THE INFLUENCE OF DIFFERENT THERMAL CONDITIONS ON THE PROXIMATE COMPOSITION OF RAINBOW TROUT FLESH FROM TWO FISH FARMS IN NW GREECE

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UTICAJ RAZLIČITIH TERMALNIH USLOVA NA HEMIJSKI SASTAV MESA KALIFORNIJSKE PASTRMKE SA DVE FARME U SEVEROZAPADNOJ GRČKOJ

Apstrakt

Kalifornijske pastrmke su gajene u različitim termalnim režimima. Jedna farma (A) se nalazila pored reke u planinskom regionu Epira, a druga (B) se nalazila u nizijskom delu, na obalskom delu Preveza. Na farmi A su preovlađivale niže temperature (10-11 ^{o}C prema 16-16.6 na farmi B). Analiza hemijskog sastava ukazuje da su različiti temperaturni režimi doveli do značajnih razlika u kvalitetu fileta I cele aksijalne muskulature. Ruba sa farme B je imala veću stopu rasta I sadržaj lipida u filetima. Ovo istraživanje je ko finansirano od strane Evropske Unije (Evropski socijalni fond, European Social Fund – ESF) i Grčkih nacionalnih fondova kroz Operativni program «Obrazovanja i celoživotno učenje - Education and Lifelong Learning «Nacionalnog Strateškog referentnog okvira (NSRF) – Program finansiranja istraživanja ARCHIMEDES III – Investiranje u društvo znanja kroz Evropski socijalni fond.

Ključne reči: kalifornijska pastrmka, akvakultura, mišić riba, temperatura

Abstract

Rainbow trout from two fish farms were reared under different thermal regimes, Farm Awas located by a river in a mountain region of Epirus and farm B was located

in a lowland location at the coast of Preveza. Lower temperature prevailed in farm A (10-11 ^{o}C vs. 16-16,6 in farm B). Proximate composition analysis indicated that the different thermal conditions resulted in significant differences in the filleting yield and the proximate composition of rainbow trout axial musculature. The fish from the farm B exhibited higher growth rate and fillet lipid contents. This research has been co-financed by the European Union (European Social Fund – ESF) and Greek national funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) - Research Funding Program: ARCHIMEDES III. Investing in knowledge society through the European Social Fund.

Keywords: rainbow trout, aquaculture, fish muscle, temperature