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RACES OF THE BULBUL *MICROSCELIS*
CHARLOTTAE (FINSCH) AND ITS RELATIVES

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With the cooperation of the authorities of the Museum of Comparative Zoology (M.C.Z.), of the American Museum of Natural History (A.M.N.H.), of the Academy of Natural Sciences of Philadelphia (A.N.S.P.), and of the Chicago Natural History Museum (C.N.H.M.), to all of whom my thanks are hereby tendered, I have brought together in Washington 194 specimens of the small olive bulbuls that have been combined under the name *Microscelis charlottae* (Finsch) by the more recent authors, and by the earlier ones under that of *Iole olivacea* Blyth.

While attempting to group them into subspecies, I was astonished to find that the more golden forms known as *viridescens* and the more greenish-to-brownish ones hereinafter to be called *charlottae* occur together throughout an extensive area, at least in eastern Burma and western Siam, without any external sign of intergradation. Recognition of this fact requires, of course, that in future they be treated as distinct, partially sympatric species.

The Tenasserimese material before me shows that while possibly *charlottae* alone inhabits the Mergui District, *viridescens* and *charlottae* appear together in the Amherst and Thaton Districts farther north. Since most of my specimens must have been handled by Hume, it is somewhat surprising to find that authority reporting only *viridescens* from the Division (Stray Feathers, vol. 6, 1878, pp. 315-317). If, however, collecting the two in numerous places together, he had assumed that he was dealing simply with one individually variable form, his placing of both under one name would cease to be puzzling. That he had made just such an assumption is indicated by his two detailed diagnoses of *viridescens*, which must have been drawn from a composite series; the theory is further strengthened by his observation, "It is [a bird] of which it is *extremely* difficult to convey by words a really correct idea," and by his description of the irides as "excessively variable, probably according to age, dark slaty, clear grey, salmon pink, pale golden brown."

The imperfectly known provinces of southwestern Siam immediately adjacent to the Amherst and Thaton Districts, whose avifauna they

share, have so far produced but one example of the group, and this is *viridescens*. But since *charlottae* occurs south, west, and north of them, it may be predicted with complete confidence that it will eventually be found *within* these provinces as well.

A series from the provinces of northwestern Siam are, with one exception, *charlottae*; the odd bird is inseparable from the population of northeastern Burma that I shall name below as a race of *viridescens*. Although I am inclined to believe that this specimen is merely a winter visitor from farther north, there is nevertheless a good chance that it was resident where collected; other cases are known of forms ranging unchanged from Myitkyina through the Shan States to Siam.

Wardlaw Ramsay long ago found *viridescens* in the Karen Hills, and Smith, Garthwaite, and Smythies (Journ. Bombay Nat. Hist. Soc., vol. 43, 1942, p. 467) have recently reported it from Thandaung in the same region. Smythies (Birds of Burma, 1940, pp. 510-511), without comment, gives two races of *charlottae* from these hills, but omits *viridescens* altogether. I myself have seen, from the same general area, a specimen of *viridescens* taken in the Salween District of Burma and another of *charlottae* collected in the adjacent Siamese province of Mae Hong Son.

Smythies (*loc. cit. supra*), again without gloss, records both *viridescens* and *charlottae* from the Chin Hills. That the former, described from Arakan, should occur there, is quite to be expected, but that what was obviously believed by the author to be the more eastern representative of the same species should *also* appear on the borders of Arakan is either erroneous or a fact of the greatest significance. Strong support is given the latter alternative by Heinrich's specimens from Mount Victoria discussed below in "Remarks" under *M. v. viridescens*.

If *charlottae* and *viridescens* actually represent distinct specific entities, it is unfortunately true that there seems to be no *definite* external character by which the forms of one may be known from those of the other except the color of the iris, which in *charlottae* is gray or white, and in *viridescens* is reddish or brown. While so feeble a distinction is far from satisfactory, yet an analogy is afforded within the family by the sympatric *Pycnonotus simplex* and *P. brunneus*, which are similarly conveniently separable only by eye color.

If the color of the irides be deemed to have specific importance in the cases of *M. viridescens* and *M. charlottae*, the conclusion is inescapable that the isolated *M. palawanensis* of Paláwan, with lemon-yellow eyes and a plumage more like that of the distant *viridescens* than like those of its geographically nearest neighbors, must likewise be elevated to the rank of a species. This bird has by some writers (Robinson, Hachisuka) been treated as a race of *Criniger finschii* of Borneo, Malaya, and Sumatra, but I must agree with Delacour and Mayr that it is actually a member of the genus *Microscelis* (*in sensu lato*) and certainly nearly related to *viridescens* and *charlottae*.

