

Adaptation to pelleted feed in pikeperch fingerlings: learning from the trainer fish over gradual adaptation from natural food



Pikeperch (*Sander lucioperca*) is commercially important as well as a valued culinary fish with potential for intensive culture. One of the basic problems in pikeperch culture in recirculating aquaculture systems is adapting early life stages to pelleted feed (PF). Our work compares four different ways of adapting 6-week-old pikeperch fingerlings (standard length, $SL = 29.30 \pm 2.14$ mm; weight, $W = 0.38 \pm 0.08$ g) to feeding on a commercial diet. The methods are designated, A – use of trainer fish (*Vimba vimba*; $SL = 36.88 \pm 3.28$ mm; $W = 0.77 \pm 0.26$ g) and direct application of PF; B – use of trainer fish and gradual addition of PF with natural food (natural feed (NF), chironomid larvae); C – direct application of PF only; D – gradual addition of PF with NF. The growth trial experiment (including adaptation to PF) lasted 14 days by which time all experimental groups were accepting PF. Pikeperch fingerlings in group A grew significantly faster and PF was more readily accepted compared to other groups ($SL = 46.11 \pm 4.09$ mm; $W = 1.44 \pm 0.38$ g; specific growth rate = $9.48 \pm 0.83\%$ day⁻¹). Other characteristics observed (total weight increment, feed conversion ratio) also support

the use of trainer fish and direct application of PF for pikeperch in their adaptation to intensive culture. It is also an illustration of applicable use of learning potential in fish which can be usable for other fish species.

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