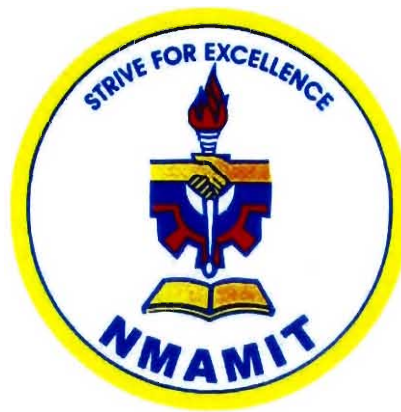


**A PROJECT REPORT ON
PRODUCTION OF HYALURONIC ACID FROM SOLID
WASTE MICROBES**

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ABSTRACT

Hyaluronic acid (HA) is a mucoid polysaccharide of biological origin. Traditionally HA was extracted from rooster combs and bovine vitreous humor , but now it is being produced by microbial fermentation due to lower production costs and simpler downstream processing techniques. The objective of the present study is to explore the micro flora of solid waste and use the organisms obtained for the production of Hyaluronic Acid. Initially the organisms were isolated by serial dilution from the solid wastes collected from the areas in and around Nitte. Organisms were screened using standard microbiological procedures for identification. Microorganisms isolated and identified were then subjected to microbial fermentation in a 1ltr lab scale fermentor under aerobic conditions for the stipulated period of time. The product was then extracted and purified using the downstream techniques. Hyaluronic acid obtained could be used for cosmetic as well as medicinal applications at a much affordable cost.

The scope of this study includes:

- To determine whether the identified bacteria isolated from Solid Waste can be used for the production of Hyaluronic Acid.
- To produce low cost Hyaluronic Acid from microbial fermentation.