At any rate, until such time as my assumption of the overlapping breeding ranges of *viridescens* and *charlottae* has been proved false, I must hold that *Microscelis viridescens*, *M. charlottae*, and *M. palawanensis* represent three allied but distinct species. Of the group, the forms apparently worthy of subspecific recognition are discussed below.

1. *Microscelis viridescens* (Blyth)

1. *Microscelis viridescens viridescens* (Blyth)

I [ole]. virescens Blyth, Journ. Asiat. Soc. Bengal, vol. 14, pt. 2, Aug. 1845, p. 573 (Arakan Division, Burma).

Iole viridescens Blyth, Ibis, ser. 2, vol. 3, Jan. 1867, p. 7. New name for *I [ole]. virescens* Blyth, 1845 (Arakan Division, Burma), not *Ixos virescens* Temminck, 1825.

Diagnosis.—Pointed feathers of crown brownish olive green; mantle olive green; upper tail coverts bright rufescent brown; exposed portions of remiges and rectrices rufescent brown, edged with brownish olive; lores and indistinct supercilium olive yellow; sides of head yellowish olive; under parts dull olivaceous, paler on the throat (where ashy-gray bases of the feathers are usually visible), everywhere streaked and suffused with bright light yellow, more yellow on the center of the abdomen, more olivaceous along the flanks (which are posteriorly faintly suffused with ochraceous); under tail coverts yellowish buff.

Wing length.—78-82 mm. (3 males), 72-78 mm. (5 females).

Specimens examined.—SIAM: Southwest: Ban Nong Pla Lai (1 female); BURMA: South: "Pegu Yoma" (1 male); Amherst District: "Oohoo Choung" (1 female); Amherst or Thaton District: "Thoung-yin" (1 female), "Thaungyin Valley" (1 female), "Hteekotaw Chg Laidawgee" (1 male); Salween District: Sinzwe Forest, Yunzalin River (1 male); Yamethin District: Foot of Mount Byingyi (1 female).

Remarks.—The specimen from "Pegu Yoma" is the most nearly topotypical I have seen; it seems to be inseparable from those of *Tenas-serim*.

Stresemann and Heinrich (Mitteil. Zool. Mus. Berlin, vol. 24, 1940, p. 181) have reported from Mount Victoria two males under the name *Iole olivacea virescens*. Since at this locality *M. v. viridescens* might be expected to occur, it is of very considerable interest to note that their specimens had wing lengths of 85 and 87 mm. and the irides "grünlichweiss" and "beige-grau." One must wonder whether a large, gray-eyed form of *viridescens* is localized on Mount Victoria or whether, as is highly probable, these examples represent an undescribed race of *charlottae* occurring far within the range of *viridescens*.

2. *Microscelis viridescens cacharensis*, subsp. nov.

Type.—C.N.H.M. No. 98479, adult male, collected at "Chutla Bhil," Cachar District, Surma Valley and Hill Division, Assam Province, India, in 1897, by A. M. Primrose.

Diagnosis.—Near to *M. v. viridescens*, but with the olives and yellows of the plumage everywhere deeper in tone (most obviously on the lores, sides of the head, and under parts).

Wing length.—82 mm. (1 male), 80 mm. (1 female).

Specimens examined.—ASSAM: Cachar District: "Chutla Bhil" (1 male, 1 female).

3. *Microscelis viridescens myitkyinensis*, subsp. nov.

Type.—A.M.N.H. No. 307094, adult male, collected at elev. 1,000 ft. along the Shingaw-Tanga road, Myitkyina District, Sagaing Division, Burma, on November 20, 1938, by the Vernay-Cutting Expedition (original number 52).

Diagnosis.—Distinguished from *M. v. cacharensis* and *M. v. viridescens* by having the pointed feathers of the crown more olivaceous brown than brownish olive green; the mantle a deeper and almost brownish olive green; the upper tail coverts a dark olivaceous brown; the exposed portions of the remiges and rectrices a dark olivaceous brown, edged with brownish olive (darker than in *cacharensis*); the sides of the head brownish olive; the throat ashy gray, merely streaked with yellow; the remaining under parts as described for *viridescens*, but everywhere deeper in tone (much as in *cacharensis*) and more obviously yellow-streaked; the under tail coverts cinnamon buff.

