

B R E V I O R A

Museum of Comparative Zoology

CAMBRIDGE, MASS.

NOVEMBER 30, 1955

NUMBER 50

NEW FROGS OF THE GENERA *ASTEROPHRYS* AND *OREOPHRYNE* FROM NEW GUINEA

By ARTHUR LOVERIDGE

During the past year the Museum of Comparative Zoology has received from Mr. Kenneth R. Slater some interesting microhylids including *Asterophrys rufescens* (Macleay), *valvifera* (Barbour), *turpicola* (Müller); *Xenobatrachus rostratus* (Méhely); *Metopostira ocellata* Méhely and *Cophixalus oxyrhinus* (Boulenger), taken at Omati, near Port Moresby, Papua.

There was also a large and handsome frog which keyed down to *Asterophrys boettgeri* (Méhely) in the synopsis to that genus furnished by H. W. Parker in his "Monograph of the Microhylidae" (1934:60. Brit. Mus.). However, *A. boettgeri* comes from Halmahera Island in the Moluccas lying to the northwest of Dutch New Guinea, while Omati is situated in the southeast of New Guinea. After Dr. E. E. Williams and I had re-examined the Omati specimen and come to the conclusion that it was probably new, it was submitted to Dr. Parker for favor of his confirmation. Meanwhile, in the hope that the collector might be able to secure more material, publication has been deferred for nearly a year. Mr. Kenneth Slater, after whom I take pleasure in naming it, now informs me that there is little hope of his obtaining a series for he will soon be returning to Australia.

ASTEROPHRYS SLATERI sp. nov.

Holotype. Museum of Comparative Zoology No. 28205, an adult ♀, from Omati, near Port Moresby, Papua. Collected by Kenneth R. Slater between January and April, 1954.

Diagnosis. Apparently closely related to *A. boettgeri* (Méhely) from which it differs in having a much longer (*not* shorter) snout;

an interorbital space that is one and one-third times as broad as (instead of equal to) an upper eyelid; tibio-tarsal articulation of adpressed hind limb reaching eye (instead of nostril); some details of coloration; and size, being 52 mm. (instead of 39 mm.; a difference that may be sexual). Possibly it is only racially distinct.

Description. Anterior palatal ridge curved, smooth. Snout subacuminate, longer than the horizontal diameter of the eye, which is equal to the distance from nostril to orbit; canthus rostralis rounded; interorbital space one and a third times as broad as an upper eyelid; tympanum moderately distinct, its horizontal diameter about half that of the eye; fingers long, the first much shorter than the second, which is slightly shorter than the fourth, the third being much the longest, all terminating in large subtriangular disks which are larger than those of the toes; both fingers and toes free of web; inner metatarsal tubercle indistinct; tibio-tarsal articulation of the adpressed hind limb reaches the eye.

Skin of head, except on occiput, pustular, especially noticeable on upper eyelids; some glandular folds on the occiput, scapular region and dorsum, the latter also displaying a few scattered tubercles; forelimb, more particularly the upper arm, studded with tubercles. Below, smooth.

Color. Above, purplish brown spotted with black and flecked with white (on body tubercles); on the occiput and back are four or five, more or less W-shaped, white lines corresponding to the glandular folds; posteriorly an obsolete, hair-like, light vertebral line is barely distinguishable; thighs heavily blotched with black, the elongate blotches separated by irregular white lines; on the tibia these light lines suggest obsolete crossbars.

Below, pale brownish spotted with darker brown and variegated with indistinct white vermiculations; these coalesce to form indistinct crossbars on the underside of the forelimbs, larger, broader, and pure white on the hind limbs; lower jaw with two downward-pointing, white, triangular spots on either side of the symphysis, while a less conspicuous pair is situated near the angle of the jaw.

Size. Holotype ♀. Length of head (from end of snout to back of tympanum), 18 mm.; length from snout to anus, 52 mm.; length of hind limb (from anus to tip of longest toe), 80 mm.

Diet. The stomach and intestinal contents, examined by my colleague Dr. W. L. Brown, were so finely masticated as to be undeterminable except for some fragments of small shells, the leg of an ant, and the chitinous plates of some arthropod.

Parasites. The stomach wall and other organs carried numerous encysted nematodes; one threadworm (preserved) was free in the body cavity.

OREOPHRYNE PARKERI sp. nov.

Cophixalus geislerorum Loveridge (not of Boettger), 1948, Bull. Mus. Comp. Zool., 101: 423.

