

WATER POLLUTANTS IN AQUATIC **ENVIRONMENT, TOXICITY POTENTIAL ON WATER GUALITY** A CASE STUDY OF TANZANIA.

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INTRODUCTION

Different water bodies have different water qualities depending on factors such as the sources of water, industrial and human activities surrounding the specific water bodies etc. The study was done on three different water bodies in Tanzania with the following objectives.

Determination of the toxicity levels on Water Quality for specific water bodies and how the toxicity levels will affect different water users.

_ake Victoria Ð

- Compare different toxicity levels against the permissible limits. \geq
- Identifying critical parameters and prioritizing for regulatory \succ monitoring.

MATERIALS AND METHODS:

- Samples were collected from Lake Victoria, Lake Nyasa and River Ruaha. \succ
- The samples were sent to Mwanza Zonal Water Quality Laboratory of for \succ the analysis.
- The data was analyzed using a student t test in Graphpad prism 9 to determine significance of the data.





RESULTS

P is significant at P < 0.05:

- There were significant COD concentration values in Lake Victoria as compared to the permissible limits P = 0.43 (ns).
- There were significant differences between the COD levels in lake Victoria in comparison to permissible levels due to industrial activities.
- There were no significant Nitrate concentration values for all the 2. three water bodies compared to permissible limits (***) P<0.0005.
- There were no significant Copper concentration values for all the 3. three water bodies compared to permissible limits, P<0.0001(****).
- There were low Nitrate and Copper concentrations for all 2. the three water bodies in comparison to the permissible levels.
- COD monitoring especially for Lake Victoria was observed to be critical and should be of the highest priority. 3.

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