STUDIES OF PERUVIAN BIRDS. NO. XLII

THE GENUS POLIOPTILA

By John T. Zimmer

As in other papers of this series, names of colors are capitalized when direct comparison has been made with Ridgway's "Color Standards and Color Nomenclature."

Polioptila plumbea bilineata (Bonaparte)
(Culicivora) bilineata Bonaparte (ex Lichtenstein MS.), 1890, Conspp. Av., I, p. 316—Carthagena, Colombia; ootypes in Berlin Mus.

A long series of birds from various parts of Central America is sufficiently distinct from South American specimens to raise the question, once again, of the validity of superciliaris and magna as separable forms. The birds from Central America have the lateral under parts quite noticeably darker and grayer than the South American examples of bilineata, and the gray of the back averages a little darker, though not as pronouncedly as the tone of the under parts. This contrast is not shown merely by a few examples but is observable in almost all of over one hundred and thirty skins, about evenly divided between the two areas. There also is a certain average difference of size, although there is too much overlap to permit this character to be used alone. Twenty-one adult males from South America have the tail 41-47 mm. in length (av., 43.5); twenty-seven adult males from Central America have the tail 36-43 mm. (av., 40). Some South American examples have a certain amount of grayish shading on the lateral under parts, but it is of a lighter tone than that of the Central American birds. In series, the distinctions are pronounced.

I believe, therefore, that superciliaris is a recognizable form, ranging from the Canal Zone to Guatemala. I am unable to separate "magna" of Ridgway from Costa Rica, which I find to fall within the limits of variation of superciliaris.

In this connection, I find myself unable to agree with Hellmayr who placed albiflora and "bairdi" in the same species with bilineata and commented on certain examples which he considered intermediate between the two groups. The distinctions between the two groups are no greater than those which separate certain of the conspecifics of bilineata from each other, and the specific association of albiflora with the same forms would be strongly suggested except for an apparent conflict of ranges that appears in the material at hand.

There is more than the matter of the extent of the white feathering in the loral and superciliary regions to distinguish albiflora and superciliaris. In albiflora there is a marked seasonal difference in the development of white in this region (as elaborated by Van Rossem, 1931, Auk, XLVIII, p. 35), but in superciliaris there is no such seasonal difference, although there is a sexual difference of the same sort in one of the conspecifics of this form (cf. discussion of P. pl. major). Albiflora is somewhat larger than superciliaris. Excluding southwest-Mexican birds, of which more will be said below, twenty-three adult males have the tail 42.1-48.2 mm. in length (av., 45.5). It is decidedly more purely whitish below, without the gray tones of superciliaris, or at least with much paler gray shading. The black areas at the bases of the outer rectrices are noticeably more extensive than in superciliaris (most easily compared on the subexternal

1 Earlier papers in this series comprise American Museum Novitates, Nos. 500, 509, 523, 524, 528, 543, 553, 564, 565, 617, 688, 703, 729, 753, 756, 757, 785, 819, 860, 861, 862, 889, 893, 894, 917, 990, 982, 963, 994, 1042, 1048, 1044, 1045, 1066, 1095, 1108, 1109, 1126, 1127, 1159, and 1160.
rectrix), and the pale outer border of the larger tertials is broader, more sharply defined and often more purely white. The top of the head in the adult males is more bluish and more highly glossy.

These characters appear together in the specimens examined, and I am unable to find a single example that is not readily assignable to one form or the other. Even using only the broad, full superciliary of superciliaris as a single criterion, there appears to be positive demarcation, and I have seen no specimen of albiloris with more than a thin line above the orbit.

With this segregation of characters, I have specimens of both forms from Bebedero, Costa Rica, and the vicinities of Matagalpa and Chinandega, Nicaragua. A series of albiloris from Progreso, Guatemala, is from the eastern side of the watershed, while the specimens of superciliaris from the same country are also from the east, although nearer the coast and in a less arid region than Progreso. Possibly the distributional segregation of the two forms throughout their ranges is more a matter of ecology than simple geography. Nevertheless, the remainder of the two series of these forms from northern Costa Rica, Nicaragua, and Honduras are from opposite sides of the cordillera. In southern Costa Rica, superciliaris occupies both sides of the mountains. On the other hand, albiventeris, which I believe is to be considered as a form of albiloris, is found in northern Yucatan and on Cozumel Island, on the Caribbean side of Mexico, in arid regions.

