

**FIRST RECORD OF
COSYMBOLITES CRASPEDOTUS (MOCQUARD)
(REPTILIA: SAURIA: GEKKONIDAE)
FROM SINGAPORE ISLAND**

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ABSTRACT. - The gecko, *Cosymbotes craspedotus* (Mocquard, 1890) (Gekkonidae) is recorded in Singapore for the first time, from the Nee Soon Swamp-forest.

The family Gekkonidae is represented by at least 14 species in Singapore (Lim & Chou, 1990). A female *Cosymbotes craspedotus* (Mocquard, 1890) (Pl. 1) of 106 mm total length and 55 mm snout-vent length was obtained from the Nee Soon Swamp-forest on 1 January, 1991. It was found by Dr. Peter Ng on a large concrete pipe along a forest path at about 9 pm shortly after rain, and is deposited in the Zoological Reference Collection, Department of Zoology, National University of Singapore under the catalogue number, ZRC.2.3260. *Cosymbotes craspedotus* is herein documented as a new record for Singapore. It is known from Borneo, the Malay Peninsula (including Penang Island) and Java.

The species is distinguished from other Singapore geckos by the size of the skin frills on the sides of the body and tail, a feature also present on two other local species, *Cosymbotes platyurus* (Schneider, 1792) and *Ptychozoon horsfieldii* (Gray, 1827). That of *Cosymbotes craspedotus* is intermediate in size (in relation to the body) between the other two species. Skin frills are also present on the sides of the throat, and along the lateral edges of all four limbs. The digits are almost fully webbed. There is a heterogeneous mixture of small and large, tubercles on the back. It is greyish-brown with dark mottles and two rows of dark, rectangular spots above. The dorsal part of the tail is marked by an irregular series of dark cross-bars. The ventral parts of the head and body are yellow, heavily speckled with dark brown; and that of the tail, red anteriorly and greyish posteriorly. A dark streak passes through the eye on each side of the head.

The function of the lateral skin frills on geckos of the genera *Cosymbotes* and *Ptychozoon* has been discussed by e.g. Tweedie (1949), Chou (1975), Medway (1975) and Kiew (1987). This structure, evident in *Cosymbotes platyurus*, is most developed in the genus *Ptychozoon*. That of *Cosymbotes craspedotus* is intermediate in condition. While Tweedie (1949) noted the ability of *Ptychozoon kuhli* to glide, Medway (1975) believes that the skin frills of *Cosymbotes craspedotus* are too small to enable it to do the same. Its function appears to be purely for camouflage, probably serving to eliminate shadows while the cryptically coloured animal rests on a tree trunk.

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Hemidactylus craspedotus Mocquard, 1890, was transferred to the genus *Mimetozone* by Boulenger (1912: 45) and De Rooij (1915: 36-37), mainly on the basis of the structure of the dermal expansion on the sides. It was subsequently referred to *Cosymbotes* by Smith (1930: 19) who commented that it "... has all the characters of *Cosymbotus* (= *Cosymbotes*), except that they are in a more highly specialized form".

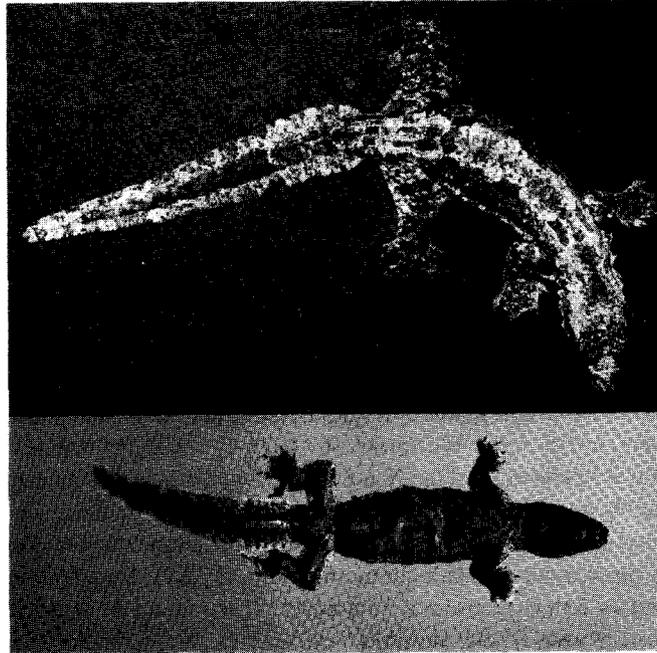


Fig. 1. Dorsal and ventral aspects of *Cosymbotes craspedotus* (ZRC.2.3260).

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