

REARING OF PIKEPERCH FRY AND PIKEPERCH STOCK FISH (*SANDER LUCIOPERCA*) UNDER CONTROLLED CONDITIONS

*Odchov plůdku a násadového materiálu candáta obecného (Sander lucioperca)
v kontrolovaných podmínkách*

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Abstract: Evaluation of oxygen demand and ammonium production of two weight categories of pikeperch (*Sander lucioperca*) at different temperature levels was realized during the year 2008 in experimental facilities of the Department of Fisheries and Hydrobiology at Mendel University of Agriculture and Forestry in Brno. Experimental weight groups had initial body weights of 19.75 g and 39.2 g, respectively, were kept at two different temperatures at 13.4°C and 20.2°C, respectively, and fish were unfed at least for 24 hour prior start of experiment. Experimental fish were reared in a closed recirculation system. Measurements of ammonium and oxygen concentration were done in cylindrical tanks equipped with movable lid and volume of 220 L (in triplicate). The lid prevents contamination of experimental water by atmospheric oxygen. Fish stocking was 0.3 g per tank. Oxygen concentration was measured in 15 min intervals and ammonium assessment was done every 30 min. Obtained data were converted to $\text{mg.kg}^{-1}.\text{h}^{-1}$. Oxygen consumption varied from 136.13 to 339.53 $\text{mg.kg}^{-1}.\text{h}^{-1}$ and ammonium excretion varied from 1.62 to 11.36 $\text{mg.kg}^{-1}.\text{h}^{-1}$. Higher oxygen consumption (325 compared to 223 $\text{mg.kg}^{-1}.\text{h}^{-1}$) and higher ammonium excretion (8.2 compared to 5.5 $\text{mg.kg}^{-1}.\text{h}^{-1}$) were detected in fish with lower body weight at water temperature of 20.0°C.

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