

# Determination of age and growth by scale of a population of common trout (*Salmo trutta macrostigma*, Dumeril, 1858) at the level of Sidi Rachid River (Ifrane. Morocco)

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**ABSTRACT:**

The determination of age and growth from the scales of trout river (*Salmo trutta macrostigma*, Dumeril, 1858) at Sidi Rachid River; was employed out of 438 specimens used the size varies between 6.3 cm and 37.5 cm, the relation linking the growth in length of the fish and the growth of the scale. Varied according to the equation  $\text{Log } Lt = 0.8674 \times \text{Log } Rt + 0.5349$ , with a coefficient of correlation(  $r$  ) = 0.86592138. The period of the end of growth to this population of trout is between December and January, this period is characterized in the middle of the atlas by important reductions in temperature on one hand, the decrease of the network trophique on the other hand which gets coincided with the period of reproduction of the trout. The resumption of the growth is made in a important way from March. The age of the trout's determined by scales varies between 0 + to 5 +. The retro measures are lower than those observed and the equation of theoretical growth of Van Bertalanffy is of the following type:  $Lt = 34, 96 (1 - \exp(-0,309 (t - 0, 27)))$ .

**Keywords:**

River trout, Age, Growth, Scales, Sidi Rachid river, Morocco.