

**PEZO SILVANO, CARLA NOEMI.** Dinámica poblacional de *Cryphiops caementarius* (Molina 1782) Camarón de río, en el Río Cañete – Perú.

### **ABSTRACT**

This study was conducted to analyze the population data of river shrimp *Cryphiops caementarius* (Molina 1972), In the Cañete River between the years 1998-2005; Province of Cañete, Lima, located between 13°09'00" de LS and 76° 31'00" LO. For the temporal analysis, it was used trend lines and correlation plots. In contrast, for the spatial analysis the method of swept area was used as well as frequency tables and graphs. Besides, for the hypothesis test was used multiple regression and analysis of variance (ANOVA).

The temporal analysis (1965-2005) showed that the temporary abundance of shrimp in the river is influenced by the level of capacity of the Cañete River which is further affected by patterns of regional-scale environmental variability such as the South Pacific Oscillation (IOS), the Multivariate ENSO index (MEI) and the Pacific Decadal Oscillation (PDO), The trend is to increase the availability of the resource when there are cold years (higher capacity) compared to the opposite during warmer years (lower capacity), *C. caementarius* responds to these environmental changes in a similar manner to species like the "anchovy" *Engraulis ringens*, nonetheless being entirely different species.

The spatial analysis (1998-2005) showed that with increasing altitude, the mean size and gende4r ratio (male/female) increases, while the abundance and biomass decreases. This is not the case for the gonadal maturation which occurs along the river simultaneously. The most common stage of maturation is "incipient". It was observed from the temporal analysis (1998-2005), that the abundance of the specie has a positive correlation regarding its biomass; however, its mean size decreased compared to the average height of 81,25 mm (1998) to 69,20 mm (2005). The ratio gender (male/female) was always favorable to males and the most frequent maturity stage was "stage II (maturation incipient).

Finally from the analysis carried out (1998-2005) on the present research work regarding this specie, there is statistical evidence which shows that the resource *C. caementarius* is overexploited which may lead to introduce some control measures to protect the specie.