



Male internal reproductive tracts of Côte d'Ivoire brackishwaters crabs, *Callinectes amnicola*, (de Rochebrune; 1883; Decapoda: Portunidae).

d'ALMEIDA Marie-Anne et Komenan Daouda KOUASSI

Laboratory of Cell Biology, UFR Biosciences, University Félix Houphouët-Boigny.22 BP 582 Abidjan 22 Côte d'Ivoire (West Africa), dalmeidakmarianne@gmail.com . Tel: (225) 08 44 04 31 / (225) 05 80 98 87.

Komenan Daouda KOUASSI Corresponding author mail: kkomenan21@yahoo.fr

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ABSTRACT

Objective: The study was aimed to investigate the macroscopic and the microscopic aspects of the vasa deferentia of *Callinectes amnicola* (brackishwaters crabs)

Methodology and results: Investigations with light and electron microscopes after respectively histological and cytological treatments, allowed following the differentiation of the internal tracts. A macroscopic observation has indicated 7 stages in male sexual maturity. Primary white vasa deferentia of the individuals of the stages II and early stage III are composed of an acellular area surrounded by an epithelium. The epithelial layer infolds centripetally fuses giving secondary ducts at the stage III. The gonoducts in the adults of stages IV to VII are subdivided in anterior vas (AVD), medial vas (MVD) and posterior vas (PVD); each one forms a package of secondary ducts. A secretory phenomenon appears in the ducts at the stage IV, and spermatophores are found among the vesicles of secretion. At the stages V to VII the secondary ducts of the anterior vas deferens (AVD) delineated by a columnar epithelium contain spermatophores in their lumen. The medial vas deferens (MVD) presents some secondary ducts containing pockets of secretion. Other ducts are invaded by spermatophores. In the posterior vas deferens (PVD), ducts contain spermatophores. Physiology of the tract was carried out.

Keywords: *Callinectes amnicola*, vasa deferentia, histology and cytology.