**Isolation of PHA producing bacteria from Puthalam salt pan, Kanyakumari District**

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Polyhydroxyalkanoates(PHA) are biodegradable plastics produced by various bacteria. In current work, 16 bacterial isolates were isolated from Puthalam salt pan, Kanyakumari district. The PHA producing isolates were screened by Sudan Black B staining to detect lipid cellular inclusions and by Nile Blue A for PHA accumulation. From the screening 2 isolates (Z6 and Z9) were selected for further analysis. The PHA from the two isolates were extracted by modified hypochlorite method and quantified. The extracted PHA was analyzed by FT-IR. The presence of PHA peak in FT-IR, where shows the stretching vibration of C-H methylene group and ester carbonyl group C=O. The highest PHA peaked strain were undergo further analysis.

Keywords: Polyhydroxyalkanoates, Salt pan, Sudan black B, Nile blue A, FT-IR