

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 3, March 2024

## Environmental Impact of Variations in the Oocytes Development of Freshwater Bivavlve, Lammelidens Marginalis During Different Seasons from Kurla Dam, Mahad Taluka (Raigad M.S.).

Dr. Bhosale P.A.

Associate Prof., Department of Zoology. Sundarrao More Arts, Commerce, and Science (Sr.) College, Poladpur, Raigad, M.S., India bhosale\_popat@rediffmail.com.

Abstract: Bivalve was found in Indian waters the reproductive cycle and gonad development of the freshwater bivalve Lammelidens Marginalis was studied over a period of 24 months (January 2018- to December 2018). At the regular reproduction molluscs in india. Especially in Maharashtra state, in diocious Lammelidens Marginalis the gonads are common structure in other species of phylum molluscs. Those species are collected from kurla dam, Tal- Mahad Dist –Raigad. Due to the highest oocyte diameter are shown by the winter season and then after slightly significant decrease on diameter in monsoon and then lowest diameter are observed in summer season. As per the variations of Previtelogenic and Vitellogenic oocytes in different seasons. Such as Winter season on Prewinter the previtellogenic oocytes diameter 57.227±3.136 to 63.486±5.170&Vitellogenicoocytes diameter 60.963±2.136 to 63.486±5.170and Postwinter on a Previtellogenic oocytes diameter 61.418±3.259 to 75.223±6.480 and *Vitelogenic oocytes diameter* 115.428±5.524 to 125.568±4.490 then Monsoon season on the Premonsoon Previtellogenic oocytes diameter 47.117± 2.136 to 33.386±4.170&Vitellogenicoocytes diameter  $51.763 \pm 2.155$  to  $58.456\pm 5.570$  and Postmonsoon Previtellogenic oocytes diameter 51.412±3.249 to 655.217±5.458, Vitelogenic oocytes diameter 98.428±4.524 to 105.468±3.470 and Summer Presummer season, thatsPrevitellogenic oocytes diameter 44.325±2.236 to 50.465±5.160 & Vitellogenicoocytes diameter 48.763±2.178to51.445±4.265 and Postsummer Previtellogenic oocytes diameter 47.318±3.563to63.183±5.4520 and Vitelogenic oocytes diameter 92.428±5.248 to90.568±3.458 diameters of oocytes are observed. (All values are in µm.).

Keywords: Lammelidens Marginalis, Oocytes, Variations of seasons

## REFERENCES

- [1]. Clarke R.B., Frid C., and Attrill M.. (2001): Marinepollution (5<sup>th</sup> ed.), Clarendon Press, Oxford. 250-552
- [2]. Gabbot P.A. and Bayne B.L.(1973): Biochemical effect of temperature and nutritive tress on mytilusedulisL,j,Mar.Boil.Assoc,UK,53269-286.
- [3]. MarkHarrmann et.al.(2009): Reproductive cycle and gonadal development of the northern Argentinean mesodesmamactroides (Bivalvia :mesodesmatidae).I.j. of aquatic biology vol4(3)45-48.
- [4]. Nagbhushnam .R. and Mane U.H. (1975): Reproduction in the mussel, mytilusviridis at ratnagiri .Bull Dept.mar.sci.Uni.Chochin.India 7; 377-387.
- [5]. Radhakrishnan K., Suresh A., Urmila, Shivarama B. and Krishnan B. (1991): Effect of mercury on lipid metabolism profiles in the organs of Cyprinuscaprio(Linn.). J.Mendal. 8: 125-135
- [6]. Sastry A.N.(1970): Reproductive physiological variation in latitudinallyseprated population of the scallop.Aequepectinirradians(Lamarks).bio.Bull.138:56-65.

Copyright to IJARSCT www.ijarsct.co.in



## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

## Volume 4, Issue 3, March 2024

[7]. Torreblanca A., Ramki J.D. and Diaz Mayans J. (1992): Changes in biochemical composition of gills, hepatopancrease and muscle of the red cray fish, Procambarus clarkia (Girad) after sublethal exposure to mercury, Comp. Biochem. Physiol., 102C, (2): 247-252.