Wing length.—91 mm. (1 male), 83-87 mm. (4 females).

Specimens examined.—BURMA: Myitkyina District: Shingaw-Tanga road (1 male), Tamu (1 female); Ruby Mines District: Kabaing (1 female); Hsipaw State: Gokteik Gorge (1 female); SIAM: Northwest: Ban Samoeng Tai (1 female).

Remarks.—The specimen from northwestern Siam (lat. 18°50' N., long. 98°45' E.), of which the eye color is unfortunately not recorded, agrees at least in every other external character with the series from northeastern Burma, although not with any other Siamese example. Inasmuch as it was collected on November 23, I consider it a winter wanderer, perhaps from no great distance, for Ticehurst (Journ. Bombay Nat. Hist. Soc., vol. 39, 1937, p. 554) found that birds taken as far south as Mong Kung (lat. 21°37' N., long., 97°32' E.) were inseparable from those of Myitkyina.

M. v. myitkyinensis is the form discussed by Mayr (Ibis, 1941, p. 103), who, however, compared it only with birds of northern Indochina (*charlottae*).

II. *Microscelis charlottae* (Finsch)

1. *Microscelis charlottae aquilonis*, subsp. nov.

Type.—A.M.N.H. No. 565615, adult (unsexed), collected at Backan (lat. 22°08' N., long. 105°50' E.), Backan Province, northeastern Tongking, on December 8, 1926, by J. Delacour and P. Jabouille (original number 1652).

Diagnosis.—Pointed feathers of crown dark rufescent brown; mantle dark brownish olive green; upper tail coverts dark rufescent brown; exposed portions of remiges and rectrices dark brown, edged with olivaceous brown; lores and indistinct supercilium olivaceous gray; sides of head dull brownish olive; throat ashy gray, streaked with light yellow; remaining under parts dull olivaceous, streaked and suffused with light yellow, more yellow on the center of the abdomen, more olivaceous along the flanks (which are posteriorly suffused with ochraceous); under tail coverts cinnamon buff.

From *M. c. propinquus*, the geographically nearest race, with which it has been heretofore confused, *aquilonis* is easily separable by the darker and browner coloration of its upper parts, the rather deeper olivaceous and yellow of its under parts, and the slightly darker cinnamon buff of its under tail coverts.

Wing length.—86-92 mm. (5 males), 85 mm. (1 female), 86-87 mm. (3 unsexed).

Specimens examined.—TONGKING: Backan Province: Backan (1 unsexed); ANNAM: Thanhhoa Province: Hoixuan (5 males, 1 female, 2 unsexed).

2. *Microscelis charlottae propinquus* (Oustalet)

Criniger propinquus Oustalet, Nouv. Arch. Mus. [Paris], ser. 4, vol. 5, 1903, p. 76 ("Pa-Mou," Laichau Province, northwestern Tongking).

Criniger lönnbergi Gyldenstolpe, Kungl. Svenska Vet.-Akad. Handl., vol. 50, No. 8, 1913, p. 24, col. pl. 1 (Ban Huai Hom and Khao Phlung; type specimen from Ban Huai Hom, Phrae Province, northern Siam, *vide* Gyldenstolpe, Ark. för Zool., vol. 19 A, No. 1, 1926, p. 57).

Diagnosis.—Near to *M. c. aquilonis*, but distinguished by the paler and less brownish coloration of the upper parts, the rather paler olivaceous and yellow of the under parts, and the slightly paler cinnamon buff of the under tail coverts.

Wing length.—85-90 mm. (17 males), 85-90 mm. (13 females).

Specimens examined.—TONGKING: Laokay Province: Ba Nam Nhung (1 male, 1 female); Laichau Province: Muong Mo (2 males), Muong Moun (1 male, 3 females), Muong Boum (3 males, 1 female), Paham (1 female), Laichau (2 males, 1 female), 27 km. SW. of Laichau (1 male); LAOS: 5° Territoire Militaire: Bountai (2 females, 1 unsexed), Phong Saly (1 male, 1 female), Muong Yo (3 males, 3 females, 2 unsexed); BURMA: Kengtung State: Ban Sop Lao (1 male); SIAM: North: Ban Huai Mae Sai (1 male), Ban Pang An (1 male), Ban Pa Miang (1 male), Doi Chiang Dao (1 male, 1 female), Doi Suthep (5 males, 3 females), Doi Ang Ka (1 male), Doi Khun Tan (3 males, 3 females), Doi Nang Kao (1 male), Chiang Saen (1 female), Muang Lom Sak (2 males); Southeast: Rayong (1 male), Ban Hup Bon (1 female).

