$ .

Phrygilus unicolor unicolor.—Peru: Limbani, 10,000 ft., 2 3 ad.; Occobamba Pass, 13,000 ft., above Ollantaytambo, 2 3 ad.; Chipa, 13,000 ft., Junin, 4 3 ad., 2 3 im.

Phrygilus unicolor grandis.—Ecuador: Bestion, 10,100 ft., Prov. Azuay, 4 & ad., 4 &; Chimborazo, 12,500 ft., 16 & ad., 10 &; Pichincha, 4 &, 4 &. Colombia: Santa Isabel, 12,700 ft., Central Andes, 5 & ad. (inc. type), 3 & im., 3 &.

Phrygilus unicolor geospizopsis.—Colombia: Bogotá region, 1 o ad., 5 Q.

Phrygilus unicolor nivarius.—Со<br/>ьомвіа: Paramo de Chiruqua, Santa Marta, 1  $\circlearrowleft$ , 2  $\circlearrowleft$ . Venezuela: Mérida region, 1  $\circlearrowleft$ , 3  $\circlearrowleft$ .

#### MEASUREMENTS OF MALES

		No.	Wing	Tail	Culmen	
P. u. plumbeus	Upper Rio Blanco, Chile	2	90-92	62-65	13.2–14 mm.	
P. u. tucumanus	Above Tafi del Valle,					
	Arg.	5	87-90	59 – 64	11 - 12.5	
P. u. unicolor	Chipa, Junin, Peru	5	85 – 89	56 – 62	12 -13	
$P.\ u.\ grand is$	Chimborazo, Ec.	5	90 – 95	60-66	13 -14	
$P.\ u.\ grand is$	Santa Isabel, Col.	5	89 – 95	62 – 68	14 -15	

The races of *Phrygilus unicolor* fall into two groups: (1) *P. u. plumbeus* and *P. u. tucumanus* of Chile and Argentina; (2) *P. u. unicolor*, *P. u. grandis*, *P. u. geospizopsis* and *P. u. nivarius*, from Peru (Bolivia?) northward to Venezuela.

In the first group the males are paler (neutral gray rather than deep neutral gray), the females and young males much less broadly streaked. The Chilean form  $P.\ u.\ plumbeus$ , which has not been currently recognized, proves to be the most strongly marked of the group, the streaks on the female and young male being less than half as broad as in the forms of the second group. The Ecuadorean and Colombian forms are distinguished from  $P.\ u.\ unicolor$  by size and apparently by browner margins to the feathers of the upperparts, but with only one female of true unicolor it is impossible to say whether this difference is constant. The relationships of the Colombian races I have previously discussed (1915, Bull. A. M. N. H., XXXIV, p. 651).

## Arremon aurantiirostris santarosæ, new subspecies

Subspecific Characters.—Most nearly resembling Arremon aurantiirostris erythrorhynchus Sclater of the Bogotá region but with a broader pectoral band and somewhat browner upperparts; similar to its nearest geographic ally, Arremon aurantiirostris occidentalis Hellmayr of western Colombia, but bill less deep at the base, vertical stripe lighter gray, superciliary whiter, upperparts yellower green, sides and flanks whiter; feet flesh-color instead of brownish; bill (in skins) paler. 5 3: topotypes, wing, 74-76; tail, 62-66; culmen, 15-15.5; depth of bill at base, 7-8 mm.

Type.—No. 172,480, Amer. Mus. Nat. Hist.;  $\circlearrowleft$  ad.; Santa Rosa, Prov. del Oro, southwestern Ecuador; October 22, 1921; G. Gill.

RANGE.—Tropical Zone, southwestern Ecuador, north to the Chimbo Valley.

#### SPECIMENS EXAMINED

Arremon aurantiirostris santarosæ.—Ecuador: Duran, 1; Bucay, 7; Chimbo, 4; Rio Jubones, 1; La Chonta, near Santa Rosa, 9; Santa Rosa, 8; La Puente, 2; Cebollal, 2; Rio Pullango, 3.

