



ABOUT THE BOOK

In the year 2015, Kaliabor College has started a students research initiative named after the famous scholar Atmaram Sarma who first translated the Holy Bible into Assamese language in 19th Century. Under this initiative **students from all streams of the college are encouraged to take up micro research projects in different topics related to grater Kaliabor area. Every year the best reserach projects are selected in all streams i.e., Arts, Science and Commerce and are awarded with "ATMARAM SARMA CHHATRA GABESONA BOTA"** which includes a cash award of Rupees Five Thousand and a Certificate. About fifty micro research projects have been completed so far under this initiative. This book includes the results of thirteen selected micro students' research projects in the form of research papers.

The objective of this book is to motivate the young students towards research and to boost their ignited minds.

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UDDIPON

Collection of Students' Research Project Summaries



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From The desk of Editor

In the modern era of Technology people become fully dependent on techno product and the young generations, also their parents are keep themselves busy in rat race to manage a space in the Technological Education. In this process of competition they start to forget the basics principles behind these technologies. Basic principles of any technology comes from the study of pure sciences, but now a day's students keep the pure science in the last option of their choice of education. As a result many basic problems of the Globe remain unsolved. To breach the gap between the pure science and applied sciences the Department of Biotechnology, Government of India started a Scheme known as Star College Scheme. The objective of this scheme is to strengthen the science education in Under Graduate Level. Initially the Botany and Zoology Department and lacture on five months departments of Kaliabor College were covered under this scheme. Different activities have been carried out under this scheme and students were encouraged to undertake small student's research projects.

Again In the year 2015, after the successful completion of 73rd Biennial Kaliabor Conference of Axom Sahitya Sabha, the then MLA of Kaliabor Constituency,

TO STUDY THE QUALITY OF GROUND WATER OF KALIABOR SUB-DIVISION

Himanjyoti Boruah, Rakhi Mandal, Rupalim,
Goswami, Pratap Medhi & Manisha Goswami*

INTRODUCTION

Water, especially ground water is most dependable widespread and in most the only source of drinking water. The purity of water cannot be judged by visibility and odour of water sample and even visibly pure water can contain some toxic metals, pesticide residues and high levels of nitrate, chloride fluoride and arsenic. Fluoride has a negative effect on human health below 0.5ppm and above 1.0ppm whereas in the range of 0.5-1.0ppm it shows positive effect. A correct proportion of fluoride has a beneficial role in information of teeth. Too low concentration (<0.5ppm) of fluoride intake may be insufficient for preventing dental cares in the early age of children. High concentration of fluoride exceeding 1.5ppm leads to teeth melting viz-dental fluorosis.

Excess of fluoride, arsenic and iron in drinking water above 4ppm cause chronic skeletal fluorosis which causes stiffness

NUTRIENT STATUS OF SELECTED TEA SOILS IN KALIABOR SUB-DIVISION

Kaushik Jyoti Gohain, Kangkana Hazarika,
Sumon Sen, Mahmuda Yeasmin,
Smita Choudhury & Dr. Pranjit Kumar Bhuyan

INTRODUCTION

Soil testing refers to the chemical analysis of soils and is well recognized as a scientific means for quick characterization of the fertility status of soils and predicting the nutrient requirement of crops. One of the objectives of soil test is to short out the nutrient deficient area from non deficient one. This information is important for determining whether the soil could supply adequate nutrients for optimum crop production or not. The concept of balanced nutrition of crop also guides the use of plant nutrients in a definite proportion as required by the crops which is possible only if one knows the available nutrient status of the soil. Thus soil testing helps in understanding the inherent fertility status of the soil. It is three step process -

- (a) collection of a representative sample from each field.
- (b) proper analysis of the sample to determine the levels of