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## EFFECT OF FEED ADDITIVES, *Allium sativum* AND *Argana spinosa* OIL ON THE GROWTH OF RAINBOW TROUT FINGERLINGS (*Oncorhynchus mykiss*) IN MOROCCO

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### Abstract

The present study aimed to evaluate the effect of garlic (*Allium sativum*) and Argan oil (*Argania spinosa*) on the growth of Rainbow trout (*Oncorhynchus mykiss*) fingerlings at the Ras El Ma (Azrou) salmon farming station during the 2023 production period. Fingerlings were distributed into seven tanks, each containing 1000 fingerlings. The control tank (B0) received only the feed without additives. Tanks B1, B2, B3, and B4 received garlic as a feed additive at rates of 1%, 1.5%, 2%, and 2.5%, respectively. Fingerlings in tanks B5 and B6, in addition to 2.5% garlic, received 5 mL and 10 mL Argan oil, respectively. During the two-month experiment, fingerling weight growth and the water's physico-chemical parameters (pH, temperature, dissolved oxygen, and electrical conductivity) were monitored. Fingerlings receiving garlic showed positive weight growth (mean weights: 4.95 g, 5.43 g, 5.13 g, and 5.06 g) compared to control fingerlings (mean weight: 3.88 g). The highest average weight was achieved with 1.5% garlic (5.43 g). Adding 5 mL and 10 mL of Argan oil resulted in a slight weight increase for B5 fingerlings (5.37 g) compared to the B4 control (5.06 g), but a minor decrease for B6 fingerlings (4.73 g). The results indicate that using these feed additives positively affected growth and yield, regardless of the quantities used.

**Key words:** argan oil, feed additive fry, garlic, *Oncorhynchus mykiss*, weight growth

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