DESCRIPTION OF A NEW FROG OF THE GENUS
HYLA FROM SURINAME

by

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With one text-figure

While in Suriname during June 1964, I had the opportunity of collecting a series of a species of Hyla that seems to be undescribed. It seems appropriate that this species be known as

Hyla boesemani sp. nov. (fig. 1)

Diagnosis. — A small Hyla with vomerine tooth patches close together or contiguous; with just a trace of web between the fingers; fourth toe webbed to the base of the penultimate phalanx; a small but well-developed patagium; a very distinct skin fold across chest. It has a dorsal pattern of scattered light spots, a distinct, narrow, postocular dark stripe, and lacks a pattern on the thigh although the latter has a small amount of uniformly distributed pigment present.

This species is perhaps most easily confused with the members of the Hyla leucophyllata-group because of its pale, unpatterned thighs. It differs from these, though, in the fact that its thighs are gray rather than pink in life and in that in preservative the thigh, although without a pattern, is covered with a rather uniform gray pigmentation rather than being pigmentationless as are those of the members of the leucophyllata-group.

Holotype. — Rijksmuseum van Natuurlijke Historie 12601, adult male, collected near Zanderij, Suriname District, Suriname, on June 16, 1964, by Coleman J. Goin and D. C. Geijskes.

Paratypes. — Fourteen, all adult males, as follows: Rijksmuseum van Natuurlijke Historie (RMNH) 12602, 12603; Florida State Museum 22367; and Coleman J. Goin collection (CJG) 2408, 2409, 2414; from Zanderij, Suriname District, Suriname. American Museum of Natural History A75555;
British Museum (Natural History) 1966.26; Carnegie Museum 41595; Museum of Comparative Zoology 52833; United States National Museum 159140; and Coleman J. Goin collection 2385-87; from near Onverwacht, Suriname District, Suriname.

Description of holotype. — Vomerine teeth in a single, transverse series, lying between the moderate sized rounded choanae; tongue three-fourths as

Fig. 1. *Hyla bosemani* sp. nov., holotype, RMNH 12601. Dorsal view with details of underside of hand and foot, roof of mouth and side of head. Paul Laessle del.
wide as mouth-opening, broadly rounded anteriorly and posteriorly but with its sides nearly parallel, its posterior border slightly free and with a shallow, median notch. Snout moderate, somewhat pointed when viewed from above, its tip rounded in profile, the upper jaw extending a little beyond lower; nostrils more lateral than superior, slightly projecting, their distance from end of snout about one-half that from eye, separated from each other by an interval equal to about two-thirds their distance from eye. Canthus rostralis slightly defined; loreal region concave and somewhat oblique, the upper lip flaring out slightly below it. Eye neither large nor prominent, its diameter equal to its distance from nostril; palpebral membrane not reticulate; interorbital distance slightly greater than width of upper eyelid, which is about equal to the distance between nostrils. Tympanum very distinct, about two-fifths the diameter of eye, separated from eye by a distance nearly equal to its own diameter. Fingers with but a trace of web at base, fourth about equal to the second in length, neither reaching to disk of third, the disk of third just covers the tympanic area; no projecting rudiment of a pollex; no ulnar ridge; toes about three-fourths webbed, the web on fourth toe reaching slightly beyond the base of the penultimate phalanx, third and fifth subequal, disk of fourth covering about three-fourths the tympanic area; a distinct oval inner and a smaller but equally distinct rounded outer metatarsal tubercle; no tarsal ridge; no dermal appendage on heel. Body not elongate, in post-axillary region just a little narrower than greatest width of head; when hind leg is adpressed, heel reaches anterior margin of eye; when limbs are laid along the side, knee and elbow meet; when hind legs are bent at right angles to body, heels overlap. A small but distinct patagium extends from the back of the upper arm to the side of the body. Skin of upper parts smooth; a low but distinct glandular ridge encircling upper part of tympanum then passing posteriorly to fade out above the insertion of the arm; skin of throat and chest, smooth, that of belly and lower surface of thigh uniformly granular; a very distinct skinfold across chest; adult male, vocal sac apparent externally only as some slight wrinkles on the throat. Skin of head not coossified with skull, roof of skull not exostosed.

Dimensions. — Head and body 31.4 mm; head length 11.0 mm; head width 11.0 mm; femur 13.4 mm; tibia 15.5 mm; heel-to-toe 21.0 mm.

Color in alcohol. — Dorsal ground color dark greyish-brown. There are two distinctive elements in the pattern: on each side a narrow, dark chocolate brown stripe passes from the nostril along the canthus to the eye and from the posterior corner of the eye posteriorly above the tympanum to above
the insertion of the arm, and an extensive series of distinct but not sharply defined light spots are present on the top of head and dorsum. Similar but less distinct spots are present on the dorsal surfaces of the shanks and forearms. The thighs, while not without pigment as are those of species of the leucophyllata-group are paler in ground color than is the dorsum and show no trace of pattern. The lower surfaces are fuscous and without distinct pigment cells except around the edge of the lower lip and anterior chest region where scattered, minute melanophores occur.

**Variation.** — In dorsal ground color the type series ranges from pale gray to a somewhat dark chocolate brown. They are all uniform in having the dark narrow post-ocular stripe that reaches to above the arm and in lacking any pattern on the thigh. There is a great deal of variation in amount of dorsal spotting. One specimen, RMNH 12603, has the entire dorsal surface of the head, body and shanks covered with small, rounded, light areas that in places are so thick they are nearly confluent. These light areas range in size from the diameter of the tympanum down to the size a small pin head. From this extreme of spotting the series ranges down to those like CJG 2409 in which the light spots on the back, although still present, are scattered and so nearly obsolescent and so inconspicuous as to be overlooked at first glance and the most conspicuous element of the dorsal pattern is a dozen or so pepper-like black flecks.

Structurally the type series, all males, range in head-body length from 27.5 to 32.1 mm. There is some variation in the arrangement of the vomerine tooth patches. In nine of the fifteen specimens the patches are contiguous, in two they are essentially in contact and in the remaining four they are slightly separate.

There is very little variation in amount of webbing, there being just a trace of web between the fingers of all specimens and all having the webbing of the fourth toe reaching the base of the penultimate phalanx.

**Remarks.** — It is a pleasure to name this species for Dr. M. Boeseman, Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands, in recognition of the help he has given me.

I am indebted to Dr. D. C. Geijskes for introducing me to field work in Suriname, to Mr. Paul Laessle for the figure of the type which accompanies this description, and to the National Science Foundation for grants GB-1339 and 3644 which made my studies of Suriname frogs possible.