

Biodiversity Record: Courtship colouration of a male green crested lizard

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Subjects: Green crested lizard, *Bronchocela cristatella* (Reptilia: Squamata: Agamidae).

Subjects identified by: Wei Jian Wong.

Location, date and time: Singapore Island, Telok Blangah Hill Park; 14 January 2023; around 1135 hrs.

Habitat: Secondary forest dominated by *Adinandra* trees.

Observer: Wei Jian Wong.

Observation: A male of about 40 cm total length (Fig. 1) was observed head-bobbing and crawling towards a smaller female (about 30 cm) approximately a metre away from him on the same branch (Fig. 2). When first observed, the male was a mixture of green and reddish-brown (Fig. 1). As he approached the female, his colours darkened until he became completely reddish-brown (Figs. 2 & 3). The female moved away, but the male did not attempt to pursue her further. The colouration of the male then lightened, and he became fully green within five minutes (Fig. 4).



Fig 1. Male green crested lizard showing green and reddish-brown colouration. Fig 2. Male (in blue circle) green crested lizard advancing towards the female (in red circle) on the same branch. (Photographs by: Wei Jian Wong).

Remarks: The mating behaviour of the green crested lizard has been documented in Singapore (Yeo, 2013) and in Kedah, Malaysia (Quah et al., 2012). Although the courting male in the present sighting was not observed to mate with the female, his swift change from green to reddish-brown when advancing towards the female with amorous intent is consistent with the observations in the afore-mentioned reports. It lends further support to this apparently seldom recorded behaviour of this lizard that is common in Singapore (see Baker & Lim, 2012). *Bronchocela cristatella* is well-known for turning dark brown when stressed (see Quah et al., 2012). It is interesting to note that a similar chromatic display is adopted by the male when sexually aroused.



Fig 3. Courting male green crested lizard turned completely reddish-brown as he crawled towards the female. Fig 4. Male green crested lizard changed to green within five minutes after giving up his pursuit of the female. (Photographs by: Wei Jian Wong).

Literature cited:

Baker N & Lim KKP (2012) Wild Animals of Singapore. A Photographic Guide to Mammals, Reptiles, Amphibians and Freshwater Fishes. Updated edition. Draco Publishing and Distribution Pte. Ltd. and Nature Society (Singapore). 180 pp.

Quah ES, Choo TC, Muin MA & Sah SAM (2012) Colour changes during courtship and mating of the green crested lizard, *Bronchocela cristatella* (Kuhl, 1820) (Squamata: Agamidae) with a discussion of its behavioural and evolutionary significance. *Russian Journal of Herpetology*, 19: 303–306.

Yeo RKH (2013) Green crested lizards mating. *Singapore Biodiversity Records*, 2013: 30–31.