



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG ISSN: 0974-4290

Vol.9, No.03 pp 645-652, 2016

## Isolation and biochemical identification in an Anaerobic Baffled Reactor for the treatment of Textile Wastewater

Bhuvaneshwari.A<sup>1\*</sup>, Asha.B<sup>1</sup> and Selvakumar. D<sup>2</sup>

<sup>1</sup>Assistant Professor in Civil Engineering, Annamalai University, Annamalai Nagar, Tamil Nadu, India

<sup>2</sup>Professor, Department of Civil Engineering, Shanmuganathan, Engineering College, Pudukkottai, Tamilnadu, India

**Abstract:** Textile wastewater containing toxic elements which are discharged from the industries and they extremely affect soil fertility, water resources, aquatic organism and also eco system. To ensure the safety of environment, proper technologies need to be used for the treatment of wastewater before discharge into land or water course. Treatment of wastewater by the method of Biodegradation can produce less hazardous. The microorganisms were initially isolated into pure culture and characteristics were identified based on morphological and staining method. The aim of this study is to isolate and biochemical identification of organism from textile effluent. The results revealed that *Alcaligenes faecalis* (Gram negative bacteria) was found in higher concentrations in textile wastewater. The species are isolated through 16S rRNA, biochemical and colony morphology methods.

**Keywords:** *Alcaligenes faecalis*, Anaerobic Baffled Reactor, Biodegradation, Morphological Characterization, Textile Wastewater.

Bhuvaneshwari.A *et al* /International Journal of ChemTech Research, 2016,9(3),pp 645-652.

\*\*\*\*\*