Arremon aurantiirostris occidentalis.—Ecuador: Manaví, 7; Esmeraldas, 4. Colombia: Barbacoas, 2; Buenavista, Nariño, 1; Cerro Munchique, 2 (all the preceding specimens have the feet flesh-color; the bill pale, as in santarosæ); San José, 3; Bagado, Chóco, 1; Alto Bonito, 3; Dabeiba, 2 (all have feet brown).

Arremon aurantiirostris strictocollaris.'—Eastern Panama: Tacareuna, 7; Chepigana, 3; El Real, 1 (all have feet brown).

Arremon aurantiirostris aurantiirostris.—Panama: Canal Zone, 3; Boqueron, Chiriqui, 3. Costa Rica: Boruca, 2; Atirro, 1 (all have feet brown).

Aremon aurantiirostris erythrorhynchus.—Colombia: Chicoral, upper Magdalena River, 3; Honda, 1; Puerto Valdivia, Antioquia, 1.

Arremon spectabilis.—Eastern Ecuador: Zamora, 9; San José de Sumaco, 13; Rio Suno, 2.

The most definite character separating certain races of this species is the color of the feet, which are brown in typical specimens of true aurantiirostris, in strictocollaris, and occidentalis, and flesh-color in erythrorhynchus and santarosæ. Specimens from northwestern Ecuador and southwestern Colombia, however, have the general colors of occidentalis, but the pale feet of santarosæ, and are thus intermediate between the two, but as they agree with occidentalis in more respects than they do with santarosæ I have placed them with the former.

Some specimens of *strictocollaris* from eastern Panama cannot be distinguished from Canal Zone examples of *aurantiirostris*, while others can be matched by San José, Colombia, examples of *occidentalis* thus confirming Hellmayr's<sup>2</sup> belief in the intergradation of the latter with *aurantiirostris*. The actual intergradations of *erythrorhynchus* with any other member of the group remains to be proven, but the differences

<sup>&</sup>lt;sup>1</sup>Todd, 1922, Proc. Biol. Soc. Wash., XXXV, p. 90; Sautata, left bank, lower Atrato River. <sup>2</sup>1911, Proc. Zoöl. Soc., p. 1118.

between santarosæ and erythrorhynchus are so small that, in spite of their wide geographic separation, it is quite possible that they may intergrade by individual variation.

The east Ecuadorean form *spectabilis* is, in my opinion, sufficiently differentiated to be accorded specific rank. Its orange shoulder and nearly obsolete vertical stripe are its principal characters.

## Atlapetes celicæ, new species

Specific Characters.—Agreeing in size and general coloration with Atlapetes leucopterus (Jardine) of northern Ecuador, but with no white speculum or evident white supraloral spots; nearly related to Atlapetes seebohmi (Taczanowski) of Cajabamba, Peru, but smaller, white supraloral spots obsolete, mystacial stripes heavier; resembling Atlapetes simonsi (Sharpe) of the Loja region, but smaller, the forehead narrowly black, the white supraloral spots obsolete.

Type.—No. 168,231, Amer. Mus. Nat. Hist.;  $\sigma$  ad.; Celica, 6900 ft., southwestern Ecuador; September 26, 1920; Geo. K. Cherrie.

#### SPECIMENS EXAMINED

Atlapetes celicæ.—Ecuador: Celica, 1 %.

Atlapetes leucopterus.—Ecuador: Pomasqui, 1; Tumbaco, 3 &; Pallatanga, 3 &, 1 &; Naranjo, Prov. Guayas, 1 &, 1 &.

Atlapetes simonsi.—Ecuador: Loja, 1 9 (topotype).

#### MEASUREMENTS

		Sex	Wing	Tail	Tarsus	Culmen
Atlapetes	celicæ	♂	68.5	63	27	16 mm.
"	simonsi	Q	76.0	<b>75</b>	28	16
• 6	$see bohmi^1$	?	76.0	71	29	17
"	leucopterus	$2\sigma$	67-69	64 - 65	27	15

In color this species seems to be nearest Atlapetes seebohmi, a species which I have not seen but which is evidently as large as A. simonsi and consequently so much larger than celicæ that there is small possibility of their being the same. Nor do I hesitate to give this bird full specific rank. The variations in Atlapetes being more frequently mutational than geographic in character, the genus contains numbers of extremely closely related but nonintergrading species.