Remarks.—The two specimens from southeastern Siam (A.N.S.P. No. 124190 and U.S.N.M. No. 330454) were respectively taken on October 15 and November 5; they represent, in my opinion, winter wanderers.

Birds from northwestern Tongking, virtual topotypes of *propinquus*, are, with three exceptions, quite distinct from *aquilonis*; these anomalous specimens somewhat approach *aquilonis* in depth of coloration and may be winter wanderers of an intergradient population.

I cannot separate 24 examples of "lönnbergi" from the 15 virtual topotypes of *propinquus* by any character whatsoever.

3. *Microscelis charlottae simulator*, subsp. nov.

Type.—U. S. National Museum No. 330453, adult female, collected at Ban Hup Bon (lat. 13°05' N., long. 101°05' E.), Rayong Province, southeastern Siam, on November 3, 1931, by Hugh M. Smith (original number 5106).

Diagnosis.—Similar to *M. c. propinquus*, but distinguishable by lesser size and, in series, by having the olive of the upper parts very slightly lighter and grayer and the yellow of the under parts very slightly paler.

Wing length.—82-86 mm. (22 males), 76-83 mm. (11 females).

Specimens examined.—LAOS: Saravane Province: Thateng (1 male), Phu Tongtul (2 males, 1 female), Phu Kongtul (1 male); Paksé Province: Paksé (3 males, 4 females); SIAM: East: Sathani Hin Lap (4 males, 1 female), Ban Sa Kaco (1 male), Nakhon Nayok (1 female);

Southeast: Rayong (1 male), Ban Hup Bon (1 female), Chanthaburi (3 males), Khao Soi Dao (2 females), Khao Sa Bap (3 males, 3 females, 1 unsexed), Ban Bang Phra (3 males), Khao Saming (2 males, 1 female).

Remarks.—Three January specimens from Ban Chanuman (lat. $16^{\circ}15'$ N., long., $105^{\circ}00'$ E.), with wing length 85 mm., are rather more deeply colored than average *simulator*; they should perhaps be considered *simulator* $><$ *propinquus*.

4. *Microscelis charlottae innectens*, subsp. nov.

Type.—U. S. National Museum No. 332438, adult (unsexed), collected in the Arboretum at Trangbom (lat. $10^{\circ}56'$ N., long $107^{\circ}00'$ E.), Bienhoa Province, Cochinchine, on August 7, 1932, by A. Poilane (original number 38).

Diagnosis.—*M. c. innectens* is separable from other Indo-Chinese races by its brownish-olive upper parts (duller than in *aquilonis*, browner than in *propinquus* or *simulator*) and by its more grayish, less yellow, under parts.

From topotypical *cinnamomeoventris* (southern Tenasserim), with which it agrees closely above, it differs by its shorter and less robust bill, the rather stronger yellowish wash over the under parts, and its cinnamon-buff, not ochraceous, under tail coverts.

Wing length.—Unknown (all specimens in molt).

Specimens examined.—COCHINCHINE: Bienhoa Province: Trangbom (3 unsexed).

5. *Microscelis charlottae* subsp.

Microscelis charlottae, in the Indo-Chinese countries, has a continuous distribution in the evergreen at feeble elevations, and its geographical variation follows a normal clinal pattern. One might therefore hypothesize the existence in southwestern Siam and the neighboring Tenasserim districts of a population intermediate between the green-backed *propinquus* of northwestern Siam and the brownish-olive-backed *cinnamomeoventris* of the northern Malay Peninsula. At Prachuap Khiri Khan (lat. $11^{\circ}50'$ N., long. $99^{\circ}50'$ E.), where a northern peninsular race would ordinarily begin to change into one of southwestern Siam, birds showing the first steps toward such intergradation do in fact occur.

