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## A new species of the genus *Calotes* (Squamata: Agamidae) from high elevations of the Knuckles Massif of Sri Lanka

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### Abstract

A new species of agamid lizard, of the genus *Calotes*, is described based on morphological evidence. This species is restricted to the Knuckles massif (>900 m elevation) of Sri Lanka. The genus *Calotes* consists of seven species in Sri Lanka, five of which appear to form an endemic radiation. The new species most closely resembles *C. liocephalus* Günther, 1872 which has an isolated population in the central highlands and is only known from Pundaluoya (~1000m), Dickoya (~1200m), Upcot (~1400m), Agrapatanas (1665m) and Peak Wilderness (Sri Pada) (>1400m). The populations from Pundaluoya and Dickoya appear to be locally extinct from the wild and are known only from museum specimens collected over 120 years ago. Males of the new species are different from males of *C. liocephalus* because of the absence of a gular pouch; by having mid gular scales smaller in size than those of its counterpart; scales on the snout which are larger in size than those on the occipital and forehead; pectoral scales which are not enlarged; elongated subcaudal scales; slightly carinate and acuminate abdominal scales; and scales on venter which are somewhat larger in size than those on dorsum at the same level. Finally, we also redescribe *Calotes liocephalus*, and provide a key to the Sri Lankan species of genus *Calotes*.

**Key words:** biogeography, *Calotes liocephalus*, conservation, Reptilia, systematics, taxonomy

### Introduction

The agamid genus *Calotes* Cuvier, 1817, currently consists of 24 species (Hartmann *et al.* 2013; Uetz & Hallermann 2013). Seven are represented in Sri Lanka; five of which appear to form an endemic radiation (Macey *et al.* 2000; de Silva 2006; Somaweera & Somaweera 2009; Wickramasinghe 2012); *C. nigrilabris* Peters, 1860; *C. liocephalus* Günther, 1872; *C. liolepis* Boulenger, 1885; *C. ceylonensis* Müller, 1887; and *C. desilvai* Bahir and Maduwage, 2005. *Calotes calotes* (Linnaeus, 1758) is distributed in India, and *C. versicolor* (Daudin, 1802) is widely spread throughout tropical Asia (Smith 1935; Deraniyagala 1953; Taylor 1953; Moody 1980; Manthey 2008; Das 2010; Venugopal 2010). Both complexes in Sri Lanka are in need of further taxonomic clarification (see Zug *et al.* 2006; Hartmann *et al.* 2013).

*Calotes liocephalus* is considered to be restricted to the Knuckles massif (Erdelen 1984; Manamendra Arachchi & Liyanage 1994) even though there were some older records from the central highlands (Deraniyagala 1953; Smith 1935; Taylor 1953). In 1981 one specimen (ZSM 219/1981) was collected from Upcot (~1400 m elevation) and in 2005 two specimens (WHT6503, WHT6504) were collected from Agrapatanas (1665 m elevation) in the central highlands. In addition, Amarasinghe *et al.* (2009) recorded *C. liocephalus* from the Peak Wilderness. After examining several museum specimens at the BMNH, NMB, and ZSM we found three specimens from Pundaluoya (~1000 m), Dickoya (~1200 m) and Upcot (~1400 m) respectively, in the central highlands of Sri

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