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Reproduction of Mollusks From Different Localities in The Southern Mediterranean Coast

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Abstract

Mediterranean Sea biota is under great stress due to the discharges made by different activities. Mollusks are used to monitor environmental health. For this reason, a study was carried out to investigate the status of reproduction of the bivalves *Donax trunculus* along Annaba Mediterranean Gulf subjected to different anthropogenic ejections. Individuals have been collected in the first three months of the year from a location prone to contamination and localities subjected to organic and industrial contaminations. The sex ratio of *Donax trunculus* is macroscopically identifiable in February and March because gonad differentiation is possible only during the period of sexual activity. Testicular tissues showed histopathological modification in bivalves obtained from the organic and industrial polluted localities during January, February, and March. On the other hand, results demonstrated that the testicular structure of animals collected from the non-polluted site appeared unaffected. In summary, testicular histological profiles of *D. trunculus* have been altered by the two types of contaminations during the study period.

Key Words: Anthropogenic ejections, histopathology, bivalves, Donax trunculus, reproduction.



