

ORTIZ GALARZA, KARINA JUDITH. 2008. Biología Reproductiva de la "concha corazón" *Trachycardium procerum* (Sowerby, 1833), (Cardiidae, Pelecypoda Chimbote-Perú.

ABSTRACT

The goals of the present work were to describe the gametogenesis, to establish the scale of gonadal maturity validated histologically, to describe the dynamic of reproductive cycle and established the first maturity gonadal size of the "Concha Corazón" *Trachycardium procerum*. The samples were collected, by the artisanal boats of the Peruvian Institute of the Sea (IMARPE-Chimbote), on the beach El Dorado, in Samanco Bay located to the south of Chimbote city, between 78° 28' to 78° 34' LW and 9°10' to 9°16' LS. The results indicated that the "Concha Corazón" *Trachycardium procerum*, is a benthonic specie with functional sexual hermaphroditism, it was noted that the great reproductive activity was observed in the males. According to the grade of development, the ovary present three types of the oocytes: Immature (IO), in maturity (EMO) and mature (MO) in the females. In the same way the males present spermatogonium (SG), spermatid (SC) and spermatozoo (SP). According to the oocyte and spermatogenic development the gonads were classified in six stages of gonadal maturity (virginal = 0; resting = I; in maturity = II; Maturity = III, spawning/spelling = IV and recovering = V). *Trachycardium procerum*, is a partial asynchronous breeding, that present trabeculas that contains oocytes and spermatozooids in different stages of development, this trabecula increase in length and in diameter according to the grade of fullness with maturity gametes which remains inside until the moment of the spawning. The reproduction of this specie occurs with great intensity during the months of summer (February and March) and spring (October and November). The Condition factor (FC), is related of direct way with the reproductive stage, due to that during the period of great reproductive activity the invertebrates uses its energy reserve to obtain reproductive success, causing a increase of corporal weight. The size of first maturity is 41 millimeters for females. The knowledge of the reproductive aspects of this important benthonic resource, *Trachycardium procerum*, is going to bring tools that can be used in an optimal fishery management of this specie.