USE OF DVAqua®, A FULLY FERMENTED YEAST CULTURE, DURING LONG TERM HATCHERY REARING OF SHASTA STRAIN RAINBOW TROUT

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ABSTRACT

The addition of a proprietary, fully-fermented yeast Saccharomyces cerevisiae culture supplement (DVAqua®, Diamond V Mills, Cedar Rapids, IA, USA) was evaluated during long-term feeding of Shasta strain rainbow trout Oncorhynchus mykiss. Beginning at initial feeding and continuing for 490 days of hatchery rearing, the trout received either a commercially-manufactured feed or the same feed supplemented with 0.125% DVAqua. This study was conducted at a production level as part of normal (real-world) hatchery operations. Thus, the fish were periodically inventoried and moved into different rearing units, resulting in eight separate rearing periods. No difference in fish growth or mortality occurred as a result of DVAqua supplementation during the first three rearing periods. However, increases in growth and feed conversion were apparent during the fourth and fifth periods in those rearing units receiving DVAqua supplementation during juvenile rearing. After these 3 months however, only small differences in feed conversion were observed through the remainder of the experiment (periods six, seven and eight). Overall feed conversion was 0.81 in the fish receiving DVAqua supplementation compared to 0.84 in the control group. There was no difference at the end of the experiment in the length or weight of fish receiving either of the diets.