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A NEW FROG OF THE GENUS *OREOPHRYNE* AND
A LIST OF AMPHIBIANS FROM CAMIGUIN
ISLAND, PHILIPPINES

BY WALTER C. BROWN AND ANGEL C. ALCALA

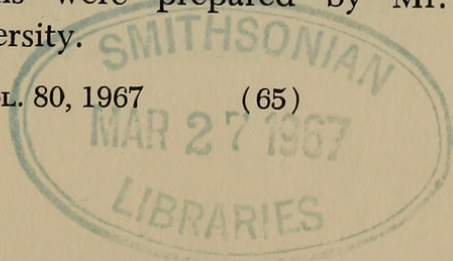
*Division of Systematic Biology, Stanford University and
Menlo College, Menlo Park, California, and
Silliman University, Philippine Islands*

The genus *Oreophryne* Boettger is represented by several species in New Guinea and the islands of the Indo-Australian Archipelago. Only one, *Oreophryne annulata* Stejneger, is previously known from the Philippines. The type-locality is Davao, Mindanao Island. *Chaparina visaya* Taylor from Biliran Island was placed in the synonymy of *O. annulata* by Parker (1934, p. 167) based on specimens in the British Museum which were identified by Taylor as *C. visaya*. Inger (1954, p. 445) followed in this synonymy.

On the basis of Taylor's description (1920, p. 335), I see no reason for identifying *C. visaya* with the present series from Camiguin Island. The original description certainly would indicate that Taylor's unique holotype was probably conspecific with *O. annulata*. Only a series from the Biliran Island population will make it possible to determine the extent to which this population is differentiated from the southern Mindanao population.

The population on Camiguin Island, as evidenced from a sample obtained during a recent expedition to that island, represents a species which is very distinct from *O. annulata*, however. This species is described in the present paper.

The investigation of the herpetofauna of Camiguin Island, as a result of which this paper is one of the taxonomic reports, was made possible by a grant from the National Science Foundation. Illustrations were prepared by Mr. Walter Zawojski, Stanford University.



Oreophryne nana new species

Holotype: Stanford University Register no. 22055, a mature female, collected in dipterocarp forest between 1800 and 3000 ft on the northwest side of Nacawa volcano, Mt. Hibok-hibok, Camiguin Island, Philippine Islands, on 3 July 1966 by Lawton Alcala and party.

Paratypes: Stanford University nos. 22056-62, same general locality as the holotype.

Diagnosis: A small *Oreophryne*, snout-vent length of 17 to 20 mm for several mature females; tips of finger and toes, except for first finger, dilated into moderately large disks; disk of third finger and third toe about equal, and about same as diameter of tympanum; sub-articular tubercles lacking; fingers and toes without webs; venter heavily mottled with brown.

Description: Size small, females measuring 17 to 20 mm in snout-vent length at maturity for our sample; (no mature males available); habitus moderately slender; head broader than long; head breadth about $\frac{1}{3}$ of snout-vent length (Table 1); snout short, bluntly round-pointed; snout length 75 to 95 percent diameter of orbit; interorbital distance greater than breadth of eyelid; tympanum distinct, its diameter about 35 to 70 percent diameter of orbit; canthus rostralis rounded; lores flat, only slightly oblique; vomerine teeth lacking; two palatine ridges present in front of pharynx, but not prominent; finger tips, except first, dilated into moderately large disks, with ventral part separated from dorsal by a circummarginal groove; ventral proximal groove lacking; disk diameter of third finger about 40 to 45 percent length of third finger and usually about twice diameter of disk of

TABLE 1. Snout-vent lengths (in mm) and certain proportions for samples of *Oreophryne annulata* and *Oreophryne nana* (R = range).

	<i>Oreophryne nana</i> (8 specimens)	<i>Oreophryne annulata</i> (2 specimens ¹)
Snout-vent lengths of adult females	R = 16.8-19.8	R = 19.0-23.4
Head breadth divided by tibia length	R = 0.808-0.903	R = 0.919-0.928
1st finger disk breadth divided by 3rd finger disk breadth	R = 0.455-0.600	R = 0.664-0.667
3rd toe disk breadth divided by 3rd finger disk breadth	R = 0.953-1.20	R = 0.833-0.882
3rd finger length divided by head breadth	R = 0.377-0.431	R = 0.440-0.478
3rd finger length divided by snout length	R = 1.05-1.47	R = 1.60-1.79

¹ Snout-vent length is based on 8 specimens.

first finger (Table 1); subarticular tubercles not evident; inner metacarpal tubercle barely evident, flat, elongate; outer not evident; second finger slightly longer than or about equal to fourth (Fig. 1a); hind limb relatively short, length of tibia about 39 to 45 percent snout-vent length and 111 to 124 percent head breadth (Table 1); toe disks moderately large, third toe disk about same size as third finger disk, or slightly larger (Table 1); subarticular tubercles not present, inner metatarsal tubercle flat, moderately elongate; third and fifth toes about equal in length.

