

RESEARCH PROJECT ON ECONOMICALLY IMPORTANT FISH SPECIES

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In this project, population parameters and reproduction periods of fish species, that are important economic point of view, Whiting (*Merlangius merlangus euxinus*), Red mullet (*Mullus barbatus ponticus*), Turbot (*Psetta maxcima maeotica*), Plaice (*Platichthys flesus luscus*), and Picarel (*Spicara smaris*) were been assessed. Also it is aimed to illuminate to the catching arrangements.

This study was done in Trabzon coasts as represent to the Eastern Black Sea, between 1991-1996. Depth Trawl was used for studies, materials were collected according to the species and then taken samples and led to the laboratory. During the laboratory measurement; total length, body weight, gonad weight. The otoliths were collected by the aim of age determination and ages were determined by using binocular microscope.

According to the collected data, whiting reproduce during the year but two times, in spring and autumn it shows pik. Reproduction starts at the end of the first age. Reproduction temperature is between 7-15 ° C. Length-weight relationship is $W= 0.0052 L^{3.14}$. Von Bertalanffy growing values; found as $W_{\infty}=736.5$ gr., $L_{\infty}=43.3$, $k=0.11$, $t_0=-1.91$ for female and $W_{\infty}=332.8$ gr., $L_{\infty}=34.2$ cm., $k=0.136$, $t_0=-2.02$ male.

Red mullet reproduce during May-August season and the maximum reproduction occurs between June15-July 15 period. Reproduction begins at the first age. The temperature of reproduction is between 18-25 ° C. Length-weight relation is $W=0.0063 L^{3.18}$. Von Bertalanffy growing Parameters; $W_{\infty}=188.8$ gr., $L_{\infty} = 25.6$, $k=0.23$, $t_0=-1.38$ for female and $W_{\infty}=115.3$ gr., $L_{\infty} = 22.2$ cm., $k=0.21$, $t_0 = -2.08$ male.

In the case of turbot, it reproduces during April-June period and the maximum reproduction is observed during May.

Reproduction starts at third age. Temperature of reproduction is between 10-20 ° C Length-weight relation is $W=0.011 L^{3.12}$. Von Bertalanffy growing parameters; $W_{\infty}=21217.0$ gr., $L_{\infty} = 103.4$ cm., $k=0.115$, $t_0=-0.93$ for female and $W_{\infty}=8288.1$ gr., $L_{\infty} = 77.3$ cm., $k=0.143$, $t_0 = -1.22$ male.

Plaice reproduce during December-February season and the maximum reproduction occurs during January. Reproduction begins at the second age. The temperature of reproduction is between 7-10°C. Length-weight relation is $W=0.007 L^{3.13}$. Von Bertalanffy growing parameters; $W_{\infty}=1026.9$ gr., $L_{\infty} = 44.98$, $k=0.197$, $t_0=-1.43$ for female and $W_{\infty}=377.5$ gr., $L_{\infty} = 33.0$ cm., $k=0.22$, $t_0 = -2.24$ male.

Picarel reproduce during June-August season and the maximum reproduction occur during July. Reproduction begins at the second age. The temperature of reproduction is between 18-25 ° C. Length- weight relation is $W=0.0069 L^{3.14}$. Von Bertalanffy growing parameters; $W_{\infty}=132.0$ gr., $L_{\infty} = 23.2$, $k=0.21$, $t_0=-2.38$ for female and $W_{\infty}=157.1$ gr., $L_{\infty} = 24.3$ cm., $k=0.23$, $t_0 = -1.86$ male.

