EVOLUTION OF BIOCHEMICAL COMPOSITION OF *Galaxias maculatus* ALONG EMBRIONIC AND LARVAL DEVELOPMENT FROM WILD LACUSTRINE AND STUARINE POPULATIONS

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Galaxias maculatus is a salmoniform that inhabits cold waters of the south hemisphere. In Chile is found in lacustrine and stuarine water where it has been intensely exploited in the last years, due to the economic importance of its juvenile, considered as a substitute of the eel larvae, by its flavor and its crystalline and anguiliform aspect. To obtain some basic information regarding the nutritional requirements of this species in the different stages of its development, wild samples of egg and different size larvae, were taken from lacustrine and stuarine populations. Samples were analyzed for proximal and fatty acid composition. The results indicated that there are not significant differences in the protein levels along development in both populations. However, there was a decrease of about 25% in the lipid content of larvae at any size with respect to the just fertilized eggs. This suggests the importance of lipid utilization during embryonic development. The fatty acids content decreased significantly after hatching, mainly due to a reduction in the series n-3 and n-6. However, from hutching and along larval and juvenile development lipid contents increased even surpasing the levels found in just fertilized eggs, suggesting that although the embryo catabolized quickly the lipid reserves, the exogenous nourishment starts immediately after hatching alowing the rapid recover of the egg lipid contents. If we compare the evolution of fatty acid contents from eggs to juveniles of both populations, an increase of n-3 and n-6 series in the lacustrine populations is observed, whereas an increase of n-3 and a decrease of n-6 in the stuarine populations was found. Differences between the fatty acids profiles of stuarine and lacustrine populations were observed.