19. REDISCOVERY OF *CALOTES ANDAMANENSIS* BOULENGER 1891 AND A REASSESSMENT OF THE TYPE LOCALITY

Calotes andamanensis Boulenger 1891 was based on a single specimen labelled "Andaman Islands" (in the Bay of Bengal, India), without further data on collector or date of collection, that is currently in the collection of Zoologisk Museum, Kobenhavns Universitet, Copenhagen, Denmark (ZMUC R36944). The species, which has been listed as valid in subsequent reviews (Moody, 1980; Smith, 1935; Wermuth, 1967), has never been collected from this locality, nor reported since the original description.

On April 11, 1997 and June 21, two female *Calotes* were found nesting on the forest floor at Kakachi, Kalakad Tiger Reserve (8° 25'-8° 53' N and 77° 10'-77° 35' E), Tirunelveli dist., Tamil Nadu State, southwestern India. Both produced four eggs that were elliptical in shape, of mean dimensions 16 x 9 mm and mean weight 0.8 gm. One lizard has been deposited in the museum of the Bombay Natural History Society, BNHS Regn. No. 1436.

We allocate the two agamids to Calotes andamanensis Boulenger, 1891, for showing the following features: SVL 76.0 and 79.0 mm; TBL 223 and 206 mm; body weight 7 and 10 gm; supralabials 10 and 10; infralabials 10 and 10; two postmentals; midbody scale rows 67 and 68; rostral bounded posteriorly by three scales; nares bounded by six small scales; tympanum small, three scales wide; finger III and IV subequal; toe IV > III; dorsal crest weakly developed on the nuchal and midbody regions; nuchals enlarged; midbody and ventral scales bear a single keel; lamellae under toe IV 32. The body is slender and compressed, the tail long, feebly swollen at the base. In addition, the body is light green dorsally, the supralabial region bluish, and there is an orange stripe between the supralabial and the orbital region. The orange stripe is also present on the thighs and a few black spots on the trailing edges.

We suggest that the type locality was erroneous, as the species has not been collected from the Andaman Islands since the original description, despite numerous surveys. Further, the high endemicity of the herpetofaunas of the Andamans (which is an impoverished subset of the Burmese, rather than the Indian fauna) and particularly of the Western Ghats and finally, all members of the section of *Calotes* to which *C*. andamanensis was assigned in the identification key in Smith (1935) are from Sri Lanka and peninsular India. The sole exception is the then poorly-known southeast Asian C. kingdonwardi Smith 1935, which, at the time of description, was known from the unique holotype, a juvenile male, which was tentatively included in this section. Further examples of this species have since been reported by Yang et al. (1979) and Zhao and Yang (1997), including Calotes kingdonwardi bapoensis Yang and Su in Yang et al. (1979). Zhao and Adler (1993) listed this taxon under C. kingdonwardi, but did not comment on its systematic status or affinities. In the absense of a phylogenetic hypothesis, we refrain from commenting on the affinities of C. kingdonwardi.

Nonetheless, in the context of Smith (1935), the group to which *C. andamanensis* was referred in the key appears to comprise a lineage within *Calotes* of slender, weak crested or crestless species that show body scales that are oriented postero-ventrally, lack axillary folds, and are only weakly sexually dimorphic in both body size and colouration.

We therefore emend the distribution of Calotes andamanensis Boulenger 1891 to mainland southwestern India. No males of the species are known at present, and it is suggested that these arboreal lizards descend to the ground only for nesting, which may explain why further

specimens of the species have not been collected for over a century since its original description.

These findings are part of an ongoing research project to examine the impact of rainforest fragmentation on the herpetofauna and small mammals in the Western Ghats, funded by the United States Fish and Wildlife Service and the Wildlife Institute of India. We thank the Tamil Nadu Forest Department for permission to conduct field work, T.R. Shankar Raman for bringing these lizards to our attention and Aaron

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20. SEXUAL DIMORPHISM IN A MARINE PERCH POMADASYS MACULATUS (BLOCH)

Sexual dimorphism is an important aspect of taxonomy and fisheries. This study deals with sexual dimorphism in *Pomadasys maculatus* (Bloch), a marine perch. Thobias (1974) worked out the sexual dimorphism in the filament barb *Puntius filamentosus* (Val.); Inasu (1993) that of a freshwater puffer fish *Tetraodon travancoricus* Hora and Nair; and Tessy and Inasu (1997) elucidated the sexual dimorphism of edible perch *Priacanthus hamrur* (Cuv. & Val.).

Day (1958) described the genus *Pristipoma* with nine species. Later the genus *Pristipoma* was renamed *Pomadasys* and four species of *Pomadasys* were described by W. Fischer (1974, F.A.O). Sexual dimorphism has not been studied in any of these species.

We collected about one hundred specimens of adult *Pomadasys maculatus* (Bloch) from January to December 1997 from Munampam, Trichur dist., Kerala. Total length, head length, caudal peduncle length, maximum width, interorbital space, diameter of the eye, and internostril distance of 60 specimens were recorded separately. The specimens were preserved in 7% formaline.

Later, the body cavity of each specimen was cut open and the gonads were examined. 28 male specimens and 32 female specimens were sorted into two groups. Morphological differences between the sexes were studied and compared by selecting two fishes of identical size of the two sexes, with the assumption that they



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