



The tadpole of the Melville Range Treefrog *Litoria andiirrmalin* (Anura: Hylidae)

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The Melville Range Treefrog (*Litoria andiirrmalin* McDonald) is a large saxicolous hylid frog restricted to boulder-field streams of Cape Melville, northeast Australia (McDonald 1997). Due to difficulties accessing its remote habitat, the breeding biology of this highly distinctive species remains poorly known. Information on the morphology and habitat of larval *L. andiirrmalin* is provided below.

Tadpoles of *L. andiirrmalin* were collected by HH and KM from shallow water alongside an unnamed creek at 14°15'24" S, 144°27'42" E, on 27 November 2001. Tadpoles were euthanized in the field with 1% chlorbutol and fixed in either 10% formalin or 70% ethanol. Tissues from two tadpoles and two adult *L. andiirrmalin* from the same collection site were sequenced for an approximately 550 base-pair portion of the *16S rRNA* gene, using the primers 16sar and 16sbr (Cunningham *et al.* 1992) with an annealing temperature of 48°C. Sequence data from tadpoles and adult *L. andiirrmalin* (GenBank accession numbers K985431-K985434) were identical thereby confirming the identification of tadpoles as *L. andiirrmalin*. Tadpole specimens were lodged with the Queensland Museum (accession number QMJ92165).

Tadpoles are described from formalin-preserved material (N = 6) at Gosner (1960) stages 26–27 and colour photographs taken in the field by HH. Morphometric measurements including tail length (TAL), body length (BL), total length (TL), body width (BW), body depth (BD), inter-narial distance (IND), inter-orbital distance (IOD), eye-naris distance (END), oral disc width (ODW), height of tail musculature at tail-body junction (BTM); maximum tail height (MTH) (see Altig and McDiarmid [1999] and Anstis [2002]) were made using a stereoscopic dissecting microscope fitted with an eyepiece micrometer. Morphometric data from preserved tadpoles are presented in Table 1.

TABLE 1. Morphometric data for Gosner stage 26 and 27 *L. andiirrmalin* tadpoles fixed in 10% formalin. Mean values uppermost with ranges in parentheses below. Acronyms are explained in the text.

| Gosner stage | BL | TAL | TL | BTM | MTH |
|--------------|---------------|----------------|----------------|---------------|---------------|
| 26 (N=4) | 6.1 (5.7–6.3) | 10.8 (10–11.7) | 16.9 (15.7–18) | 1.3 (1.2–1.3) | 2.8 (2.5–3.2) |
| 27 (N=2) | 6.7 (6.5–6.8) | 12.3 (11.7–13) | 19 (18.2–19.8) | 1.6 (1.5–1.7) | 3.3 (3–3.5) |

TABLE 1. (Continued)

| Gosner stage | BW | BD | IOD | IND | ODW | END |
|--------------|-------------|---------------|----------------|---------------|---------------|----------------|
| 26 (N=4) | 3.5 (3–3.8) | 2.5 (2.3–2.7) | 1.3 (1.17–1.3) | 0.6 (0.5–0.7) | 1.5 (1.5–1.7) | 0.7 (0.7–0.8) |
| 27 (N=2) | 3.8 (3.7–4) | 2.6 (2.5–2.7) | 1.4 (1.3–1.5) | 0.7 | 1.7 | 0.75 (0.7–0.8) |

Description of preserved specimens. Body and head: Body broadly elliptic in dorsal view, much wider than deep and widest across the gills, narrowing posteriorly; depressed in lateral view (Figure 1A). Snout elongate and rounded in lateral view. Eyes small and near-dorsal in position; set well back from body margin in dorsal view. Nares moderately large and narrowly spaced with slight anterolateral tilt; situated dorsally, half-way between eyes and tip of snout. Rim of nares raised. Spiracle lateroventral in position, opens dorsoposteriorly, two-thirds of the way along body and well below the longitudinal body axis. Inner wall and margin of spiracular opening more or less flush with body surface. Vent tube