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A NEW PHYLLOMEDUSA FROM BOLIVIA (SALIENTIA, HYLIDAE)

BY BENJAMIN SHREVE

In 1954 Carl Gans and Padre F. S. Pereira, C.M.F. collected amphibians and reptiles in the state of Mato Grosso in Brazil and the Department of Santa Cruz in Bolivia. W. C. A. Bokerman of the Departamento do Zoologia, São Paulo, Brasil, did some preliminary work on identifying the amphibia, while I was called upon to complete this task. While doing so, I discovered the novelty described here. Dr. Gans, who is planning to publish a complete report on his collection, has graciously presented about half of the amphibians to the Museum of Comparative Zoology, including the type of the new form, the remainder going to the Carnegie Museum of Pittsburgh, Pennsylvania.

PHYLLOMEDUSA PAILONA sp. nov.

Type. Museum of Comparative Zoology 29677, an adult male, from El Pailon, 5 kilometers from the eastern shore of the Rio Grande, altitude 350 meters, Department of Santa Cruz, Bolivia, collected by Carl Gans and F. S. Pereira March 5, 1954.

Paratypes. M.C.Z. 29678-79 and Carnegie Museum 36278-80, all adult males, with the same data as the type.

Diagnosis. Apparently most closely allied to *Phyllomedusa sauvagii* Boulenger but differing in apparently smaller size, longer hind limbs, immaculate venter and other aspects of coloration.

Description. Tongue slightly nicked behind; vomerine teeth in two slightly oblique groups between the choanae; snout longer

than the diameter of the eye, obliquely truncated from behind forwards (male only?, shape of snout may be different in female); loreal region slightly oblique; interorbital space broader than the upper eyelid; tympanum (longest diameter) two-thirds the diameter of the eye (two-thirds or slightly less in paratypes); fingers free, first very slightly shorter than second, fourth somewhat shorter than third; toes free, first longer than second; disks of fingers and toes much smaller than tympanum; inner metatarsal tubercle fairly prominent; the tibio-tarsal articulation of the adpressed hind limb reaches to the tympanum; upper surfaces minutely granulate; parotoids large, short, a larger portion extending about as far as axilla, a rather obscure extension extending farther back (not evident in some paratypes); belly and lower surface of thigh granulate, other parts of lower surface less granulate; a subgular vocal sac and a brown nuptial pad on inner side of thumb.

Coloration in alcohol. Above, grey blue (quite light in some of the paratypes); inner two fingers and outer three toes yellowish suffused with brown, disks of other fingers and toes brownish; eye more or less narrowly bordered with white suffused with orange, decidedly more extensive and continuous on upper eyelid than lower (possibly bright orange in life). Below, yellowish; a white stripe on tarsus and forearm (that on the former curving around the tibio-tarsal articulation), separating dorsal and ventral pattern, continuing on to the adjoining digit; a similar stripe, but short, above anus; a wash of more or less purplish brown under limbs particularly in the vicinity of the stripe, the same color below anal stripe; also a white stripe on under side of upper arm curving around insertion anteriorly. Some of the paratypes show obscure white spotting under the thighs.

Head and body length. Type 67mm. Paratypes 60-69mm.

Remarks. A transforming individual (M.C.Z. 29680), apparently referable to this species, was taken from the stomach of a hatchling *Chironius pyrrhopogon* (Wied). This toad had the tail still present but the limbs appeared fully developed. Owing to some possible doubt about the identification, this individual is not included as a paratype. The data is the same as that of the type and paratypes.

The range of *sauvaggi* is given by the most recent reviser of the genus, A. Funkhouser (1957, p. 54), as Argentina, southern Brasil, and southern Bolivia. While this roughly includes the type locality of the species described here, there appears to be no evidence that the two forms are sympatric. The nearest locality, El Carmen, at which Carl Gans collected *sauvaggi* is about 488 kilometers to the east of El Pailon. L. Müller and W. Hellmich (1936, p. 107) record *sauvaggi*, mentioning some variation in color, from "Curriche von San Ramon" north of San Jose de Chiquitos. "Curriche von San Ramon" is not specifically indicated on Müller and Hellmich's map (*loc. cit.*, p. 115), though a short spur from the main itinerary extending north and west from San Jose de Chiquitos may include or terminate at "Curriche." In any event, this locality is much closer to El Pailon than is El Carmen, San Jose de Chiquitos itself being about 218 km. to the east. In the absence of evidence of sympatry, the judgment that *sauvaggi* and *pailona* are specifically distinct is based on the several differences cited in the diagnosis.

