

Reproduction in the Desert Lacerta, *Mesalina guttulata*, from Israel

(Squamata: Lacertidae)

Stephen R. Goldberg

Abstract. *Mesalina guttulata* follows a seasonal reproductive cycle in Israel which commences in autumn and concludes in spring. Mean clutch size ($n = 16$) was 4.2 ± 1.3 SD, range 1-6. One is a new minimum clutch size for this species. Males and females of *M. guttulata* reach maturity at 36 mm and 43 mm snout vent length, respectively. Mature females were larger than males. There was no suggestion that females produce multiple clutches. The correlation between female body size and clutch size was not significant.

Key words. Spermiogenesis, oviductal eggs, maturity size, clutches.

Introduction

The Desert Lacerta, *Mesalina guttulata* (Lichtenstein, 1823) is known from Northern Africa and Senegal, Niger, Sudan, Sinai, Israel, Aden and Western Saudi Arabia (SCHLEICH et al. 1995). Reproduction occurs from February to April, females reach maturity at 40 mm SVL, several clutches per year are produced with 2-7 eggs per clutch, mean 4.4 eggs and clutch size increases with female SVL (SCHLEICH et al. 1995). FRANKENBERG & WERNER (1992) reported oviposition of *M. guttulata* in Israel from February to April with a mean clutch size of 4.4 eggs, range 2-7. No specific locality was given for the observations by SZCZERBAK (2003) who reported *M. guttulata* mating occurs at late February or early March and perhaps in the autumn also, females with eggs are found from March to June, two clutches of 2-10 eggs are laid and neonates appear starting in June. The purpose of this paper is to add information on the reproductive biology of *M. guttulata* in Israel from a histological examination of gonadal material.

Materials and methods

A sample of 71 *M. guttulata* consisting of 37 adult males (mean snout-vent length, SVL = 42.8 ± 3.8 mm, range 36-51 mm), 23 adult females (SVL = 45.9 ± 3.1 mm, range 40-53 mm), 11 subadults consisting of 9 females (SVL = 36.0 ± 3.4 mm, range 33-42 mm) and 2 males (SVL = 31.5 ± 2.1 mm, range 30-33 mm) were examined from the Natural History Collections, Tel-Aviv University (TAUM), Tel-Aviv, Israel. Lizards were collected between $32^{\circ}40'N / 35^{\circ}50'E$ and $29^{\circ}30'N / 34^{\circ}41'E$ during 1949-2006. Collection numbers were as follows: Jerusalem District: