

**ROJAS MÁLAGA, DINA ELIZABETH. 2011.** Evaluación de marcadores nucleares por ILPs y STRs heterólogos en la anchoveta peruana *Engraulis ringens* para estudios poblacionales.

### **ABSTRACT**

Despite *Engraulis ringens* economic importance in our country, there is a lack of information about the variability and genetic population structure of this species, where no specific molecular markers have been identified.

For this reason, five molecular markers were evaluated for the molecular characterization of the Peruvian anchovy: two microsatellites, Ee10 and Ee2, reported in the european anchovy *E. encrasicolus*, and three intronic length polymorphism markers (ILPs): myosin light chain intron 3 Mlc-3, creatin kinase intron 7 Ck-7 and the growth hormone intron 5 Gh-5. Two of them, the microsatellite Ee2 and the intronic marker Gh-5, did not amplify in this species. For Ee10 locus, there was a high probability of presence of null alleles, ranging from 0.2005 to 0.7420, which would explain the significant heterozygote deficiencies found. Based on the observed heterozygosity, a low polymorphism is reported for Mlc-3 and a high one for Ck-7. The results show that only Ck-7 can be used in future population studies. This marker suggests that the six collected sack along the Peruvian coast, a northern stock (Salaverry) and five from the centre (Callao, Huacho, Supe and Pisco), constitute a single reproductive unit from a genetic point of view