J. Int. Environmental Application & Science, Vol. 4 (3): 267-271 (2009)

Estimation of Growth Parameters of Bleak (*Alburnus alburnus alborella*) in Shkodra and Ulza Lake through Length at Age Relationship[#]

Valbona Kolaneci[*], Bledar Kuka

Department of Animal Production, Faculty of Agriculture and Environment, Agricultural University of Tirana, Tirana, Albania.

Received May 06, 2009; Accepted July 27, 2009

Abstract: Growth varies considerably amongst the individuals in a population and between individuals in different populations of the same species, especially when these populations are found in environments with different characteristics. This study is an attempt to estimate the age of bleak (*Alburnus alburnus alborella*, de Filippi, 1844) using length frequency analysis and the growth parameters through length at age relationship. A Ford Walford plot is used to estimate the von Bertalanffy growth parameters. Growth curves of the bleak populations in both lakes are built using the parameters estimated by non-linear least squares as $K=0.52\ yr^{-1}$; $L_\infty=20\ cm$ and $K=0.45\ yr^{-1}$; $L_\infty=19\ cm$ respectively for Shkodra and Ulza Lake. The growth curves of the bleak populations of two lakes were different with K and L_∞ being higher for Shkodra Lake.

***Key words**: Alburnus alburnus alborella, length frequency analysis, length at age analysis.*

[*] *Corresponding : E-mail: valbona_kolaneci@yahoo.com; Tel.:+355 4 200873 ; Fax.: 355 4 200874*

[#] *This study has been presented at 24-25 April 2009-Alblakes'09, Pogradec- Albania.*