Holotype. Museum of Comparative Zoology No. 12964, an adult ♀, taken from running water in sago-palm forest at Matapan, Australian New Guinea. Collected by E. A. Briggs about January, 1923.

Paratype. British Museum No. 1955.1.1.17, with same data as type.

Diagnosis. In Parker's synopsis to the genus (1934:160) these frogs key down to the *anthonyi-biroi* section but are not very closely related to either species. *Oreophryne anthonyi* (Boulenger), of which we have a cotype, is a more robust frog than the gravid holotype of *parkeri*, from which it differs slightly in almost every character, the most conspicuous being the coloring of the underside and:

Eye separated from tympanum by a distance equal to $1\frac{1}{2}$ times the horizontal diameter of the latter. Total length of adult 45 mm. *anthonyi*
 Eye separated from tympanum by a distance equal to only $\frac{1}{3}$ the horizontal diameter of the latter. Total length of gravid ♀ 30 mm. *parkeri*

O. parkeri agrees with *biroi*, of which we have a series, in size and many other respects, but differs sharply in tympanic characters.

Tympanum scarcely distinct, very small, $\frac{1}{4}$ to $\frac{1}{3}$ the eye diameter; disk of third digit nearly $\frac{1}{2}$ the eye diameter; ratio of tibia length to head width at commissure of mouth 1.1 to 1.3 (4 ex.) *biroi*
 Tympanum very distinct, large, $\frac{2}{3}$ the eye diameter; disk of third digit nearly $\frac{2}{3}$ the eye diameter; ratio of tibia length to head width at commissure of mouth 1.37 to 1.43 (2 ex.) *parkeri*

The head of *parkeri*, as Dr. R. G. Zweifel has pointed out to me, is relatively small compared with those of other *Oreophryne*.

Description. Palate with a row of three transversely elongate tubercles followed by a denticulated dermal ridge in front of pharynx. Snout truncate, subequal to the horizontal diameter of the eye, which is about equal to seven-eighths its distance from the nostril; canthus rostralis rounded; loreal region slightly oblique, distinctly concave; interorbital space more than one and a half times as broad as an upper eyelid; tympanum very distinct, almost two-thirds the diameter of the eye to which it is very close; fingers long, the first much shorter than the second, which is subequal to the fourth, the third being much the longest, its disk almost two-thirds the diameter of the eye, all fingers terminating in large subtriangular disks which are somewhat larger than those of the toes; toes webbed at the base, the third slightly shorter than the fifth, inner metatarsal tubercle very indistinct, outer absent; tibio-tarsal articulation of the adpressed hind limb reaches the shoulder.

Skin of head smooth, except for a slightly raised median line and the suggestion of a supratympanic fold; between the shoulders a)(-shaped glandular fold. Belly smooth (? preservation).

Color. Above, brown, uniform except for some dark crossbars on the limbs and light areas in groin. Below, brown, paling posteriorly towards groin; thighs flecked with white, tibiae largely white.

Size. Holotype ♀. Length of head (from end of snout to back of tympanum), 7 mm.; length from snout to anus (which was 28 mm. prior to dissection), now 30 mm.; length of hind limb (from anus to tip of longest toe), 37 mm.

Diet. The stomach of the holotype contained the remains of scores of a shiny black *Iridomyrmex* ant (smaller than either *batesi* or *scrutator*), a group that is known to forage in trees; also a single head of one of the arboreal *Podomyrma* ants.

Remarks. In 1948, when reporting on the "New Guinean Reptiles and Amphibians in the Museum of Comparative Zoology" (Bull. Mus. Comp. Zool., **101**: 303-430), I erroneously referred these two frogs to *Cophixalus geislerorum* Boettger. More recently, when Dr. R. G. Zweifel of the American Museum of Natural History was working over our material, he redetermined them as *Oreophryne* of no known species. I then submitted them to Dr. H. W. Parker who replied that a clavicle is present though not reaching the scapula, so that they are unquestionably *Oreophryne*,

also eleutherognathine.

I am also indebted to Dr. Parker, after whom this new species is named, for supplying me with the ratios of tibial length to head width at commissure which, in the cotypes of *O. anthonyi* is 1.14 to 1.38, with an average of 1.25. Parker also observes that, according to Boettger, Nieden and Vogt, *C. geislerorum* is without a tympanum; the contrary view was stated by van Kampen and so got included in the monograph.