

Muscle pigmentation changes during and after spawning in male and female rainbow trout,



The dynamics of astaxanthin and canthaxanthin were studied through an 11-month feeding experiment by following carotenoid deposition in male and female rainbow trout muscle, during and after spawning. Carotenoids were analysed by chromatography (HPLC), muscle colour was measured by a colourimeter and visual rank evaluation. In both sexes, a decrease in the muscle carotenoid content was observed at spawning time. The recovery of the muscle pigmentation differed between females and males, but seemed not to be influenced by the type of carotenoid additives in feed. The carotenoid content of the female muscle increased rapidly after spawning, while in the male this increase was slower. Eighteen weeks after spawning, carotenoid concentrations in the muscle of females corresponded to those before spawning, while in males they reached only one third of that amount. Significant correlations were found between chemical analysis, colourimetric measurements and visual rank evaluation.

Auteurs du document : Georges Choubert, Jean-Marie Blanc

Obtenir le document : EDP Sciences

Mots clés : carotenoid, pigmentation, colour, spawning season, trout, caroténoïdes, pigmentation, couleur, reproduction, truite

Thème (issu du Text Mining) : FAUNE

Date : 2007-02-15

Format : text/xml

Source : <https://doi.org/10.1051/alr:1993016>

Langue : Anglais

Télécharger les documents : <https://www.alr-journal.org/10.1051/alr:1993016/pdf>

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/muscle-pigmentation-changes-during-and-after-spawning-in-male-and-female-rainbow-trout0>

Evaluer cette notice: