



## **Operculum Regeneration in The Family Strombidae, Red Sea Coast, Sudan**

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The family Strombidae is the one of the largest molluscan families in the Sudanese Red Sea coast. It has an economically important value. This work studied an operculum regeneration in the family Strombidae with special reference to *Strombus triconis* in four animal groups on the Sudanese Red Sea coast. The results have revealed that *S. triconis* operculum can regenerate under experimental conditions within the natural habitat. The process of operculum regeneration has been described. The growth time needed for a removed operculum to reach its original size has been determined. The monthly relative growth was calculated and indicated that there is a decreasing rate of increase in the length of the regenerated operculum over time. Regression analysis of the length in mm of the regenerating operculum with time in months showed that there is a significantly high correlation between length and time in the four animal groups. The result indicated also an overall predictive equation for determining the time needed by the animal to regenerate an operculum of the same length as the removed one was derived. The investigation provided an important data revealing basic information connected with the process of regeneration and growth of the operculum. The time for appearance, commencement of the different stages of growth have also been defined. In this connection through tedious statistical exercise, a formula has been derived to speculate the growth time needed for a removed operculum to reach the original size.