Skin of dorsum smooth; venter usually weakly granulate posteriorly.

Measurements of holotype (in mm): Snout-vent length 19.4; head length from posterior edge of tympanum to snout tip 6.0; head breadth 6.9; snout length 1.9; orbital diameter 2.2; third finger length, measured from point of separation from fourth finger, 2.6; breadth of third finger disk 1.1; breadth of first finger disk 0.6; breadth of third toe disk 1.1, tibia length 8.3; hind limb length 26.4.

Color (in preservative): Dorsum dusky brown except for snout, upper eyelids, and axillary and loreal regions which are blackish, otherwise occasionally with a few scattered darker blotches; limbs without distinct transverse bands, venter best described as brownish with scattered light blotches, or more rarely light cream, heavily mottled with brown.

Comparisons: *Oreophryne nana* differs from *O. annulata* in attaining maturity at a smaller size. Inger (1954, p. 447) gives a snout-vent length of 19.0 to 21.7 mm for 6 mature females of *O. annulata*. Two

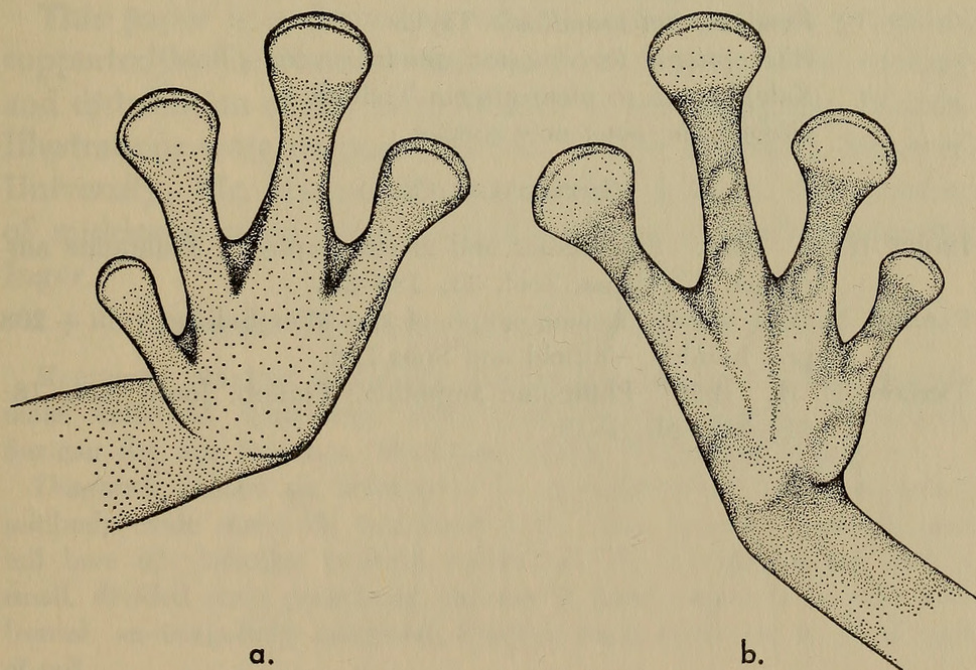


FIG. 1. a, undersurface of hand of *Oreophryne nana*; b, undersurface of hand of *Oreophryne annulata*.

females (S. U. 20120 and 20124) measure 23.2 and 23.4 mm in snout-vent length. *O. nana* differs also in having a darker ventral coloration; a relatively broader third-toe disk as compared to the third finger disk; a less dilated first-finger disk as compared to the third finger disk; a shorter third finger length compared to the head breadth or the snout length; a complete absence of subarticular tubercles (Fig. 1), and a smaller tympanum compared to orbital diameter (Table 1).

Using Parker's key (1934, p. 160), *O. nana* appears to belong to that group of species which includes *variabilis* (Boulenger) and *zimmeri* Ahl from Celebes and *rookmaakeri* Mertens from Flores. It differs from these species, however, in its much smaller size, features of its color pattern such as its darker venter, and its smaller toe disks as compared to its finger disks. In size, *O. nana* appears to be most similar to the *O. jeffersoniana* Dunn from which it is readily distinguished, however, by its much larger digital disks.

PRELIMINARY CHECKLIST OF AMPHIBIANS FROM CAMIGUIN ISLAND

Since no information on the herpetofauna of Camiguin Island has previously been published, the following list includes all amphibians collected by our recent expedition to that island.

Cornufer corrugatus (Duméril)
Ooeidozyga l. laevis (Günther)
Rana c. cancrivora Gravenhorst
Rana leytenensis (Boettger)
Rana m. magna Stejneger
Rana signata grandicula Taylor
Rhacophorus leucomystax quadrilineatus (Boie)
Kalophrynus p. pleurostigma Tschudi
Oreophryne nana new species

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