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## **NATURAL HISTORY NOTES**

BRONCHOCELA JUBATA. (Maned Forest Lizard). MATING BE-HAVIOR. Bronchocela jubata is a large lizard found mainly in Indonesia on the islands of Singkep, Java, Bali, Sulawesi, Karakelang, Salibabu; Nias Island, Singkap Island, Borneo (Kalimantan), as well as in Thailand, Cambodia and Philippines (Hallermann 2005. Russian J. Herpetol. 12:167–182; Ineich and Hallermann 2010. The IUCN Red List of Threatened Species 2013:e. T170378A6772283). Little is known about the species biology, including information on its period of reproduction and courtship behavior (Diong and Lim 1998. Raff. Bull. Zool. 46:345–359; Das 2020. Snakes and Other Reptiles of Borneo. HELM, Bloomsbury Publishing, London, UK. 77 pp.). Herein, we describe notes on the mating behavior of B. jubata in a tropical rainforest of Ubud in the central foothills of the Gianyar Region, Bali, Indonesia (8.4944°S, 115.2541°E; WGS 84; 232 m elev.).

On 26 September 2018 at 1045 h, we observed a mating pair of B. jubata in dense vegetation at a height of ca. 6 m above the ground (Fig. 1). The male was clearly identifiable by the much longer, sickle-shaped scales in his nuchal crest, which is slightly smaller than the females. During our observation the male held the female with its front arms near her pelvis while using his tail to maintain balance in the vegetation (Fig. 2). While in this position, the male repeatedly bit the female around her neck, while extending its gular flap (e.g., dewlap) and elevating its nuchal crest. The female did not move during this mating interaction and after 8 min the pair separated. The female climbed down in the vegetation where the mating took place and disappeared out of view. The male remained alone in place and did not move for about 2 min, then he moved in the same general direction of the female and disappeared out of view. Twenty-five types of courtship and mating behaviors are known for agamids (Pandav et al. 2007. Curr. Sci. 93:1164-1167). We saw eight of these in this pair of B. jubata: body wrap, dewlap extension, nuchal crest, stationary, straddle, neck bite hold, copulation, and grip release. Documented observations of courtship and reproduction are still sparse in this species and gathering more data would help determine more aspects of their reproductive biology.

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Fig. 1. Mating *Bronchocela jubata* observed in dense vegetation, Bali, Indonesia. The male is holding the female with his front limbs close to the pelvis, clearly biting the female's neck.