

**GOMESOPHIS BRASILIENSIS** (NCN). **REPRODUCTION** and **DIET**. *Gomesophis brasiliensis* is an aquatic, Brazilian endemic snake and is a member of tribe Tachymenini (Amaral 1932. *Memórias do Instituto Butantan* 52:91–92; Bailey 1967. *Herpetologica* 23:151–161). Aside from scarce and conflicting statements (see Amaral 1932, *op. cit.*; Amaral 1978. *Serpentes do Brasil. Melhoramentos/Univ. São Paulo, Brazil*, 246 pp.) no information is available on the biology of this snake. We present herein data on sexual dimorphism, mode of reproduction, reproductive cycle and food habits based upon the dissection of 71 specimens from southeastern and southern Brazil housed in the collection of the Instituto Butantan (IB).

Sexual maturity is attained at similar snout–vent lengths (SVL) in males and females: adult males averaged 355.6 mm (SD = 60.8, range 267–455 mm, N = 27) and females averaged 337.0 mm (SD = 53.7, range 261–475 mm, N = 27). There were no significant differences in SVL and relative head size between sexes (SVL:  $U = 289$ ,  $p = 0.270$ , N = 54; head size: t-test of residuals:  $t = 0.45$ ,  $p = 0.656$ , N = 48).

*Gomesophis brasiliensis* is a live-bearer as already recorded for other members of Tachymenini (Ferrarezzi 1994. *In Nascimento et al. [eds.], Herpetologia do Brasil* 1, pp. 81–91. Fundação Biodiversitas and Ezequiel Dias. Belo Horizonte). Females with vitellogenic follicles appeared from August to February (Fig. 1). Three females with oviductal embryos were collected in December (N = 1) and March (N = 2) (Fig. 1). Eight presumed hatchlings (112–123 mm SVL) were collected in February and March. Thus,

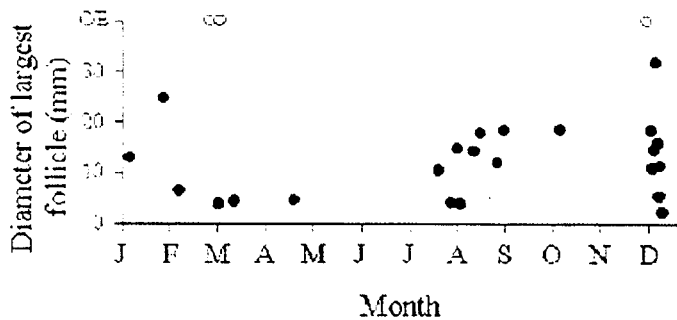


FIG. 1. Seasonal variation in the diameter of the largest ovarian follicle in adult *Gomesophis brasiliensis* females. Open circles represent oviductal embryos.

the reproductive cycle of *G. brasiliensis* is seasonal, with vitellogenesis and gestation occurring throughout the rainy season and recruitment of juveniles at the end of rainy season and onset of the dry season.

*reviceps*, and now *G. brasiliensis* are known to feed largely on earthworms (Greene and Cadle, *op. cit.*; Marques 1996. *Herpetol. Rev.* 27:147; Martins and Oliveira 1999. *Herpetol. Nat. Hist.* 6:78–150). Most species of Tachymenini feed on frogs and lizards, but *Tomodon ocellatus*, *T. dorsatus*, and *G. brasiliensis* regularly prey on invertebrates (Gallardo 1972. *Neotropica* 18:57–63; Bizerra 1998. *História Natural de Tomodon dorsatus*. M.S. dissertation. Univ. São Paulo, São Paulo, SP, 102 pp.; present study). A study on phylogenetic relationships within the tribe Tachymenini (Bizerra, *op. cit.*; Franco 1999. *Relações filogenéticas entre os gêneros da tribo Tachymenini Bailey, (1967) (Serpentes; Colubridae)*. Ph.D. thesis. Univ. São Paulo, São Paulo, SP., 252 pp.) indicates that diet based on invertebrates is a derived character in this group.

We thank I. Sazima for incentives and suggestions on this manuscript and A. M. Mazzoni and C. C. Nogueira for suggestions. We thank M. F. Furtado and V. Germano (IB) for allowing dissection of snakes under their care. Financial support was provided by the FAPESP (00/12339-2).

Submitted by **JULIANA L. OLIVEIRA**, Departamento de Ecologia, Instituto de Biociências, Universidade de São Paulo. R. do Matão, Trav. 14, 321, CEP 05508-900, São Paulo, SP, Brazil (e-mail: jlima@ib.usp.br), **MICHELA BORGES**, Universidade Estadual de Campinas, and **OTAVIO A. V. MARQUES**, Laboratório de Herpetologia, Instituto Butantan. Av. Vital Brazil, 1500, CEP 05503-900, São Paulo, SP, Brazil (e-mail: otaviomarques@originet.com.br).