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The Growth and Reproduction Characteristics of Chub *Leuciscus cephalus orientalis*
(Nordmann, 1840) Living in the River Aras

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Abstract: In this study, the populations structure, growth and reproduction characteristics of 1091 *Leuciscus cephalus orientalis* from the Yagan Region of River Aras between December 1995 and November 1997 were investigated monthly. The age composition of this species ranged between I and VIII. Individuals were composed of 48.85% males and 51.15% females. Female individuals attained greater size and age than males. The largest Female captured was 27.5 cm FL and age VIII, while the largest male was 24.1 cm FL and age VIII. Von Bertalanffy growth equations (in length and weight) and length-weight relationships were found as $L_t = 32.47(1 - e^{-0.1217(t+1.63)})$, $W_t = 502.10(1 - e^{-0.1217(t+1.63)})^3$, $W = 0.0099L^3$ in males and $L_t = 36.66(1 - e^{-0.1114(t+1.39)})$, $W_t = 745.31(1 - e^{-0.1114(t+1.39)})^3$, $W = 0.0093L^3$ in females. Mean condition coefficients of males and females were calculated as 1.326 and 1.333 respectively. Males matured at ages II-III and females at ages III-IV. Spawning in the both years of study occurred between May and July. Fecundity ranged between 3391-17187 eggs/female and was correlated significantly with fish length, weight, age and gonad weight. The minimum fishing size for this species in the River Aras is suggested to be 20.0 cm in terms of total length and it is recommended that fishing be prohibited between May and July.

Key Words: Population Structure, Growth, Spawning Age and Season, *Leuciscus cephalus orientalis*, River Aras

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