I am unable to follow Van Rossem's distinctions between albiloris and "bairdi" (1931, Auk, XLVIII, pp. 34–39). He gives the length of tail in albiloris as 53 mm., in "bairdi" as 48, and restricts albiloris to eastern Guatemala and southern Mexico on the Atlantic side of the mountains (but without giving Mexican localities for this latter form). The supposed "bairdi," described by Ridgway from Nicaragua, is said to be confined to the Pacific drainage.

My only Mexican birds of this species, except the type of albiventeris, are from the Pacific side of Oaxaca, and these birds are the largest of the series. The lengths of tail in the adult males from different regions are as follows: W. Mexico (4 skins), 48–51 mm. (av., 49.6); W. Honduras (6), 44–48 (av., 46.1); C. Guatemala (5), 42–46 (av., 44.9); Nicaragua (5), 42–48 (av., 44.8); Costa Rica (7), 44–48.2 (av., 45.9).

Ridgway (1904, Bull. U. S. Nat. Mus., L, pt. 3, pp. 725, 726) restricted albiloris to Guatemala and Oaxaca, Mexico; bairdi, to Nicaragua and Costa Rica. He found male albiloris (all from Oaxaca) to have the tail 49–56 mm. (av., 52.6), but Van Rossem (loc. cit.) included all west-Mexican birds of this group in "bairdi" with an average tail-length (males) of only 48 mm. Obviously there is much work still to be done on the variations and distinctions in the albiloris group, and it appears probable that there is a large form in western Mexico still to be characterized and named. I do not see how it can be referred to "bairdi" or how a "bairdi," based on Nicaraguan birds, can be distinguished from albiloris.

Returning to the consideration of P. plumbea bilineata, I must say that I have only one bird from Santa Marta to represent the north-Colombian population of the subspecies, in this case the population to which the name bilineata adheres. This single bird agrees in coloration with the west-Ecuadorian and west-Peruvian birds, although in size it can be matched in both these and Central American skins of superciliaris. In view of the approximation in color, therefore, I follow earlier authors in assigning the west-Ecuadorian and west-Peruvian birds to bilineata in spite of the hiatus in distribution that occurs in western Colombia where the form has not been found to date.

As to the matter of specific association with plumbea, the case appears to be fairly clear. A male of plumbeiceps from Honda, Colombia, shows decided, white lores and superciliaries, and another male from the same locality has a lesser amount of white in the same area, at the tips of the feathers. A female from the foot of Mt. Duida has a very slight suggestion of white above the lores, and one from the upper Orinoco has traces of white above the eyes. The
amount of white on the outer three rectrices varies sufficiently to show perfect transition between plumbeiceps and bilineata in this respect. General measurements show good intergradation. In distribution there is no conflict.

The conclusion to be reached from this evidence is that bilineata and its accepted conspecific must be added to the plumbea group through demonstrable relationship to plumbeiceps.

In Perú, the range of bilineata is restricted to the Pacific coast and western slopes of the western Andes from Pacasmayo north to the Ecuadorian boundary, thence extending northward to Esmeraldas, Ecuador. Peruvian records are from Pacasmayo, Tembladera, Guadalupe, and Lechugal, as well as the localities mentioned in the subjoined list of material examined.

Polioptila plumbea major Hellmayr


Polioptila bilineata andina Hellmayr, 1903, Verh. k. k. zool.-bot. Ges. Wien, LIII, p. 224—Cajabamba, Perú; ♂ [♀=♀]; Frankfort Mus. (Berlepsch Collection).

The collection of a good series of males and females in the range once supposedly occupied jointly by major and andina has shown that these two forms are merely opposite sexes of the same bird, which must be known as major. Dr. Hellmayr has examined the specimens and has reached the same conclusions.

The discovery of this synonymy removes one difficulty formerly in the way of recognizing plumbea and bilineata as conspecific. It eliminates a supposed conflict in distribution, but it projects another problem into the field with regard to the relationship of major and plumbea. In this case the difficulty lies entirely in the female plumage, for the males are not distinct enough from other members of the plumbea group to cause much comment. The females, however, are marked by a steel-black cap like that of the male but relieved by a white stripe above the eye, thus rather closely resembling the males of bilineata. At first sight it might seem that this close approximation of the sexes would be a sufficiently distinctive character to serve as a basis for specific isolation of major, but there is much evidence to weaken this idea.

