

**A DESCRIPTION OF *BUFO PARDALIS* TADPOLES
(ANURA: BUFONIDAE)**

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ABSTRACT

Tadpoles of *Bufo pardalis* Hewitt from Kei Road, Cape Province, are described.

INTRODUCTION

Although tadpoles of *B. pardalis* have been included in Van Dijk's (1971) key to the genus *Bufo*, no adequate description of this taxon has yet been published. Further studies on variability depend upon a complete description of each species.

The four tadpoles on which this description is based are housed in the collection of the Transvaal Museum, Pretoria (Catalogue number TM 42961). They were collected by Mr. N. I. Passmore on 13 August 1971, as early tailbuds, at "Glenniffer", Kei Road, Cape Province, 1/4° grid South East 3227 Cb. The mating pair were identified by Mr. Passmore. The tadpoles were reared in the laboratory, and preserved on 29 September 1971.

Descriptive characters and nomenclature are those advocated by Van Dijk (1966) and used by myself in an earlier paper (Channing 1972).

A large number of larval anurans remains to be described in detail.

DESCRIPTION

Size 25–27 mm, approximately stage 52 of the *Xenopus* Normal Table.

Mouth situated ventrally, just visible dorsally on the anterior surface. Oral disc 0,8–0,96 width of head at level of disc. A single, poorly developed row of papillae with a mental gap 0,5–0,7 disc width.

Suprarostrodont bears slight lateral inflexions. Serrations longer than broad to subequal in length and breadth. Median series of serrations not flanked by smaller lateral serrations. Marginal 0,8 pigmented and keratinized.

Keratodonts compound, with two or three constrictions at subequal intervals along their lengths; $\frac{\text{breadth}}{\text{length}} = 0,12$. Two rows of supra-angular keratodonts, distal row not interrupted by a gap, medial fifth of the proximal row interrupted. Three uninterrupted rows of infra-angular keratodonts, the distal row approximately one-tenth shorter than the two subequal proximal rows.

Nostrils kidney-shaped with a raised median projection on the proximal margin. Distinct marginal ridge present. Opening dorsal, nasal passage visible frontolaterally.

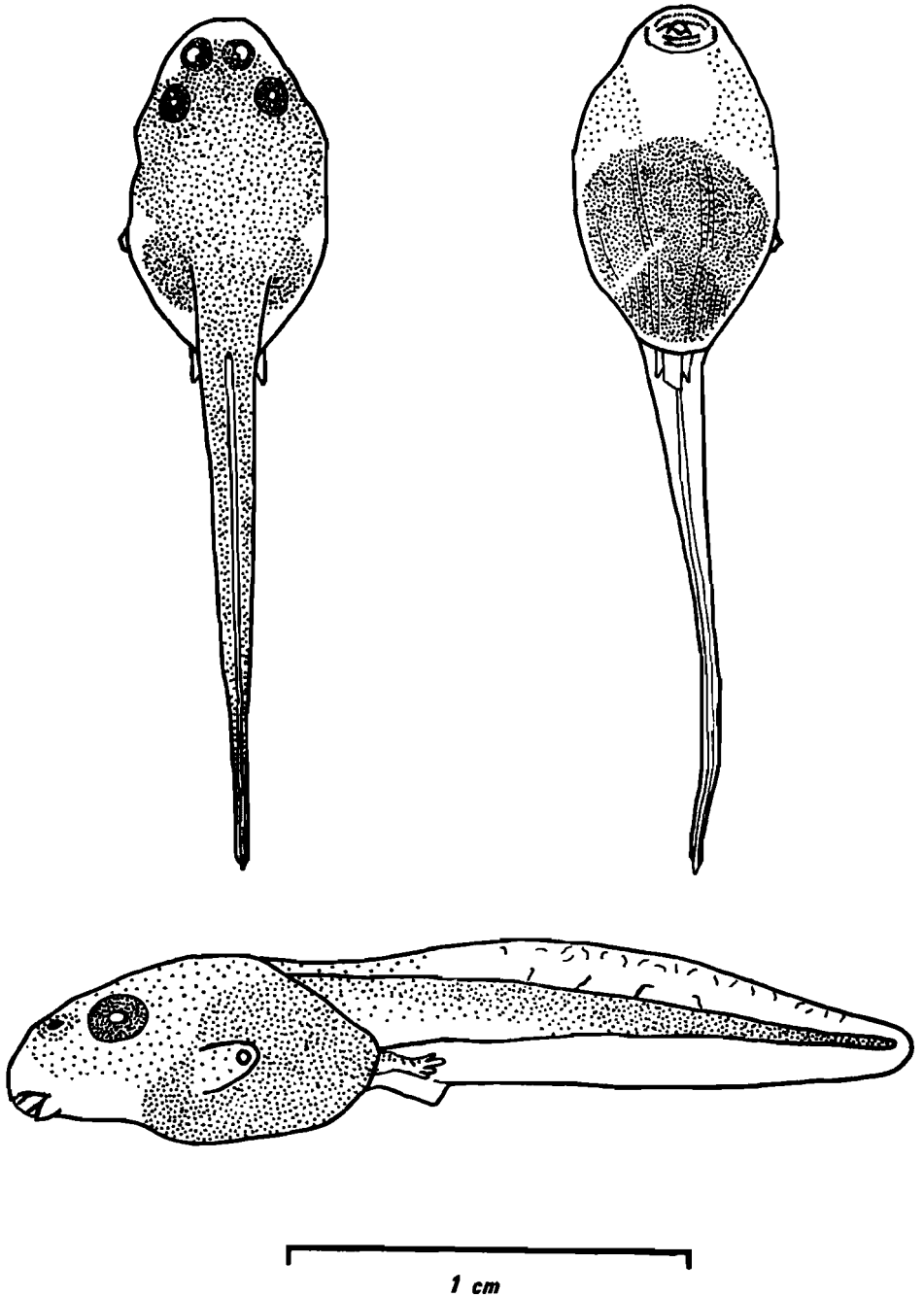


FIGURE 1

Dorsal, ventral and lateral views of a *Bufo pardalis* tadpole to show the extent of pigmentation.

Internarial ratio: $\frac{\text{width of nostril}}{\text{internarial distance}} = 0,28-0,5.$

Longitudinal position of nostrils: $\frac{\text{rostronasal distance}}{\text{orbitonasal distance}} = 1,85-2,24.$

Orbitonasal line not visible. Pineal spot a light region.

Extra-ocular proportion:

$\frac{\text{width of head minus distance between lateral limits of eyes}}{\text{distance between lateral limits of eyes}} = 0,36-0,5.$

Spiracle single, sinistral, visible dorsally and ventrally, situated 0,58–0,68 posteriorly along trunk. Spiracular tube not visible. Opening constricted, subcircular, visible laterally. Vent basi-caudal, opening flattened, medial, marginal, and pointing dextrally.

Vent ratio: $\frac{\text{proctodaeal tube length}}{\text{vent width}} = 2,0-2,74.$

Tail height subequal, to less than trunk height. Tip rounded. Maximum height of dorsal fin occurs 0,46 posteriorly along tail. Ventral fin subuniform in height. Fins do not originate in fleshy crests. Tail euthoural, axis extrapolated anteriorly passes through dorsal half of eye.

$\frac{\text{tail length}}{\text{length of head and trunk}} = 1,51-1,75 (n = 3).$

$\frac{\text{height of caudal muscles at base of tail}}{\text{height of trunk}} = 0,3-0,37.$

Dorsal pigmentation dark brown. Eyes darkly pigmented. Circumnasal area darkly pigmented. Ventral surface darkly pigmented over abdomen, lightly pigmented anteriolaterally. No pigment posterior to oral disc. Laterally the abdomen is darkly pigmented, with a lighter region extending anteriorly over the dorsal surface. Almost no pigment posterior to oral disc. Tail uniformly pigmented, except for the anterior ventral third. Ventral fin unpigmented, dorsal fin pigmented in an irregular fashion (Fig. 1).

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REFERENCES

CHANNING, A. 1972. A description of *Bufo pusillus* tadpoles (Anura: Bufonidae). *Ann. Natal Mus.* 21: 509–511.

- VAN DIJK, D. E. 1966. Systematic and field keys to the families, genera and described species of Southern African Anuran tadpoles. *Ann. Natal Mus.* 18: 231–286.
- VAN DIJK, D. E. 1971. A further contribution to the systematics of Southern African Anuran tadpoles—the genus *Bufo*. *Ann. Natal Mus.* 21: 71–76.