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# A New Subspecies of *Caiman sclerops* from Colombia

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From January to the end of May, 1952, I collected crocodylians in the upper Río Apaporis, Comisariato Amazonas of Colombia. This river is the principal tributary of the Caquetá, or Yapurá, which flows into the Amazon. The region visited is situated near meridian 71° W., several kilometers north of the Equator (approximately 0° 7' N.). The upper Río Apaporis is separated from the lower by several falls, the biggest of which, Raudal de Jirijirimo, is approximately 30–40 meters high. The river has cut a channel some 13 km. long through a rocky gorge below it. The waters, receding first in cascades, are very turbulent and can not be used as communication between the upper and lower sectors of the river in this area. The Jirijirimo apparently forms a limit for certain caimans, including *Melanosuchus niger* from the Amazon, which is to be found only in the lower Apaporis territory (La Pedrera, etc.).

The population of *Caiman sclerops* in the region observed shows a noticeable difference from that of the Colombian Llanos Orientales and other areas (British Guiana), especially in details of the skull and in certain external characteristics. Therefore it seems justifiable to describe the *Caiman sclerops* from the upper Apaporis as a new subspecies, based on a series of 21 specimens in Chicago Natural History Museum (presented by myself) and ten located in other museums or collections (see below). Because of insufficient materials from most localities, the entire problem of morphological differences and geographical range of the *Caiman sclerops* populations can not be completely solved. I have made an attempt in this direction through the comparison of several of the more distinct of such popu-

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lations, for publication in another paper. I am much indebted to Dr. Karl P. Schmidt, and to other members of the staff of Chicago Natural History Museum, for the furtherance of my studies on crocodylians. My interest in this group of reptiles was stimulated by Dr. Schmidt's paper on the South American caimans (1928), which I read in Berlin in 1938.

**Caiman sclerops apaporiensis** subsp. nov.

*Type*.—Chicago Natural History Museum no. 69812, from upper Río Apaporis, Comisariato Amazonas, Colombia, South America. Skull of an adult male. Collected by Fred Medem.

*Diagnosis*.—A subspecies of *Caiman sclerops* (Schneider, 1801), corresponding in general characteristics with the species, but distinguished therefrom by its very elongated and comparatively narrow snout; the flat cranial table; the large temporal vacuities; and the bright yellow-brownish color, spotted with black vermiculations, in fresh specimens.

*Description of the type*.<sup>1</sup>—The dermal armor consists of two rows of keeled occipitals, the first of which contains six and the second seven individual scutes. There are four rows of cervicals in which the scutes number 4-4-2-2. The dorsals are in 19 transverse rows, of which the broadest contains 13 individual scales. The ventrals are in 24 transverse rows of which the broadest contains 13 individual scales. The number of double-crested caudal verticils (segments) is 13, and the number of single-crested scales is indeterminate, the tail being incomplete, regenerated.

Skull triangular, much elongated, posteriorly broad; cranial table very flat and broad; snout long and narrow as compared with the posterior part of the skull; premaxillae broad; nasals not entering the external nasal aperture;<sup>2</sup> premaxillae forming the pointed projection into the posterior border of the external nasal aperture; preorbital ridge little elevated; interorbital space anteriorly wide, narrowed in the middle by the highly elevated inner borders of the orbits; supraoccipital broad, pointed anteriorly; a vestigial quadratojugal spine present; palatines very slightly concave at the middle, slender, extending forward to the level of the eighth maxillary tooth; pterygoids not entering the palatal vacuities; supratemporal fossae

<sup>1</sup> Based on field notes on the specimen represented by skull no. 69812, as well as on the prepared skull.

<sup>2</sup> The projection pointing forward into this opening, usually formed by the nasals and premaxillae, is formed by the premaxillae alone.

