

The Activity and Thermal Biology of the Fossorial Reptile, *Diplometopon zarudnyi* (Amphisbaenia: Trogonophiidae) in Central Saudi Arabia

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Abstract. - The nocturnal activity of the fossorial amphisbaenid *Diplometopon zarudnyi* was studied in the field and its thermal selection and tolerance were determined in the laboratory. During the study period (summer) the animals commenced activity at 20.00 hrs (ground temperature 30-32°C) and finish their foraging between 3.00 to 4.00 hrs (ground temperature 28-26°C) before the break of dawn. The mean activity temperature determined in the field was 31.5°C, which was usually 0.5 to 1°C higher than the ground temperature. The mean selected body temperatures in a gradient during day and night were 26.4°C (range 15-38°C) and 26.3°C (range 14-38°C) respectively. The Critical Thermal Maximum was 47.6°C and the Critical Thermal Minimum was 7°C. *D. zarudnyi* tolerates a wide range of temperatures while maintaining its mean body temperature within a narrow range. The role of Selected Body Temperature is discussed in relation to metabolism.

Key words. - Amphisbaenia, Trogonophiidae, fossorial reptile, *Diplometopon zarudnyi*, Saudi Arabia, Central Arabia, activity, thermal preference, thermal tolerance.