Variability Of The Salinity In The Mafragh Estuary (mediterranean)

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Abstract The Mafragh estuary is considered as one of the most important wetlands in North Africa. It is situated in the north-eastern part of Algeria and extends along the depressions of Bounamoussa River and El-Kebir River. The Mafragh estuary is also considered as a rare type of shallow water networks in the region since it is a mixture of valleys fresh water and the marine water of Annaba gulf, which is characterized by a mid-day tide. The hydrological pattern of the estuary has been studied through four cruises. The study took place during the year 2006. The cover of the estuary has been made in 10 stations at the level of El-Kebir River and 7 stations at the level of Bounamoussa River. At the hydrological level, the Mafragh is a unique strait among the streams depressions in terms of the degree of salinity and corner edges. The continental flows control the estuary flows. The quantity of the marine water that comes by the tide operation is very limited. In general, according to the quantities of the rainfall, the hydrological manifestations of the estuary can be summarized in a sequence of three different stages along the four seasons. These stages are respectively as follows: the valley stage, the strait stage and the lake stage. Keys words: Hydrological pattern, Salinity, Water masses, Mafragh estuary, Mediterranean Sea