ABSTRACT

The goal of this study was to better understand the degradation of hydrocarbons by halophilic organisms. In Seminole, Oklahoma, a bacterium was found, and classified as Arodimonious species Seminole, and was found in the soil at a fracking site (Canaan). This bacterium was found to break down benzene, toluene, phenol, 4-hydroxybenzoic acid (4-HBA), protocatechuic acid (PCA), 12 and phenylacetic acid (PAA) with sources of high salinity (Canaan, Powerpoint). In order to better understand the function of a particular gap in the protein, we had to perform a method of DNA Replication named PCR. The PCR Process replicated the DNA millions of times and then we used that cluster of DNA strands to determine the length and complexity of the strand through a process called Electrophoresis. The electrophoresis was considered to be unusable due to many factors including a weak PCR product and old photo equipment. The mistakes learned can be used to improve the experiment in the future.

REFERENCES