In this series of bilineata, parvirostris, anteocularis, plumbea, and plumbeiceps there are occasional specimens dressed in typical female plumage except for their noticeably darker heads. These birds were marked by their collectors as females, and although these determinations have been questioned in one or two cases by subsequent workers, I believe that the birds in question actually are females and not young males as suggested. A similar bird is the type of plumbeiceps which was sexed by the collector as a male but which is rather exactly matched by other skins sexed as females. One female of anteocularis from Honda, Colombia, has the head with a decidedly bluish sheen, and with the lores and an abbreviated superciliary stripe white. A female of plumbea from Faro, Rio Jamundá, Brazil, is similar but has much more prominent white about the eye though the top of the head is not quite as dark as in the Honda skin of anteocularis. Likewise a female of parvirostris from Puerto Indiana, Perú, has a lightly glossed cap and a suggestion of white above the eye where there should be no white.

To prove conclusively that these birds are females and not males will require particular studies in the field, but the evidence on which I base my supposition is as follows. Several young males are at hand rather definitely ascertainable as such by reason of various fully black feathers which have appeared on the crown among the soft, drab remnants of the juvenile plumage. There is no intermediate plumage of bluish gray or bluish-tipped gray to be seen. The immature females have a similar juvenile plumage with drab or dull gray pileum, and in the change to clearer gray cap there is no apparent intermediate dress. Various of the supposed dark-headed females show no suggestion of immaturity, and in those which do show such suggestions, the juvenile plumage may be clearly recognized as such. Evidently, therefore, this dark,
but not completely black, coloration of the head is not part of any immature plumage but belongs to the adult dress of the female, with typical examples of which complete intermediacy is shown in the series at hand.

Thus, while there is no complete intergradation demonstrable between the females of *maior* and the same sex of any other member of the *plumbea* group, there is a strong tendency sporadically shown by individual variants. Consequently I place *maior* in the *plumbea* group where it occupies an otherwise unoccupied space in the middle of the Peruvian range of the species. *P. p. maior* is still so little known that possible variations in its plumage on the outskirts of its range have yet to be discovered. Although the species probably is restricted to the Tropical Zone in Perú, this subspecies almost forms an exception since it ascends to an elevation of 9000 feet according to the data ascribed to the type. Other examples are from lower elevations, down to 1500 feet (Sauces, Río Chamaya), which is definitely tropical though in the upper level of the Tropical Zone. The elevation of 9000 feet is sufficient to carry *maior* over the Porculla Pass near Huancabamba to the western slopes of the western Andes, but all specimens from the Pacific side are referable to *bilineata*.

In a sense, therefore, *maior* is both a geographical and zonal representative of the group, since neither *bilineata* nor *parvirostris* reaches such high elevations. This and the comparatively efficient isolation are responsible, no doubt, for much of the unusual degree of differentiation now observable in the form under discussion.

Records of *maior* are from Guajango, Callacate, and Río Chota, as well as localities from which material has been examined according to the subjoined list.

**Polioptila plumbea parvirostris** Sharpe

*Polioptila parvirostris* SHARPE. 1885, Cat. Birds Brit. Mus. X, pp. 441, 448—Chamieuros, R. Amazon; *♀*: British Mus.

I have seen no topotypical material, and this form has not been recorded from north of the Amazon, but I believe that three specimens from near the mouth of the Río Napo must be referred to it. Compared with examples of *P. p. plumbea* from various localities, the three birds at hand differ by having the auriculars and lores more extensively black in the male, gray in the female. There is no trace of white on the lores (as, indeed, is likewise true in some examples of *plumbea*), and the auriculars have the white restricted to the lowermost border or the basal portion of the shafts on the lower border, although there is a subocular space of white which reaches the lower margin of the orbit at the middle. Also, *plumbea* has the white border of the tertials and innermost secondaries averaging broader than is shown by the three *parvirostris*, but some examples are not distinguishable in this respect.

Dr. Hellmayr writes me that the difference I have noted in the extent of black on the auriculars is shown by the type of *parvirostris* from Chamieuros and also by three males, one each from Moyobamba, Tarapoto, and "Juanñuí," Huallaga [= Juanjú]. This character, therefore, appears to be reliable as a subspecific criterion for separating *parvirostris* and *plumbea*.

The female, apparently undescribed to date, is like the male in almost all respects except that the top and sides of the head are gray, of a shade distinctly darker than the back. One of the two females at hand is as light gray on the back as the male, but the other, from Puerto Indiana, is much darker, with the top of the head even more obscure. Differences of about the same degree are shown between individuals of either sex in the series of *plumbea*.

How far to the eastward *parvirostris* extends I am unable to say. The specimen at hand from Anayacu represents the most eastern locality known to me. On the other hand, *plumbea* apparently extends westward along the Amazon only to the Jamundá on the north bank and a short distance west of the Tapajoz on the south bank. Actual junction of the ranges of *plumbea* and *parvirostris* is evidently non-
existent, and a wide extent of territory on both banks of the Amazon is left without any known member of this group.

Records of parrirostris, which is confined to Perú so far as known, are from Tarpoto, Chamicuros, Moyobamba, Juanjuf, and Sarayacu, and the localities where the specimens listed below were collected.

I believe that birds from southern Venezuela belong with innotata rather than with plumbiceps. A series of nearly forty skins from the Orinoco and Mt. Duida shows a distinct average of less heavy shading on the chest and sides than the more northern examples, agreeing with specimens from British Guiana and northern Brazil. There is some overlapping of characters whichever way the separation is made, but a more satisfactory arrangement, from both taxonomic and distributional aspects, is the method proposed.

The type of plumbiceps Lawrence bears no indicated locality other than "Venezuela." It was collected by S. C. Nash who also collected the type of Myiarchus ferox venezuelensis, described by Lawrence in the same paper with the Polioptila. This Myiarchus is confined to northwestern Venezuela in the neighborhood of the State of Carabobo where Nash's other specimens are likely also to have been obtained. Since the form in question is known to occur at Tucacas, Falcón, not far from Carabobo, it is appropriate to select Tucacas as type locality for Polioptila plumbiceps Lawrence, 1865.

**Specimens Examined**

**P. p. plumbea.**

**Dutch Guiana:**
- Paramaribo, 5 ♂, 1 ♀;
- Kwatu, 2 ♀.

**French Guiana:**
- Cayenne, 8 ♂, 3 ♀, 1 (?) ;
- Approuague, 1 ♀;
- Roche Marie, 1 ♀.

**British Guiana:** (error ?) 1, 1 ♀.

**Brazil:**
- Faro, 15 ♂, 8 ♀;
- Pará, Flor de Prado, 1 ♀;
- Marajó, 1 ♂;

**Villa Bella Imperatriz, 6 ♂, 1 "♀," 3 ♀;
Río Tapajoz, Urucurituba, 1 ♀;
Río Xingó, Porto de Mox, 1 ♂;
Río Tocantins, Baixo, 2 ♀;
Mocajuba, 1 ♀.

**P. p. innotata.**

**Brazil:**
- Rio Surumú, Frechal, 1 ♂, 3 ♀;
- Rio Branco, Caracaarhy, 1 ♂.

**British Guiana:**
- Annai, 2 ♂, 2 ♀;
- Rupuruni River, 1 ♀.

**Venezuela:**
- San Fernando de Atabapo, 1 ♂;
- Caicara, 1 ♀;
- El Llagual, 1 ♀;
- Maripa, 4 ♂;
- Maipures, 1 ♂;
- Agua Salada de Ciudad Bolívar, 1 ♂;
- Ciudad Bolívar, 5 ♂, 5 ♀;
- Altagracia, 3 ♂, 2 ♀;
- Lalaía, 1 ♂, 1 ♀;
- Ayacucho, 2 ♂, 1 ♀;
- Esmeraldas, 1 ♂, 3 ♀.

**P. p. plumbiceps.**

**Venezuela:**
- (no other locality), 2 ♂ (incl. type);
- Tucacas, Estado Falcón, 1 ♂;
- La Vela de Coro, 1 ♀;
- El Cuji, Estado Lara, 1 ♂;
- Carápamo, 1 ♂;
- San Felix, Cumaná, 6 ♂, 2 ♀;
- Los Dos Ríos, 1 ♂;
- La Guaira, 1 ♂;
- Puerto Cabello, 1 (!).

**P. p. antecedentia.**

**Colombia:**
- "Bogotá," 5 ♂;
- Honda, 3 ♂, 1 ♀;
- Chicoaral, 3 ♂, 1 ♀.

**P. p. daguae.**

**Colombia:**
- Los Cineros, 1 ♂ (type);
- Río Dagua, 1 ♀;
- Primavera, 1 ♂;
- "Yuntas" [= Juntas de Tamaná], 1 ♀.

**P. p. bilineata.**

**Perú:**
- Palambla, 1 ♂;
- Paletillas, 2 ♂, 2 ♀;
- Pilares, 1 ♀;
- Samaite, 2 ♀;
- Chilaico, 1 ♂, 1 (?) ;
- Sullana, 5 ♂, 2 ♀;
- Lamar, 4 ♂, 2 (?) ;
- Tumbes, 1 ♂;
- Tembladera, 2 ♀.