A single example of *charlottae* from the Thaungya Sakan (Amherst or Thaton District, Tenasserim), whether by its provenience or by its color characters, may be assumed to represent this theoretical population. Despite the fact that the bird is old and in faded plumage (September 23, 1878), it appears to belong to a race easily distinguishable from any other, and I suggest that a series of fresh-plumaged specimens will show that it needs a particular name.

6. *Microscelis charlottae cinnamomeoventris* (Stuart Baker)

Iole virescens cinnamomeoventris Stuart Baker, Bull. Brit. Orn. Club, vol. 38, Dec. 4, 1917, p. 16 (Tenasserim Town and Bankasun; type locality here restricted to Tenasserim Town, Mergui District, Tenasserim Division, Burma).

Diagnosis.—Nearest *M. c. innectens* (Cochinchine), from which it is inseparable above, but distinguished by its longer and heavier bill, its

more grayish under parts (almost free of yellow suffusion), and its ochraceous, not cinnamon-buff, under tail coverts.

Wing length.—82-86 mm. (7 males), 78-82 mm. (3 females).

Specimens examined.—BURMA: Mergui District: Bentinek Island (1 male), Domel Island (1 male, 1 female), Sullivan Island (1 male, 1 female); SIAM: Peninsula: Ban Sichon (1 male, 1 female), Khao Nok Ra (1 male), Chong (2 males).

Remarks.—Two female specimens from Khao Luang (lat. 11°40' N., long. 99°35' E.), with wing length 79 and 82 mm., were collected in August and must represent the breeding population of that area. They stand very near *cinnamomeoventris* in coloration, but have a much smaller bill; I consider them intergrades between true *cinnamomeoventris* and the unnamed bird of southwestern Siam.

It has long been known that *cinnamomeoventris* and *cryptus* (see below) occur at many places together in the Siamese portion of the Malay Peninsula, and despite the great similarity of the two, there seems never to be the slightest difficulty in assigning a given specimen to one or the other form. This raises the question of whether or not we are dealing with two sympatric species.

Study of published records and the material before me shows that *cryptus* breeds at least as far north as Nakhon Si Thammarat (lat. 8°25' N., long. 100°00' E.) and has been taken (September 14) as far north as Ban Tha Lo (ca. lat. 9°05' N., long. 99°15' E.).

M. c. cinnamomeoventris, of which, excepting the aberrant examples of Khao Luang, I have no summer specimens, has been reported south of the Isthmus of Kra (lat. 10°00' N.) only in winter (if two birds from Ban Sichon, at lat. 9°00' N., long. 99°55' E., collected as early as September 4 and 5, may be considered winter-taken!).

In short, the somewhat incomplete evidence presented by these series does not preclude the possibility that *cryptus* and *cinnamomeoventris* have distinct breeding ranges, with the latter wandering southward into the range of the former after the young are on the wing. Nevertheless, the rather striking (for this complex) differences in color and size, and the curious lack of intergradient individuals, may point to the fact that the two are indeed sympatric forms.

7. *Microscelis charlottae cryptus* (Oberholser)

I [ole]. olivacea Blyth, Journ. Asiat. Soc. Bengal, vol. 13, pt. 1, May 1844, p. 386 (Singapore Island, Malaya).

Iola olivacea cryta Oberholser, Proc. Biol. Soc. Washington, vol. 31, Dec. 30, 1918, p. 197 (Pulua Jimaja, Anamba Islands, South China Sea).

Diagnosis.—Near to *M. c. cinnamomeoventris*, but perfectly distinct by its dark olivaceous-brown (not brownish-olive) upper parts, its duller and paler under tail coverts, its longer wing, and its longer and heavier bill.

Wing length.—86-94 mm. (17 males), 81-85 mm. (8 females), 87-90 mm. (unsexed).

Specimens examined.—SIAM: Peninsula: Ban Tha Lo (1 male), Nakhon Si Thammarat (1 male), Khao Phanom Bencha (4 males, 1 female), Le Song Hong (3 males, 1 female), Ban Phra Muang (1 male); MALAYA: "Malacca" (3 unsexed); Pahang State: Gunong Taban (1 female); Selangor State: Rawang (1 male), Negri Sembilan

State: Bukit Tampin (1 male, 1 female); RHIO ISLANDS: Lingga Island (1 male, 1 female); SUMATRA: North: Rupat Strait (1 female), Siak River (1 male, 1 female), Indragiri River (1 male), Mandau River (1 female), Kateman River (1 female), Batang Serangan, Langkat (1 male, 1 female), Deli (1 male, 1 female), Tapanuli Bay (1 male), Tarussan Bay (1 male); BARUSSAN ISLANDS: Tana Massa Island (1 unsexed); BANKGA ISLAND: Tanjong Tedong (1 male); ANAM-BA ISLANDS: Pulau Jimaja (1 male, *type*).