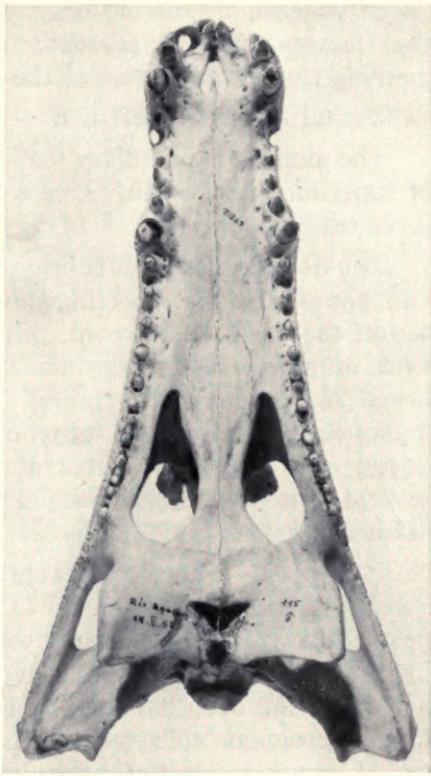
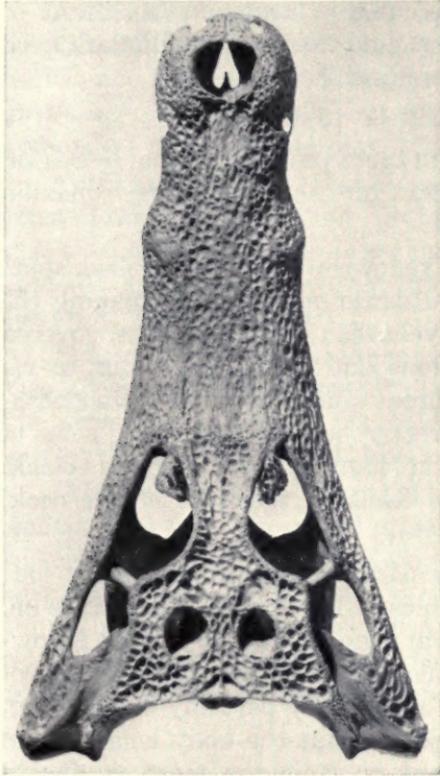


FIG. 75. *Caiman sclerops apaporien-sis* subsp. nov.; type, dorsal view.

FIG. 76. *Caiman sclerops apaporien-sis* subsp. nov.; type, ventral view.

wide and shallow; infratemporal fossae wide; external mandibular foramen wider than the bordering angular and supra-angular; palatal vacuity very large, anteriorly narrow, extending forward to the ninth maxillary tooth.

SKULL MEASUREMENTS

	mm.
Length from tip of snout to occipital condyle.....	304
Width across quadrato-jugals.....	173
Length of snout.....	198
Width at ninth maxillary tooth.....	81
Width at fourth maxillary tooth.....	72
Width of premaxillae.....	62
Length of mandible (from tip to end of articular).....	374
Width of normally placed jaws at rear.....	178
Height of skull, with mandibles in place.....	107

In general, no discernible differences in dentition from that of the known forms of *sclerops*; first and fourth mandibular teeth piercing the outer borders of the premaxillae.

Dental formula: Pmx 5-5 + Mx 17-18/Md 20-20.

The number of maxillary teeth in the type is not normal by reason of supernumerary teeth. One socket on each side in each maxilla gives rise to two teeth.

The dorsal coloration is bright yellowish-brown, with black spots and vermiculations; spotting more dense on the head, making the top of the head dark brown; tail yellowish on light brown, covered with numerous black vermiculations and spots, with four to six broad dark zones discernible; throat and lower jaws yellowish; flanks in general yellow, gray directly beneath the outer rows of dorsal scutes; keeled scutes of the flanks dark brown or black; several scutes with orange-colored keels on the sides of the neck; extremities dark gray or black.

*Paratypes*.—There are twenty paratypes, fourteen adults, one subadult, and five juveniles in Chicago Natural History Museum, nos. 69813-32, from the same general region as the type. The following table gives body length as well as total length, many of the tails of adults having been damaged in life, and only partially regenerated, in the specimens collected by myself. Thus the body length, from tip of snout to posterior border of anus, is the most significant measure of length.

CNHM number	Sex	Body length	Total length
		cm.	cm.
69831	♂	114	209
69830	♂	104	194
69829	♂	101	183
69813	♂	100	178
69821	♂	98	169
69815	♂	93	155
69824	♂	68	127
69832	♂	67	127
69825	♂	62	106
69817	♂	43	89
69823	♂	28	40
69819	♂	26	53
69818	♂	22	45
69826	♀	90	164
69822	♀	88	158
69820	♀	88	163
69814	♀	84	158
69816	♀	72	...
69827	♀	32	62

Additional material, which may also be regarded as paratypic, is located in Bogotá (two adults, with six eggs containing embryos); Senckenberg Museum, Frankfort-on-Main (three adults and two juveniles); Museum of Vertebrate Zoology, Berkeley, California (one adult and two juveniles, nos. 42842-44).

*Notes on paratypes.*—Adult specimens are very uniform and conform closely with the type. Subadults and the larger juveniles are also distinguishable from other populations of *sclerops*. The smaller juvenile specimens, however, do not exhibit differences sufficient for exact discrimination.

The color of fresh specimens corresponds with that of the type. One specimen (CNHM 69813) has several orange-colored scutes on the sides of the neck. The color of juvenile specimens is always more yellowish above than that of other types of *sclerops*.