## Diglossa albilatera schistacea, new subspecies

Subspecific Characters.—Resembling Diglossa albilatera albilatera Lafresnaye of eastern Colombia, but upperparts and frontal region averaging paler, the underparts, especially posteriorly, always appreciably grayer. Very near Diglossa albilatera federalis Hellmayr of the Caracas, Venezuela region, but apparently slightly paler below. 4 3: wing, 57–59; tail, 45; culmen, 10.5–12 mm.

<sup>&</sup>lt;sup>1</sup>Ex Taczanowski.

Type.—No. 181,651, Amer. Mus. Nat. Hist.; of ad.; Chaupe, 6100 ft., northeast of Huancabamba, N. Peru; February 2, 1923; H. Watkins.

RANGE.—Chiefly Subtropical Zone from northern Peru through southwestern (and northwestern?) Ecuador.

#### SPECIMENS EXAMINED

Diglossa albilatera schistacea.—Peru: Chaupe, 4 ♂, 3 ♀. Ecuador: San Bartolo, 7500 ft., Alamor Range, 1 ♂, 3 ♀.

Diglossa albilatera albilatera.—Ecuador: below Papallacta, 1 ♂; above Baeza, 2 ♂. Colombia: East Andes, 7 ♂, 5 ♀; Central Andes, 6 ♂, 5 ♀; West Andes, 4 ♂, 2 ♀; Santa Marta Mts., 2 ♂, 3 ♀. Venezuela: Mérida region, 3 ♂, 1 ♀.

Diglossa albilatera federalis.—Venezuela: Las Cienegas del Aguilon, 1 %.

There can be no question of the distinctness of this form from true albilatera, but I am by no means certain that it is separable from federalis of the Caracas region. Proof of absolute parallelism, however, must rest on series large enough fully to cover the range of individual variation and, until such material is available, I do not venture to refer the form from northern Peru and southwestern Ecuador to federalis. I have no specimens from northwestern Ecuador but several males from Cerro Munchique, southwestern Colombia approach schistacea, a fact which suggests that western Ecuador birds are of that race.

## Diglossa indigotica incæ, new subspecies

Subspecific Characters.—Similar to Diglossa indigotica indigotica Sclater of the Subtropical Zone of Ecuador, but general coloration deeper and richer, wings and tail longer.

Type.—No. 150,038, Amer. Mus. Nat. Hist.; on ad.; Inca Mine, Santo Domingo, 6000 ft., southeastern Peru; August 6, 1918; H. Watkins.

#### SPECIMENS EXAMINED

Diglossa indigotica incæ.—Peru: Santo Domingo, 9 ♂, 3 ♀.

Diglossa indigotica indigotica.—Eastern Ecuador: Macas region, 1 3; lower Sumaco, 3 3, 1 9; below Oyacachi, 1 9; "Ecuador," 1.

#### MEASUREMENTS OF MALES

		No.	Wing	Tail
D. i. incæ	Santo Domingo, Peru	8	63-66.5(65)	44-48(46) mm.
" indigotice	Macas region, Ec.	1	62	43
" "	Lower Sumaco, Ec.	<b>2</b>	59-60	40-42
"	Below Oyacachi, Ec.	1	59	42

The receipt of a small series of *indigotica* from Ecuador for the first time gives us an adequate representation of the typical form, from which southeastern Peruvian specimens prove to be quite distinct.

It is noteworthy that, aside from these Santo Domingo specimens and one from San Miguel in the Urubamba region, this species does not

<sup>&</sup>lt;sup>1</sup>Bull. U. S. Nat. Mus., No. 117, p. 115.

appear to have been recorded from Peru. I have not seen Diglossa glauca of Bolivia. While said by Sclater to be "somewhat similar to D. indigotica," the description of the female as "beneath ochraceous" indicates that it is not a member of the indigotica group.