**Ecuador:**
- Durán, 4 ♂;
- Daule, 1 ♂;
- Esmeraldas, 4 ♂, 4 ♀;
- Manta, 1 ♂, 1 ♀;
- Bahía (Manavi), 1 ♂, 1 ♀;
- Ia La Plata, 2 ♂, 2 ♀;
- Guayaquil, 2 ♂, 3 ♀;
- Nanegal, 1 ♂.
Bahia de Caraques, 1♀; Santa Elena, 1♂; Chongocito, 2♂, 1♀; Isla de Puna, 2♂, 1♀; Río Pullango, 1♂; Casanga, 1♂; Río Jubones, 1♂; Chongon Hills, 1♀; Portovelo, 4♂, 1♀; Bucay, 1♂.

COLOMBIA:
Bondia, Santa Marta, 1♀.

P. p. supercilialis.—

PANAMÁ:
(Panamá R. R.), 1♂, 1♀ (cotypes) Almirante, 4♂, 2♀, 1♀ "♀"; La Mares, 1♂; El Villano, 1♂; Cituro, 1♀; Chiriquí, 2♂, 1♀; La Chorrera, 1♂; Coiba Is., 1♂; Santa Fe, Veraguas, 1♂; Cerro Largo, 1♂; "Panamá," 2♂, 1♀.

COSTA RICA:
Miravalles, 1♂; Carrillo, 2♂; Bebedero, 1♂, 1♀; Orotina, 1♂; Boruca, 2♂, 1♀; El Zapotal, 5♂, 2♀; Aguinares, 1♂; Limón, 1♂; Volcán de Oso, 1♂; El Pozo, Río Táraba, 1♂, 1♀.

NICARAGUA:
Tuma, Matagalpa, 1♂; Río Grande, 1♂; Los Sabalos, 2♀; Chinandega, 1♀; Chontales, 1♀.

GUATEMALA:
Chimoxan, 2♂, 1♀; Vera Paz, 1♂; Finca Chamá, 1♂, 2♀; Secanquim, 1♂, 1♀; "Guatemala," 2♂, 1♀ (?).

HONDURAS:
El Boquerón, 1♂.

P. p. major.—

PERÚ:
Sucha, 1♂ (type); Viña, 1♂; Cajabamba, 3♂, 2♀; Araquedá, 1♀; Pucará, 1♂; Huancabamba, 1♂, 5♀; Perico, 2♂, 2♀, 1"♀"; Sondorillo, 1♀; Sauces, 1♀.

P. p. parvirostris.—

PERÚ:
Puerto Indiana, 1♂, 1♀; Anayaca, 1♀.

P. a. albitorus.—

COSTA RICA:
(Bebedero, Las Cañas, and Bagaces), 7♂, 3♀.

NICARAGUA:
(Matagalpa, León, Calabasas, Volcán de Chinandega, 4 miles north of Chinandega, Matagalpa, San Rafael del Norte, Corinto, Savana Grande near Managua, Calabasas, south of Metapa), 6♂, 6♀.

GUATEMALA:
Progreso, 7♂, 1♀, 3♀ (?).

MÉXICO:
Tehuantepec, Tapana, 1♀; Santa Efígenia, 2♂; Oaxaca, 2♂.

P. a. albicinctus.—

MÉXICO:
Yucatan, Temax, 1♂ (type).

THE POLIOPTILA GUIANENSIS GROUP

During the study of Polioptila plumbea, the congeneric species, guianensis, was examined for comparison. It was found that the material at hand included a very distinct new subspecies very nearly linking the allied schistaceigula with it.

In spite of the purely extralimital character of this group, I include the discussion of it here where it may not be out of place beside the treatment of other members of the genus. The description of the new form is as follows.

Polioptila guianensis facilis,
new subspecies

Type from Solano, Río Cassiquiare, Venezuela. No. 433,542 bis, American Museum of Natural History. Adult male collected May 5, 1929, by the Olalla brothers.

Diagnosis.—Similar to P. g. guianensis of the Guianas, but eyelids without pronounced white; tail with considerably less white; all the rectrices with black bases reaching nearly to or beyond the tips of the under-tail-coverts; penultimate pair with about the basal half black; third pair with only a relatively narrow white tip; breast somewhat paler gray.