*Distribution.*—The long-snouted population described above is known thus far only in the upper Río Apaporis, between the Falls of Jirijirimo and Puerto Yaviya (a rubber collection point), a distance of about two hundred kilometers. In this area it is to be found in the tributaries of the Apaporis and the adjacent lagunas. The shorter-snouted *Caiman sclerops* of the Colombian Llanos and of the Amazonian drainage in general is not found with *apaporiensis*.

#### REFERENCES

SCHMIDT, KARL P.

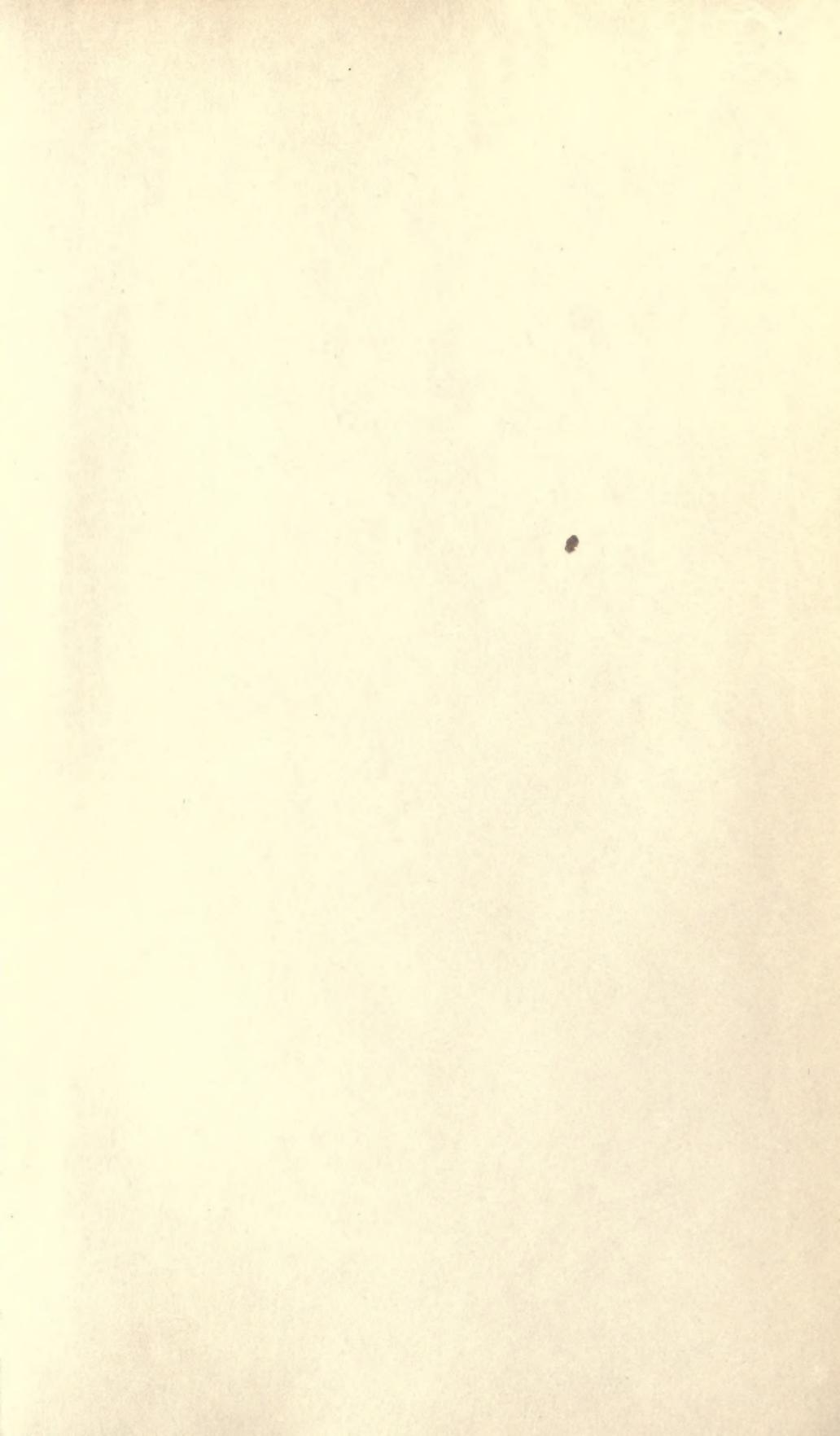
1928. Notes on South American caimans. Field Mus. Nat. Hist., Zool. Ser., **12**: 203-231, pls. 16-21, text figs. 1-3.

SCHNEIDER, JOHANN GOTTLÖB

1801. *Historiae Amphibiorum naturalis et literariae*. Fasc. 2, pp. 1-364, pls. 1, 2.











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