P. pailona seems also to be related to *P. boliviana* from which it appears to differ in having smaller discs on the fingers and toes, differently shaped parotoid glands, and in different coloration, consisting chiefly in the absence of white spotting or vermiculation on the sides, and a nearly immaculate ventral coloration.

According to Funkhouser (*loc. cit.*, p. 57), the range of *boliviana* is the eastern Andean foothills of Ecuador and Bolivia, thus apparently occurring at higher altitudes than that (350m.) at which *pailona* occurs. Again there appears to be no sympatry, and specific distinction is inferred from the extent of morphological and color differences.

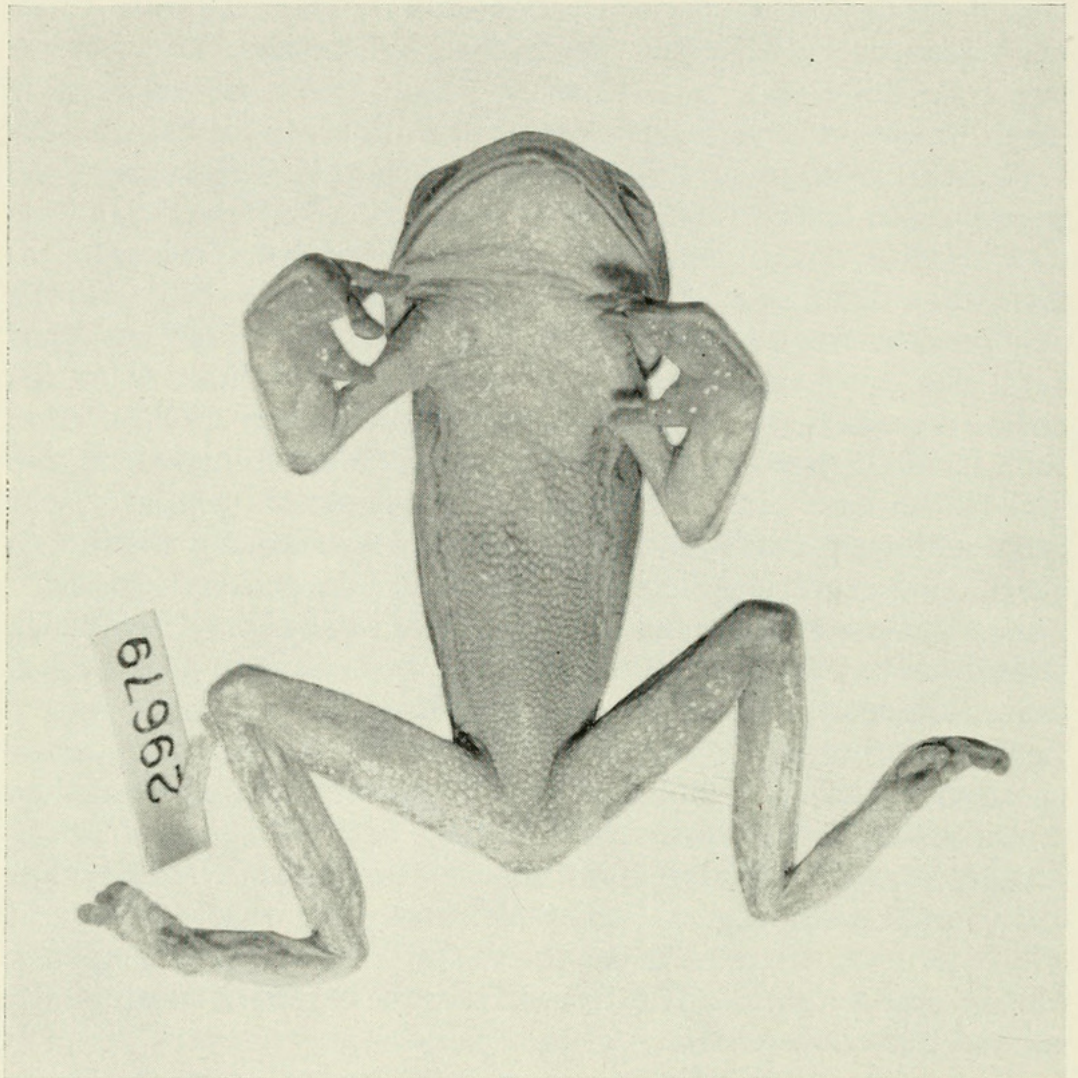
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Phyllomedusa pailona, paratype, MCZ 29679, ventral view to show immaculate venter. Carl Gans, photographer.



Shreve, Benjamin. 1959. "A new Phyllomedusa from Bolivia (Salientia, Hylidae)." *Breviora* 113, 1-4.

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