

ABSTRACT

DETERMINATION OF AGE AND SOME GROWTH PARAMETERS IN DIFFERENT POPULATIONS OF *Ommatotriton ophryticus* (BERTHOLD, 1846) (CAUDATA: SALAMANDRIDAE) (NORTHERN BANDED NEWT)

Çiçek GÜMÜŞ

M.Sc. Thesis, Department of Biology
Supervisor: Associate Prof. Dr. Nazan ÜZÜM
2013, 103 Pages

Body size of newts from three populations of *Ommatotriton ophryticus* in Turkey was measured and the age of the newts was estimated using skelotochronological method. Age was determined individually by counting the number of resting lines (LAG) in cross-sections taken from phalanges. Body size (SVL) is similar among populations ranged between 58.41-85.78 mm in males and 50.33-71.56 mm in females. Males are significantly bigger than females in all populations. Age at maturity was determined as 4-6 years in males and 5-6 years in females. The average age of males and females in all populations was similar and did not significantly differ. Maximum age or longevity was ranged from 9 to 12 years in males and 9 to 11 years in females. Positive correlation between body size (SVL) and age was determined for both males and females in all populations.

In this study, significant difference was determined among populations of *Ommatotriton ophryticus* in terms of age and body size (6, 7 and 8 age classes). However, it was difficult to say that these differences resulted from geographic positions or altitudes of localities. For this reason, the age and body size is thought to be effected by other ecological factors such as predation, aggressive competitors, food etc.

Key words: *Ommatotriton ophryticus*, body size, age, skeletochronology.