

## On the Incubation of *Pseudocalotes microlepis* (Squamata, Agamidae) from Northern Thailand

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**ABSTRACT:** Six eggs of *Pseudocalotes microlepis* were moved from the pit-nest on the ground in evergreen forest on a hillside at 1,400 m.asl. in Doi Pui, Chiang Mai Province, Northern Thailand, to incubate in the laboratory. All eggs were white, and oval in shape. The average size of the eggs was 7.6 x 15.6 mm. After 60 days three hatchlings emerged. The average size at birth measured from snout to vent was 22.3 mm, and the tail was 44.3 mm.

**KEY WORDS:** *Pseudocalotes microlepis*, Northern Thailand.

### INTRODUCTION

*Pseudocalotes microlepis* (Boulenger, 1887)

Synonym: *Calotes microlepis* Boulenger, 1887

Type locality: Pla Pu (1,200 m. asl.), W. of Mt. Muleyit, N. Tenasserim.

The original description made by Smith (1935) is similar to *P. floweri*: "Head rather large, its length twice or nearly twice its breadth; snout one and a half times as long as the orbit; forehead nearly flat; upper head scales unequal, keeled, a series of enlarged ones forming a Y-shaped figure on the forehead; canthus rostralis and supraciliary edge moderately sharp; 8 to 10 upper and as many lower labials; diameter of tympanum not more than half that of the orbit. Body strong compressed; dorsal scales smooth or feebly keeled' all pointing backwards and downwards, larger than the median ventral's, which are strongly keeled.

*Pseudocalotes microlepis* differs from *P. floweri* in the following particulars: 65 to 72 scales round the middle of the body, the upper 2 or 3 dorsal rows pointing straight backwards, the hind-limbs reach to the axilla or the shoulder.

The types (2 females, 1 male) collected by Fea are of a light golden brown colour with black specks and some black lines radiating from the eye;. The gular pouch of the male is chocolate. The specimens are sexually mature, although possibly not fully grown. They measure from snout to vent, 65-67, and the tail is 150 mm. A gravid female obtained on the Langbian Plateau, S. Annam, which is of the same species, is a dark brown colour with lighter variegations, It measures, from snout to vent, 85, and the tail is 185 mm.

Range: Tenasserim (Mt. Muleyit); Annam (Langbian Plateau); ?Assam (Manipur) (Smith, 1935) Lao PDR (North, South in Annamite Mts.) (Stuart, in Duckworth *et al.*, 1993).

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**The occurrence of *Pseudocalotes microlepis* (Boulenger, 1887) in Thailand**

Nabhitabhata *et al.* (2000) reported the occurrence of *Pseudocalotes microlepis* on Doi Inthanon, Doi Suthep and Doi Pui in Chiang Mai Province; Phu Luang in Loei Province and Phu Kieo in Chaiyaphum Province. Additional localities for this lizard have been reported by Chan-ard, who photographed a juvenile of this lizard taken in Doi Lang, Chiang Mai Province at an elevation of 2,000 m.asl. on 8 July 2007 (personal communication).

Confirmation of its occurrence in Doi Inthanon has been reported by Chan-ard, Makchai and Cota on 6 March 2007; and in Phu Luang by Jeenthong on 25 September 2009 (personal communication).

**Note on incubation of eggs**

12 June 2009: 14:00 hrs.: A mature female was found along the nature trail near Doi Pui camping area. The female was measured after depositing eggs from snout to vent, 63 mm, and the tail was 121 mm. She was observed digging in ground at a pine tree buttress and later laid 6 eggs in a shallow pit. The eggs were white, and oval in shape. All the eggs were moved with the surrounding pine leaves, sandy soil and grass roots to incubate in the laboratory. The eggs with their surroundings were put in a Styrofoam box and kept in an air-conditioned room with a stable temperature of 25°C. Water was sprayed over the surface of the assembly every day. After 60 days the first juvenile hatched on the 10 August 2009. The six eggs produced three hatchings. The first hatching measured from snout to vent 22 mm, and the tail 43 mm.; the second; from snout to vent 23 mm, and the tail 45 mm. and the third, from snout to vent 22 mm. and the tail 45 mm. All hatchlings died when they were 15 days old. Before they died, they were fed termites.

**Table 1.** Size of eggs.

number	Width (mm)	Length (mm)
1	7	16
2	8	16
3	7	15



**Figure 1.** *Pseudocalotes microlepis* (female), photo taken after egg laying.



**Figure 2.** A hatchling of *Pseudocalotes microlepis*.

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