## Tanagra mesochrysa tavaræ, new subspecies

Subspecific Characters.—Similar to Tanagra mesochrysa mesochrysa (Salvadori) of the Subtropical Zone of Colombia and Ecuador, but male with the upperparts bluer green, the forehead and underparts deeper yellow (bright analine yellow); the yellow below much more extensive, covering the breast and abdominal region; only the throat, sides and flanks being greenish.

Type.—No. 147,790, Amer. Mus. Nat. Hist.; of ad.; Rio Tavara, alt. 1600 ft.; long. 70° 20′ W., lat. 13° 25′ S., southeast Peru; June 18, 1915; H. and C. Watkins.

#### SPECIMENS EXAMINED

Tanagra mesochrysa tavaræ.—Peru: Rio Tavara, 2 3, Chaupe, 6100 ft., northeast of Huancabamba, 4 3, 3 9.

Tanagra mesochrysa mesochrysa.—Eastern Ecuador: below Oyacachi, 2 ♂. Соломыа: "Bogota," 1 ♂.

Specimens from northern Peru are somewhat less extensively yellow below than those from Tavara, and the yellow is paler; they thus approach true *mesochrysa* but are still much nearer to *tavaræ* than to the more northern form. Lacking females of true *mesochrysa*, I cannot say whether racial variation is presented by this sex.

## Tangara punctata zamoræ, new subspecies

Subspecific Characters.—Similar to *Tangara punctata punctata* (Linnæus) of the Guianas, but larger and with the primary coverts and outer primaries margined with green instead of with blue.

Type.—No. 130,432, Amer. Mus. Nat. Hist.; o ad.; Zamora, eastern Ecuador; November 3, 1913; W. B. Richardson.

## SPECIMENS EXAMINED

(see below)

## Tangara punctata perenensis, new subspecies

Subspecific Characters.—Similar to Tangara punctulata (Sclater and Salvin) of Bolivia and southeastern Peru, but averaging darker above and with the sides of the abdomen and flanks unstreaked, and with fewer and narrower streaks in the lower tail-coverts.

Type.—No. 169,444, Amer. Mus. Nat. Hist.; or ad.; Utcuyacu, 4800 ft., Prov. Junin, eastern Peru; H. Watkins.

#### SPECIMENS EXAMINED

Tangara punctata zamoræ.—Eastern Ecuador: Zamora, 6  $^{\circ}$ , 1  $^{\circ}$ ; below San José de Sumaco, 2  $^{\circ}$ .

Tangara punctata perenensis.—Central Peru: Utcuyacu, 6 &, 1  $\circ$ ; Tulumayo, 1  $\circ$ .

Tangara punctata punctata.—Cayenne, 1  $\sigma$ . British Guiana: Wismar, 1  $\sigma$ , 1  $\varphi$ ; Rockstone, 1  $\sigma$ .

Tangara punctata punctulata.—Southeastern Peru: Rio Inambari, 2 3, 3 9; Santo Domingo, 2 3, 1 9; Rio Tavara, 1 9. Bolivia: Yungas, 2 3.

#### MEASUREMENTS OF MALES

			No.	Wing	Tail
T. p.	punctata	Cayenne	1	61	38.0  mm.
"	"	Wismar, B. G.	1 .	60	39.5
"	"	Rockstone, B. G.	1	59	38.5
"	zamorx	Zamora, Ec.	5	63 - 64	42.5 – 44.0
"	perenensis	Utcuyacu, Peru	3	65 - 66	44 -46
"	punctulata	Santo Domingo	2	63 - 65	44 -46
"	"	Yungas, Bolivia	6	65-66	46 -48

Previous writers have referred the Ecuadorean form of this species to the southern *punctulata*. There can, however, be no doubt of its closer affinity to true *punctata*, from which, indeed, it differs only slightly but apparently diagnostically.