Remarks.—Any slight differences that appear between the mainland and island series seem to be wholly explainable as the results of wear, age of specimens, etc., etc.

Blyth's name *olivacea* is considered preoccupied within the genus *Microscelis* by [*Hypsipetes*] *olivacea* Jardine and Selby, 1837 (*cf.* Deignan, Auk, vol. 59, 1942, p. 314).

8. *Microscelis charlottae charlottae* (Finsch)

Criniger Charlottae Finsch, Journ. für Orn., vol. 15, hft. 1, Jan. 1867, p. 19 (Borneo; type locality here restricted to Banjarmasin, southwestern Borneo).

Trichophorus brunescens "Müll." Finsch, Journ. für Orn., vol. 15, hft. 1, Jan. 1867, p. 19 (Borneo, Sumatra). *Nomen nudum*!

Diagnosis.—This race is just separable from *cryptus* in series by the darker olivaceous brown of the upper parts and, possibly, by having the under parts suffused with a deeper, more brownish, olivaceous tinge.

Wing length.—85-88 mm. (2 males), 87-92 mm. (3 females).

Specimens examined.—SARAWAK: no definite locality (1 female), Mount Penrissen (1 female), Mount Kenepai (1 male, 1 female), Batu Sang, Baram River (1 male).

Remarks.—The measurements of wing length given above seem to indicate that some of the specimens have been erroneously sexed.

9. *Microscelis charlottae perplexus* (Riley)

Iole olivacea perplexa Riley, Journ. Washington Acad. Sci., vol. 29, No. 1, Jan. 15, 1939, p. 40 (Labuan Kelambu, eastern Borneo at lat. 1°40' N., long. 118°40' E.).

Diagnosis.—*M. c. perplexus* is a well-defined race, separable from *charlottae* by the lighter olivaceous brown of the upper parts (which are slightly paler and more olivaceous even than in *cryptus*), and from both *cryptus* and *charlottae* by having the grayish-olivaceous under parts everywhere suffused with a dull yellowish tinge (much as in *M. c. simulator*, but considerably less bright).

Wing length.—89 mm. (1 male), 86 mm. (1 female).

Specimens examined.—BORNEO: East: Labuan Kelambu (2 females), Segah River (1 male), Sibatik Island (1 female).

Remarks.—This form, with its more olivaceous upper parts and more yellowish under parts, might almost be considered a link between *M. c. charlottae* and *M. palawanensis*, but the complete lack of pure, bright yellow on the under parts causes it to look much nearer *charlottae*. Moreover, like *charlottae*, it has white irides, according to Stresemann (Temminckia, vol. 3, 1938, p. 127), who, under the name "*Iole olivacea charlottae*" has reported four males (wing length 89-92 mm.) and two females (wing length 83-84 mm.) from Peleben on the Kajan River.

III. *Microscelis palawanensis* (Tweeddale)

1. *Microscelis palawanensis* (Tweeddale)

Criniger palawanensis Tweeddale, Proc. Zool. Soc. London for 1878, pt. 3, Oct. 1878, p. 618 (Puerto Princesa, Paláwan Island, Philippine Islands).

Diagnosis.—Pointed feathers of crown light olivaceous brown; mantle brownish olive green; upper tail coverts dark rufescent brown; exposed portions of remiges and rectrices rufescent brown, edged with light olivaceous brown; lores and indistinct supercilium gray; sides of head pale olivaceous gray-brown, each feather with a whitish shaft streak; throat and upper breast ashy gray, streaked with light yellow; remaining under parts canary yellow, strongly washed with olivaceous along the flanks (which are posteriorly suffused with ochraceous); under tail coverts light yellowish buff.

Wing length.—84-85 mm. (2 males), 80 mm. (1 female).

Specimens examined.—PALAWAN: Puerto Princesa (2 males, 2 females).

Remarks.—This golden-eyed species combines characters of *viridescens* and the more greenish northern races of *charlottae*. The light shafts of the feathers of the sides of the head seem to occur in no other form discussed in these pages, and may thus be considered to have specific importance.



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