

2016-17

PROJECT REPORT OF B.SC. 6TH SEM
BOTANY (MAJOR)
ON MICROBIOLOGY OF WATER



**Physico-Chemical and Microbial
Analysis of Drinking Water Quality of
some areas of Tinsukia Town with
special reference to 'COLIFORM
BACTERIA'**

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Certificate

This is to certify that Sandhya Shah, student of B.Sc. 6th semester, Botany (Major) of Tinsukia College has completed her Project work report entitled 'Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia with special reference to Coli form Bacteria' successfully as a part of the syllabus (for the academic session 2016-2017) under my guidance.

This is a bonafide record performed by her.

She is being wished with the very best of her luck for the future.

Date:

21-4-2017



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Preface

This Project report is the combination of our Experimental work on microbiology of water based on botanical study. Being a student of B. Sc. 6th semester Botany (Major) of Tinsukia College we have undertaken this Project report entitled 'Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia with special reference to COLIFORM BACTERIA', as a part of the syllabus under Dibrugarh University during session 2016-17. This report has been made full care following the various suggestions received from teachers. It is hoped this report will be accepted under due consideration.

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ACKNOWLEDGEMENT

It is my utmost privilege in presenting the concerned Project work. In this regard, I would like to pay my heart-full thanks and gratitude to Dr. (Mrs.) Sanjukta Gohain Baruah, Associate Professor & HOD, for her cordial co-operation and guidance in making the Project work a success.

I am also grateful to our Laboratory assistant Sri Lilakanta Bhattarai for his valuable advice and co-operation in our project work.

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Photographs

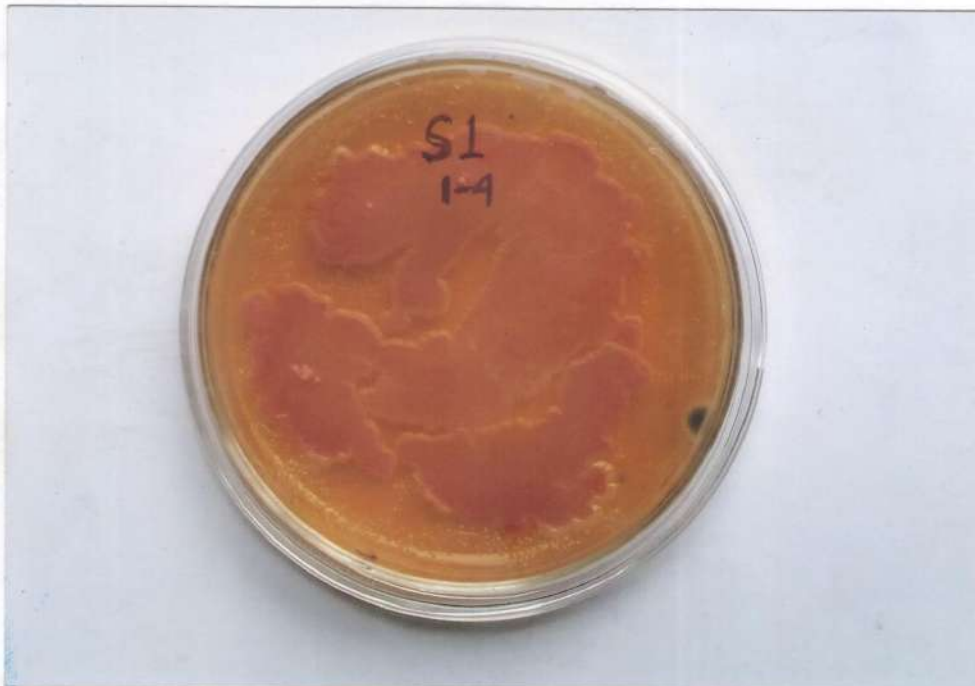


Fig 1: Coliform bacteria found on Sample 1



Fig 2: Light red coloured coliform bacteria of Sample 2

Photographs



Fig 3: White coloured irregular coliform bacteria of Sample 3

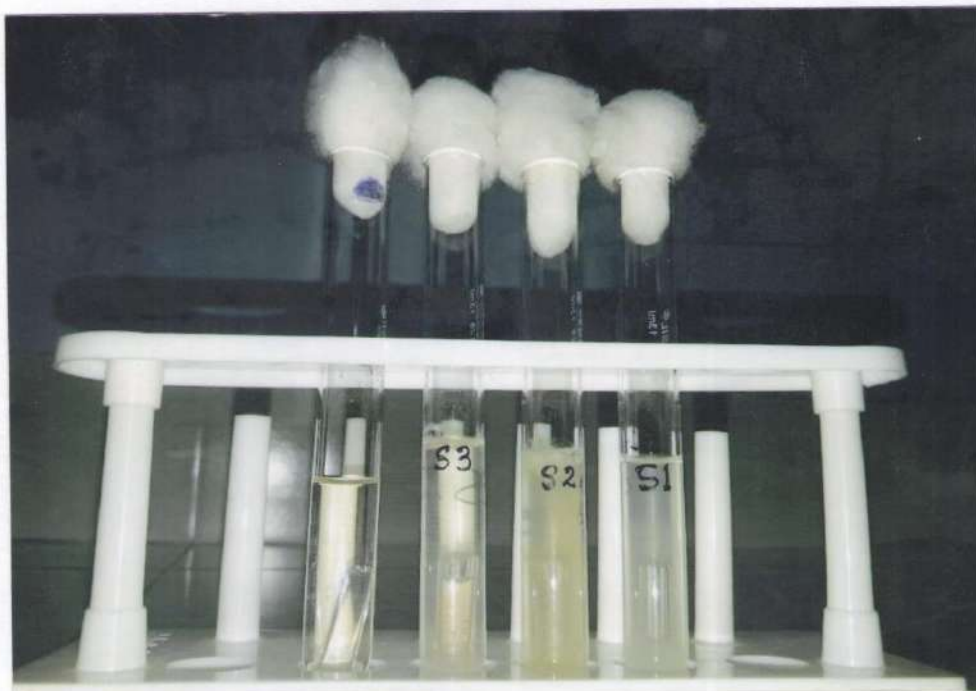


Fig 4: Incubated test tubes of Sample 1, 2 and 3 which shows acid and gas formation

Photographs



Fig 5: Methyl Test ! Red colour shows as positive, methyl test.



Fig 6 : Voges - Proskaver Test : Development of pink colour shows a positive reaction

Photographs



Fig 7: Incubated water samples of 4, 5, 6



42 Fig 8: Production of red-pink colour which indicates the presence of indole in the sample.