Range.—Río Cassiquiare, Venezuela, and upper Río Negro, Brazil.

Description of Type.—Upper parts Neutral Gray X Deep Neutral Gray; upper tail-coverts darker with more blackish centers. Lores and malar region Light Neutral Gray, auriculares a little darker; lower eyelid only faintly whitish, not much paler than the lores; chin and throat whitish, breast and sides Pale Neutral Gray; belly, flanks and under tail-coverts white; thighs gray; wings blackish; primaries, except for two outermost, externally narrowly margined with light gray; secondaries with margins
broader and a little paler; tertials with exposed surface largely gray; upper wing-coverts with exposed edges Deep Gull Gray; under wing-coverts whitish; inner margins of remiges white; alula black, with narrow pale gray outer margins. Tail with outer rectrices white except for narrow blackish bases not quite hidden by the under tail-coverts; second pair with broader black bases, the line of demarcation from the white terminal area starting from a point 30 mm. from the tip of the outer web, crossing the shaft 22 mm. from the tip, and reaching the inner margin about 12 mm. from the tip; third pair with an irregularly shaped white tip 4 mm. long (at shaft) on outer web, 7½ mm. on inner web; remainder of tail black with only very faintly suggested grayish tips at the extreme apex of the fourth pair. Bill with maxilla dull blackish (in dried skin), mandible a little paler; feet blackish. Wing, 46½/ mm.; tail, 44½/; exposed culmen, 9; culmen from base, 12½/; tarsus, 16.

Remarks.—Female like the male but paler on the breast and sides. The exact extent of black at the bases and of white at the tips of the rectrices varies in the two males, but the arrangement is of the same general style, with most of the outer feathers, a little more than the terminal half of the next pair, and a small terminal portion of the next white, with a faint suggestion of white or pale gray on the next, and with the two middle pairs entirely blackish. This is in decided contrast to the tail of guianensis which has the three outer rectrices almost entirely white.

A pair of birds from Caxiricatuba, Rio Tapajoz, Brazil, appear to belong to P. g. paraenxis (Todd, 1937, Ann. Carnegie Mus., XXV, p. 255—Benevides, Pará; Carnegie Mus.). They are even paler than facilis in comparable plumage, although the male of paraenxis is rather similar below to the female of facilis. The female is noticeably paler both above and below. Both birds have a fine, white line occupying the eyelids, quite inconspicuous in comparison with the facial markings of guianensis but noticeable in comparison with facilis. The tail apparently is longer than in facilis or guianensis, being 48 mm. in the type, according to Todd, and the same in the Caxiricatuba male; 46 in the Caxiricatuba female. The upper parts have a slight mouse-gray tinge in comparison with the bluer gray of guianensis, and in this respect facilis is nearer guianensis, although a little lighter in tone.

P. schistaceigula of northwestern Ecuador and western Colombia certainly is closely related to guianensis, if it is not conspecific. As found in Colombia, it presents a further extension of the white facial markings exhibited by the British Guianan skin of guianensis and has an even greater reduction of white on the rectrices than the specimens of g. facilis. The type (a male) is very sooty on the breast and has most of the sides of the face gray, with very narrow white borders on the upper and lower eyelids and a short white line over the anterior auriculac. The two females at hand from Colombia (Río Dagua and Rio Cauca) have the whole side of the head white, including a relatively broad superciliary stripe, except for a restricted dusky antecular spot and a dark postocular stripe. It is possible, therefore, that the Colombian examples are not true schistaceigula, but it is also possible that their differences from the Ecuadorian bird are sexual or individual.

Future material from various localities may make it desirable to place guianensis and facilis with schistaceigula, but at present it will be sufficient to note that they are more closely related to each other than to any of their congeners. Much more material will be necessary to determine the limits of individual and racial variations.

Specimens Examined

P. g. guianensis.—
French Guiana:
Pied Saut, 1♂.
British Guiana:
Potaro Landing, 1♀.
P. g. facilis.—
Venezuela:
Solano, Rio Cassiquiare, 1♂ (type);
Rio Pescada, Mt. Duida, 1♂.
Brazil:
Mt. Curucucuyari (foot), Rio Negro, 1♀.
P. g. paraenxis.—
Brazil:
Caxiricatuba, Rio Tapajoz, 1♂, 1♀.
P. schistaceigula.—
Ecuador:
Cachabi, 1♂ (type).
Colombia:
Puerto Valdivia, Rio Cauca, 1♀;
San José, Rio Dagua, 1♀.