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DIPLOGLOSSUS BILOBATUS (O'Shaughnessy's Galliwasp). **REPRODUCTION.** *Diploglossus bilobatus* is a diurnal, secretive anguid known from lowlands and adjacent premontane slopes of Costa Rica and Panama (Savage 2002. The Amphibians and Reptiles of Costa Rica. A Herpetofauna Between Two Continents, Between Two Seas. University of Chicago Press, Chicago, Illinois. 934 pp.). Taylor (1956. Univ. Kansas Sci. Bull. 38:3–222) reported clutches of six and 15 eggs. The purpose of this note is to provide additional information on reproduction of *D. bilobatus*.

Five males (mean SVL = 82.4 mm ± 3.1 SD, range = 78–86 mm, LACM 130923, 148115, 116, 121, 122); three females (mean SVL = 68.0 mm ± 7.0 SD, range = 61–75 mm, LACM 148114, 119, 120) and five presumed neonates (mean SVL = 27.6 mm ± 2.1 SD, range = 25–30 mm, LACM 148117, 123, 124, 126, 127) collected 1962 to 1994 in Costa Rica (10°N, 84°W, datum: WGS84) were examined from the herpetology collection of the Natural History Museum of Los Angeles County (LACM), Los Angeles, California.

An incision was made on the lower portion of the abdomen and one gonad was removed. Histological slides were prepared using conventional methods (Presnell and Schriebman 1997. Humason's Animal Tissue Techniques. Johns Hopkins University Press, Baltimore, Maryland. 572 pp.). One clutch of oviductal eggs was counted. Slides are deposited in LACM.

All five males were undergoing spermiogenesis = sperm formation: January (N = 2), March (N = 1), July (N = 1), August (N = 1). One female from June (LACM 148114, SVL = 75 mm) contained five oviductal eggs. One female each from February and July had quiescent ovaries (no yolk deposition). Presumed neonates were collected in spring: March (N = 1), April (N = 1), May (N = 1), June (N = 2).

The presence of males undergoing spermiogenesis in widely separated months suggests *D. bilobatus* has an extended period of spermiogenesis. Continuous spermiogenesis has been reported for other lizards from Costa Rica (Smith 1968. Biol. Bull. 134:325–331; Goldberg 2008a. Bull. Maryland Herpetol. Soc. 44:42–45; 2008b. Bull. Chicago Herpetol. Soc. 43:130–131). Five eggs is a new minimum clutch size for *D. bilobatus*.

I thank Christine Thacker (LACM) for permission to examine *D. bilobatus* which are part of the CRE (Costa Rica Expeditions) collection donated to LACM by Jay M. Savage in 1998.

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GONATODES HUMERALIS (NCN). **DEFENSIVE BEHAVIOR.** Curling the tail over the back is a defensive strategy some lizards use to reduce predation (Pianka and Vitt 2003. Lizards: Windows to the Evolution of Diversity. Univ. California Press, Berkeley, California. 333 pp.). By performing this behavior, a lizard may mimic a scorpion and/or expose its tail to predators (diverting attention from more vulnerable areas) (Pianka and Vitt, *op. cit.*). Among Brazilian geckos, this behavior is reported only for *Gymnodactylus carvalhoi* (= *G. geckoides amarali*) (Colli et al. 2003. J. Herpetol. 37:694–706), and *Coleodactylus brachystoma* (Brandão and Motta. 2005. Phyllomedusa 4:139–145), both from the Cerrado biome. Here, we report an observation of similar behavior in the gecko *Gonatodes humeralis*.

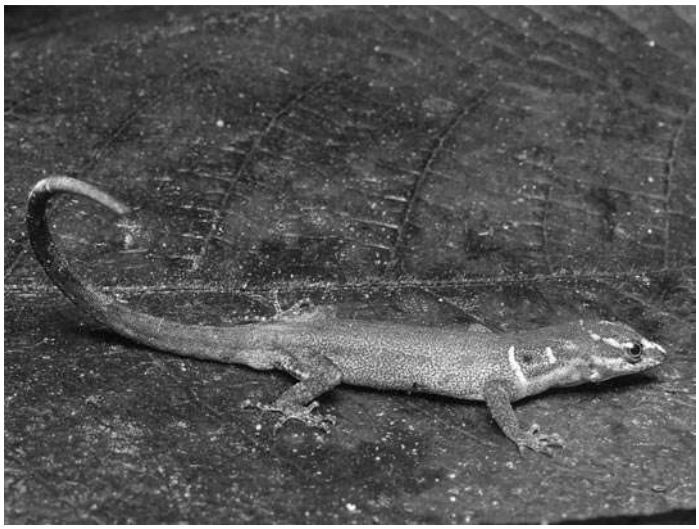

FIG. 1. *Gonatodes humeralis* exhibiting its defensive tail display. Photo by D. J. Santana.

At ca 2000 h On 6 March 2008 during fieldwork in Aripuanã, Estado do Mato Grosso, Brazil, VASP and DJS collected an adult male *G. humeralis* (35.85 mm SVL) sitting on the leaf of a small tree ca. 1.0 m above the ground at the edge of an altered submontane tropical rainforest near human settlement (10.1650°S; 59.4392°W; datum: WGS84; elev. 176 m). The following day, while being photographed, the gecko exhibited a display in which its tail was lifted and held still (Fig. 1), a defensive behavior reported for the first time in this species. This behavior may have one or both of the following causes: 1) Scorpion mimicry (Pianka and Vitt, *op. cit.*), considering that scorpions are common in the study area; and/or 2) Tail exposure as geckos possess particularly fragile tails that detach easily (Pianka and Vitt, *op. cit.*; Brandão and Motta, *op. cit.*).

The collected *G. humeralis* (MZUFV 647) was deposited in the herpetological collection of Museu de Zoologia "João Moojen," Universidade Federal de Viçosa, in Viçosa, Minas Gerais. We thank Energética Águas da Pedra S.A. for financial support; IBAMA for collection permits (029/2006-COFAN and 50/2007-SUPES/MT, process number 02001.003069/2004-42; Permanent License for Collecting Zoological Material (10504-1) to Renato N. Feio, IBAMA registration number 491048); J. Dergam and M. Hayes for suggestions on the manuscript.

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GONATODES HUMERALIS (NCN). **HABITAT OCCURRENCE; ESCAPE BEHAVIOR.** *Gonatodes humeralis*, a broadly