

Nitrogen and phosphorus utilisation in rainbow trout (



Dietary nitrogen and phosphorus utilisation were evaluated in rainbow trout, *Oncorhynchus mykiss*, fed fish meal and soy protein concentrate-based diets. Two short term trials were conducted with rainbow trout having initial mean weights of 24 and 156 g maintained at a water temperature of 17 ± 1 °C, during which triplicate groups of trout were fed the respective diets two times a day to apparent satiety by hand. In both trials, fish fed fish meal-based diet exhibited significantly higher growth. In small trout, feed/gain ratio and protein utilisation were slightly higher in groups fed the fish meal-based diet; however, in larger fish, there was no significant difference between treatments. Nitrogen retention and loss were not affected by dietary treatments, while phosphorus retention was higher in fish fed diet containing fish meal (30 and 17 %) than in fish fed diet containing soy protein concentrate (25 and 15 %) and greatly reduced in larger fish. Phosphorus losses were 10 and 13 g·kg gain⁻¹ of fish fed the fish meal-based diet, while those for fish fed the diet without fish meal were 14 and 17 g.

Auteurs du document : Jeong Dae Kim, Sadasivam J. Kaushik, Jeanine Breque

Obtenir le document : EDP Sciences

Thème (issu du Text Mining) : BIOCHIMIE - CHIMIE

Date : 1998-07-15

Format : text/xml

Source : [https://doi.org/10.1016/S0990-7440\(98\)80009-0](https://doi.org/10.1016/S0990-7440(98)80009-0)

Langue : Anglais

Télécharger les documents : [https://www.alr-journal.org/10.1016/S0990-7440\(98\)80009-0/pdf](https://www.alr-journal.org/10.1016/S0990-7440(98)80009-0/pdf)

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/nitrogen-and-phosphorus-utilisation-in-rainbow-trout0>

Evaluer cette notice: