

CNEMASPIS GORDONGEKKOI, A NEW GECKO FROM LOMBOK, INDONESIA, AND THE BIOGEOGRAPHY OF ORIENTAL SPECIES OF CNEMASPIS (SQUAMATA: SAURIA: GEKKONIDAE)

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(with one plate and two text-figures)

ABSTRACT: A new species of *Cnemaspis* is described from the Indonesian island of Lombok, in the Lesser Sundas. The new species, *C. gordongekko*, is compared with its congeners from the south-east Asian archipelago. *Cnemaspis* shows a distinctly disjunct distribution in south and south-east Asia, known species forming a western component (south-western India and Sri Lanka), a central component (from southern Malay peninsula, the Andaman and Nicobar Islands, and the Greater Sundas) and an eastern component (Lombok and Timor).

The absence of *Cnemaspis* species in regions between the western and central components is attributed to marked seasonal climate including cold winters and more xeric conditions. However, the Plio-Pleistocene sea-level rises that fragmented the once continuous distribution, in addition to the progressive desiccation of the Lesser Sundas, may have been responsible for causing the present disjunction for approximately 800 km between Lombok and Timor. The absence of these geckos on the islands is attributed to anthropogenic changes on the landscape, particularly on Bali and Java, which have lost much of their natural vegetation. However, the apparent absence of members of the genus *Cnemaspis* on Sumatra is curious and is suspected to be the result of poor sampling of the island's herpetofauna rather than biogeographic phenomena.

KEY WORDS: *Cnemaspis gordongekko*, Gekkonidae, biogeography, Lombok, Indonesia.

INTRODUCTION

The Indonesian archipelago, composed of 13,677 small and large islands, is one of the richest zones on earth in terms of biodiversity. Approximately 1,000 species of amphibians and reptiles are expected to occur on these islands (Collins, *et al.*, 1991). The last monograph on the reptile fauna, now in need of a revision, is the series by De Rooij (1915; 1917), show the great inadequacy of studies on this fauna.

The genus *Cnemaspis* contains 35 species (Kluge, 1991), the members of which are distinguished from other gekkonids in possessing a suite of characteristics, including rounded pupils, non-dilated, clawed digits, a distinct eyelid-like structure around the eyes and diurnal habits.

Two examples of a gecko collected during a field trip to Lombok Island, Nusa Tenggara (Lesser Sunda) District, Republic of Indonesia, proved to be hitherto undescribed after comparisons with previously-described south-east Asian species of the genus (at the AMNH, BMNH, MNHN and ZRC) and the literature (e.g., De Rooij, 1915; Smith, 1925; Dring, 1979). The type series was hand-collected, photographed alive, fixed in four percent formalin and preserved in 70% ethanol, all measurements and descriptions taken of the preserved material eight to 10 months after preservation. These are here being described as a new species. Institutional abbreviations follow Leviton *et al.* (1985); geographical coordinates for the islands in the Lesser Sundas are from Anon. (1968).