

SERNA CRUZ, JOSE ALBERTO. 2013. Efecto de la temperatura en la reproducción del *hippocampus ingens* en condiciones controladas

ABSTRACT

The aim of this study was to determine the optimum temperature range affecting reproduction *H. ingens* under controlled conditions. The study was conducted in the coastal laboratory of Instituto del Mar del Peru (IMARPE), Tumbes, over a five months period, from May 4 to October 4, 2012, where three treatments were tested (24 °C, 28 °C and 30 °C) and a control (room temperature) with three replicates for each treatment. 4, 6 and 8 births were observed for treatments at temperatures 24 °C, 28 °C and control respectively, except treatment at 30 °C where no births were observed although mature eggs were collected. The incubation or pregnancy period were significant different: In the treatment at 28 °C 12,3 days on average, was the birth of the offspring, while in treatment 24 °C and control (about 24,9 °C) the incubation period averaged 13,8 and 16 days respectively. The reproductive rate at 28 °C and control (24,9 °C) was 1 and 1,3 birth / month respectively, with no significant difference, and at 24 °C was 0,3 birth / month. The average number of born for the treatments at 24 °C, 28 °C and 24,9 °C was 269, 429 and 560 respectively, with a size ranging between 6 and 7 mm. At the end of the study the conclusion is that the optimal temperature range for the reproduction of *H. ingens* was between 25 °C and 28 °C.