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Study of Frequency and Distribution of Skin Ionocytes in Caspian Sea Zander Larvae during Acclimation to Different Salinity

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Abstract : Changes in abundance and size of skin ionocytes were investigated in two larval stage of Caspian sea zander, Sander lucioperca, before and after yolk sac absorption, at 96h after transfer from fresh water (FW; <0.5%) to 7% (estuary) and 12% (Caspian sea water=CW) salinity. Survival rate in the stage of after yolk sac absorption were more than larval preabsorbed yolk sac in condition of salinity (p<0.05). Ionocyte abundance increased significantly in 7 and 12% salinity (p<0.05), but not about ionocyte size. The results of this study suggest that development of skin Ionocyte osmoregulatory function and osmoregulation capability of Caspian Sea zander larvae increased with growth of the larvae.

Keywords: Caspian Sea, larvae, Sander lucioperca, salinity, skin ionocyte

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