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A NEW *HYLA* FROM GUATEMALA

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THE third University of Michigan-Carnegie Institution of Washington Expedition brought back a series of hylas from Guatemala which we have been unable to identify with any of the known species. Because of the noisy song, we are naming the new form

Hyla loquax, new species

DIAGNOSIS.—Snout flat and broadly rounded; canthus rostralis indistinct; loreal region oblique, plane; diameter of ear half to three-fourths that of the eye; vomerine teeth between the choanae; fingers three-fourths webbed; toes almost fully webbed; a tarsal fold; a tubercular fold on outer side of forearm and fourth finger, and of the tarsus and fifth toe. Concealed surfaces of legs and the first three toes orange in life (reddish in alcohol).

TYPE SPECIMEN.—Museum of Zoology, University of Michigan, No. 75446; adult male; Ixpuc Aguada, north of La Libertad, El Peten, Guatemala; June 4, 1933; L. C. Stuart, collector.

DESCRIPTION OF TYPE SPECIMEN.—Head as long as broad; snout flat, broadly rounded, slightly longer than diameter of orbit, which is somewhat more than the distance of orbit from

nostril; nostrils almost terminal, distance between them about three-fourths of the eye diameter; canthus rostralis rounded; loreal region oblique; eyes lateral; interorbital space twice the width of the upper eyelid; ear distinct, its diameter half that of the eye. Tongue round, slightly emarginate; vomerine teeth in two slightly oblique groups between choanae. Fingers three-fourths webbed; no rudiment of pollex; disk of third finger as large as the ear. Toes almost entirely webbed, leaving half of the last phalange of the fourth free, disks smaller than those of the fingers; subarticular tubercles distinct, a single metatarsal tubercle and a strong tarsal fold. Skin shagreened dorsally, becoming smoothly granular on the sides; throat smooth, gular region almost smooth, belly and under surface of thighs strongly granular; a fold over the ear and another on the chest; a tubercular fold on the outer surface of the arm, extending on the fourth finger, another on the outer surface of the tarsus, extending to the disk of the fifth toe, and another over the vent; palms and soles tubercular, the tubercles extending somewhat on the webs. Gular sac extending on the pectoral region.

Color (in alcohol): light reddish brown above with a few scattered small black spots, a large irregular blackish blotch on the scapular region, and another smaller one anterior to the vent; upper surface of the arms, three outer fingers, legs, and two outer toes colored like the dorsum; tarsus with two (left) or three (right) narrow black bands, tibia and foot also with a trace of narrow black bands; axilla, concealed surfaces of the femur, ventral surfaces of the tibia and tarsus and first three toes red (orange in life), including the webs of the toes; glandular fold of arms and legs and fold over the vent cream-colored, as are the throat, belly, and ventral surfaces of the thighs; ground color of the head extending somewhat below the angles of the jaws.

Snout to vent 35 mm.; the heel marks the front of the eye when the leg is extended along the body.

PARATYPES.—The Museum of Zoology collection contains twelve paratypes of this frog, from Guatemala. One was col-

lected at Chicha Aguada, southwest of La Libertad; ten from Ixpuc Aguada, north of La Libertad; by L. C. Stuart and C. L. Lundell; on April 28, June 1, June 9, June 10, and June 12, 1933. One, an adult female filled with eggs, was taken at Uaxactun, April 15, 1931, by Josselyn Van Tyne.

There is little variation in structure in the paratypes. The length of the head and body ranges from 32 to 37 mm.; the tibio-tarsal articulation reaches the middle of the eye (one female), the front of the eye, or the nostril, when the leg is extended along the body; the ear diameter is one-half to three-fourths that of the eye. The greatest variation is in color and pattern. The ground color is like that of the type in most of the specimens; in the others it is a darker grey-brown, a lighter reddish brown, or a pale grey (two specimens, one of which was almost white when collected). The small black spots may be distinct, or so minute that they are discernible only under a lens. Other dorsal spotting is lacking in all but the female from Uaxactun, which has three large irregularly placed and shaped dark spots on the back. The pattern on the legs is obscure or consists of narrow stripes or wider blotches. One specimen has a dark spot on the elbow and another on the wrist, and the fold over the ear is edged with black. The majority of specimens have a dark spot in the axilla, instead of the reddish one evident in the type.

One specimen was collected from a tall tree near Chicha Aguada, the others from water plants in the *aguadas*. They were heard singing occasionally in tall trees.

Remarks.—The species seems most nearly related to *Hyla miotympanum*, occurring in adjoining Mexico. From *miotympanum* it differs in the shape of the head, the larger ear, greater webbing of the fingers and toes, indistinct canthus rostralis, smoother gular region, and in coloration.

Specimens have been compared by Mr. H. W. Parker, of the British Museum, with the types of *Hyla godmani* (= *miotympanum*). Dr. E. R. Dunn, of Haverford College, and Dr. Doris Cochran and Dr. Remington Kellogg, of the United States National Museum, have also examined specimens and have offered helpful advice.

