MELISSA ROXANA QUISPE ZUÑIGA.2012. Estimación del crecimiento poblacional de *Argopecten purpuratus* “concha de abanico” en la Bahía del Callao, durante los eventos La Niña y El Niño, entre 1995-2001.

ABSTRACT

Argopecten purpuratus Is a bay scallop of economic importance, from which depends the fisher village of a bay a Callao. This is the reason of the study of population growth, so the estimation of growth during the climate periods, which occur along the coast, allows us to establish the basis for a sustainable management of the species. In order to develop the study, it was evaluated the database that was made by the Institute of Peruvian Sea from 1995 to 2001 in a Excel spreadsheet in order to analyze the height, total weight, body weight and superficial temperature of sea; then it go the growth rates, asymptotic length and the size distribution through the FISATT II program for each period of La Niña, involving the years 1995-1996 and 1999-2001. The results of the analysis show that the growth rate is lower during the years 1995-1996, and higher during La Niña in the years 1999-2001, although the asymptotic length is equal for both periods, it was observed that the lower growth rate is related to the sea surface temperature of the same year period, finding a relationship of temperature on the growth of the species. In addition, studied individuals are in the range 7 to 102 mm in shell height, and have a dominance of young individuals during data collection. Thereafter, the gotten values allow to find the length-age and weight-age relations, which follow the growth of Von Bertalanffy, we obtain a greater shell height or total weight in the first year of life during El Niño, in contrast to La Niña periods.