Genetic variability in a hatchery population of coho salmon (Oncorhynchus kisutch (Walbaum. 1792)) in Chile Variabilidad genetica en una poblacion de piscicultura de salmon coho (Oncorhynchus kisutch (Walbaum, 1792)) en Chile

Winkler, Federico M.

Guiñez, Ricardo

Diaz, Nelson

Espejo, Pablo

A wild Chilean population of coho salmon (Oncorhynchus kisutch (Walbaum, 1792)) was started using eggs imported from Oregon, U.S.A. A hatchery population was founded using eggs collected from this wild population, and a program of genetic improvement was initiated. Information on genetic variability of these populations are of interest in order to monitoring genetic changes along the application of the breeding plan. In this study we analyzed the genetic variability in two cohorts from different years of the population used to start with the breeding plan, using horizontal starch electrophoresis of proteins. 14 loci were resolved in one population and 27 in the other one. Two loci were variable: G3pd-3 and Pgm-1. No variability was detected in one cohort, while in the other one polymorphism and mean heterozygosity were P = 7.4% and Hi = 0.004, respectively. Results show a clear reduction in polimorphism but not in heterozygosity with respect to information in the literature. This sugge