Central Peruvian specimens, on the other hand, have the much whiter underparts of *punctulata* but in their unstreaked sides are more like *punctata*. They thus have the color of the southern and the pattern of the northern form.

## Tangara labradorides chaupensis, new subspecies •

Subspecific Characters.—Resembling Tangara labradorides labradorides Boissoneau of Colombia, but general coloration greener; abdomen much paler, the whitish area extending to the breast and occupying most of the abdominal region; forehead with little or no golden sheen; the primaries margined externally with golden green instead of with blue.

Type.—No. 181,698, Amer. Mus. Nat. Hist.; ♂ ad.; Chaupe, 6100 ft., 'northeast of Huancabamba, northern Peru; January 27, 1923; H. Watkins.

#### SPECIMENS EXAMINED

Tangara labradorides chaupensis.—Peru: Chaupe, 3 ♂, 1 ♀.

Tangara labradorides labradorides.—Colombia: East Andes, 8  $_{\circlearrowleft}$ , 8  $_{\circlearrowleft}$ ; Central Andes, 6  $_{\circlearrowleft}$ , 3  $_{\circlearrowleft}$ ; West Andes, 8  $_{\circlearrowleft}$ , 9  $_{\circlearrowleft}$ .

The occurrence of a distinct form of this species on Amazonian drainage in northern Peru is most interesting. The species is common in all three ranges of the Colombian Andes (though I know of no record from the eastern slope of the East Andes), has been recorded from three localities in western Ecuador, but is unknown from eastern Ecuador. The fauna of Chaupe is distinctly Amazonian and, if the absence of this

species from eastern Ecuador is actual, it apparently has reached Chaupe from the west.

Unfortunately, we have no specimens from western Ecuador but several examples from as far south in the West Andes of Colombia as the latitude of Popayan are referable to true *labradorides*.

## Compsocoma somptuosa and Its Races

Compsocoma somptuosa, a species of the Subtropical Zone ranging from central Peru to the Caracas region in Venezuela, and represented in southeastern Peru and Bolivia by the nearly allied Compsocoma flavinucha, presents some exceedingly interesting variations.

Some years ago<sup>1</sup> I predicted that Compsocoma victorini of the Bogotá region, treated by authors generally as a full species, would be found to intergrade with a race of somptuosa; and the large amount of material which we have since received, representing the various races of this species, apparently verifies the prediction. Dr. Hellmayr<sup>2</sup> has shown that the type locality of Compsocoma somptuosa Lesson is Peru, not Venezuela as Berlepsch<sup>3</sup> had stated. I assume, therefore, that we may accept specimens from the Chanchamavo region as topotypical. Birds from this part of Peru have the foreback solid black, the wings and tail margined with pale cerulean blue. Birds from northern Peru and southwestern Ecuador have the vellow areas somewhat deeper in tone and the crown-patch slightly larger than those of central Peru; nevertheless, I should place them with true somptuosa. In southwestern Ecuador, north to the Chimbo Valley, a form occurs in which the foreback is often more or less mixed with the greenish of the rump, and the wings and tail are margined with king's blue. This bird very closely resembles antioquix of north central Colombia, but is smaller; the difference in size between them, in connection with the fact that their ranges are widely separated by that of cyanoptera, induces me to describe the bird of southwestern Ecuador under the name Compsocoma somptuosa alamoris.

Specimens from the northern part of the range of this race (the latitude of Zaruma) in the blackness of the back approach cyanoptera, in which the wings and tail are externally margined with cadet blue, and the foreback is black. This form occurs from the Chimbo Valley northward into the West Andes of Colombia and the western slope of the Central Andes, increasing in size as it proceeds northward, and, at the northern end of these mountain chains, intergrading with Compsocoma

<sup>&</sup>lt;sup>1</sup>1917, Bull. Amer. Mus. Nat. Hist. XXXVI, p. 606. <sup>2</sup>1913, Verhandl. Orn. Ges. Bayern, XI, p. 317. <sup>3</sup>1911, Rev. Tanagers, p. 1049.

somptuosa antioquiæ, a large bird with the foreback mixed with greenish and the wings and tail externally margined with king's blue.

From the eastern slope of the East Andes, as I have before recorded (loc. cit., p. 606), from El Eden and Rio Toché, we have specimens which in the increased amount of green in the foreback approach victorini. It was the occurrence of these birds which led me to believe in the intergradation of the last-named form with somptuosa. Unfortunately the region between El Eden and La Palma on the eastern slope of the Central Andes is still unrepresented in our collections, but meanwhile we have secured an excellent series from Baeza on the eastern slope of the Ecuadorean Andes. These birds I have described beyond under the name Compsocoma somptuosa baezæ. They have the entire back wholly green. or but slightly marked with blackish in the nuchal region. The more brightly colored specimens are exceedingly near victorini, which they further resemble in the pale cerulean blue of the margins of the wing and tail. While we have no examples which would positively demonstrate the intergradation of victorini with baezx, it seems to me clear that the characters separating the two are only differences of a degree and racial in nature. I have seen no specimens of this species from north of the Bogotá region, nor from western Venezuela; but in the Caracas region it reappears in a form so closely resembling true somptuosa of Peru that Dr. Hellmayr fomerly referred Caracas birds to that race; he later separated the Caracas bird under the name of venezuelana, but it is obviously very near to somptuosa. Indeed, a topotypical specimen in our collection—and the only one of venezuelana which I have seen—can be exactly matched by specimens from Peru. In addition to wide divergence in color which is apparently completely bridged by geographic variation, Compsocoma somptuosa presents two instances of parallelism in one of which a north central Colombia race differs from one of southwestern Ecuador only in size, and that slightly; while in the second, specimens from the Caracas region of Venezuela agree with others from central and northern Peru.

## Compsocoma somptuosa alamoris, new subspecies

Subspecific Characters.—Similar to Compsocoma somptuosa antioquiæ Berlepsch of the Subtropical Zone of the northern end of the Central and West Andes of Colombia but smaller (wing, 89, as compared with 97 mm. in antioquiæ). Resembling Compsocoma somptuosa cyanoptera Cabanis of northwestern Ecuador and western Colombia, but wings and tail margined with lighter blue (king's blue rather than cadet blue); foreback usually more or less mixed with the green of the rump; rump greener.

Type.—No. 168,453, Amer. Mus. Nat. Hist.; o<sup>3</sup> ad.; Alamor, 4550 ft., southwestern Ecuador; October 5, 1920; Geo. K. Cherrie.

RANGE.—Subtropical Zone; southwestern Ecuador north to the Chimbo Valley.

## Specimens Examined (see below)

## Compsocoma somptuosa baezæ, new subspecies

Subspecific Characters.—Similar to Compsocoma somptuosa victorini (Lafresnaye) of the Bogotá region, but back much darker green (hellebore rather than grass green), the feathers narrowly margined with black, the nuchal region usually with more black; external margin of remiges and rectrices the same. Resembling C. s. antioquiæ Berlepsch of north central Colombia, but back greener and wing and tail margins king's, instead of cadet, blue.

Type.—No. 173,873, Amer. Mus. Nat. Hist.; o<sup>7</sup> ad.; Baeza, 5000 ft., eastern Ecuador; September 12, 1922; Olalla and Sons.

RANGE.—Subtropical Zone of northeastern Ecuador.

#### Spescimens Examined

Compsocoma somptuosa somptuosa.—Peru: Chelpes, Junin, 5  $\circlearrowleft$ , 3  $\circ$ ; Chaupe, northeast of Huancabamba, 2  $\circlearrowleft$ , 3  $\circ$ . Ecuador: Sabanilla, Rio Zamora, 2  $\circlearrowleft$ , 1  $\circ$ ; Zamora, 2  $\circlearrowleft$ , 1  $\circ$ .

Compsocoma somptuosa alamoris.—Southwestern Ecuador: Alamor,  $4 \circlearrowleft$ ,  $1 \circlearrowleft$ ; Celica,  $1 \circlearrowleft$ ; San Bartolo,  $4 \circlearrowleft$ ,  $1 \circlearrowleft$ ; Salvias,  $4 \circlearrowleft$ ,  $1 \circlearrowleft$ ; Zaruma,  $3 \circlearrowleft$ ,  $3 \circlearrowleft$ ; El Chiral,  $5 \circlearrowleft$ ,  $2 \circlearrowleft$ .

Compsocoma somptuosa cyanoptera.—Ecuador: "Quito," 1; Gualea, 1 ♂; Pallatanga, 1 ♀. Соlombia, West Andes: Cocal, 1 ♂; La Florida, 1 ♂; Gallera, 1 ♂; Cerro Munchique, 2 ♂, 2 ♀; San Antonio, 1 ♂, 6 ♀. Соlombia, Central Andes: La Sierra, 1 ♂, 2 ♀; above Palmira, 2 ♂; Salento, 2 ♂.

Compsocoma somptuosa antioquiæ.—Colombia, Central Andes: Santa Elena, 4  $\circlearrowleft$ , 2  $\circlearrowleft$ ; Barro Blanco, 1  $\circlearrowleft$ ; Rio Toché, 1  $\circlearrowleft$ ; El Eden, 1  $\circlearrowleft$ .

Compsocoma somptuosa baezæ.—Eastern Ecuador: Baeza, 6 o, 4 9.

Compsocoma somptuosa victorini.—Colombia, East Andes: La Candela, 2; Subia, near Bogotá, 7 ♂, 1 ♀; Anolaima, 1 ♂; El Roble, above Fusugasugá, 2 ♀. Colombia, Central Andes: San Augustin, 1 ♂; La Palma, 1 ♂.

Compsocoma somptuosa venezuelana.—Venezuela: Galipan, near Caracas, 1 🍼

It is surprising to find that the race of *Compsocoma* inhabiting north-eastern Ecuador is much nearer the Bogotá race and less like that of southwestern Ecuador than any other member of the group. Unless, therefore, *baezæ* and true *somptuosa* merge somewhere between Baeza and Zamora (two localities faunally alike), intergradation of *somptuosa* with *victorini* must be accomplished either by contact between *antioquiæ* and *victorini* on the eastern slope of the Central Andes, or by individual variation between *antioquiæ* and *baezæ* and by contact between the latter and *victorini*. Specimens from El Eden and the Rio Toché, to which I

have before referred as approaching *victorini*, except for the color of the quill and tail margins, can be matched by specimens of *baezæ*, but specimens from the head of the Magdalena Valley, in both the Central and East Andes (La Palma and La Candela), are typical *victorini*, showing that *antioquiæ* does not intergrade directly with *baezæ*.

The principal characters and ranges of the races of this species are presented below.

- Compsocoma somptuosa somptuosa.—Back black; yellow crown-patch small; remiges margined with pale cerulean blue. (Central Peru to southeastern Ecuador)
- 2.—Compsocoma somptuosa alamoris.—Back often more or less green; rump green; remiges margined with king's blue; resembling C. s. antioquix but smaller.

  (Southwestern Ecuador)
- 3.—Compsocoma somptuosa cyanoptera.—Back black; remiges margined with dark (cadet) blue; rump dark often nearly black. (Northwestern Ecuador; West Andes and west slope of Central Andes, Colombia, except at northern end)
- 4.—Compsocoma somptuosa antioquiæ.—Back usually with more or less green; remiges margined with king's blue; rump green; like alamoris but larger.

  (Northern end of Central and West Andes, Colombia)
- 5.—Compsocoma somptuosa baezæ.—Back dark (hellebore) green. (Northeastern Ecuador)
- 6.—Compsocoma somptuosa victorini. Back bright (grass) green. (East Andes and eastern slope of Central Andes, at head of Magdalena Valley, Colombia)
- 7.—Compsocoma somptuosa venezuelana. Resembling C. s. somptuosa. (Caracas region, Venezuela)