Thesis Title	A Study of Electricity Produced from Banana Stem Liquid as an Electrolyte
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ABSTRACT

The purpose of this study was to compare the electrolytic properties of various parts of banana and banana liquid extract (obtained from the various parts of the banana tree) with 1 M sulfuric acid solution. The lowest pH values, i.e. pH 4.60, were found for the ripe banana, intermediate pH levels (pH 5.50 to 6.23) were found for the banana root, stem, raw banana and the banana flower, and highest pH levels (pH 7.37) were found for liquid extracted from the putrefied banana trunk. Moreover electrical conductivity, voltage and current were measured for the various parts of the banana tree and its liquid extract. It was found that liquid extracted from the banana stem without dilution (100 % extract) generated the maximum electricity. In addition, electrical voltage and current produced from 1 M H_2SO_4 solution was found to be higher than that produced from liquid extracted from banana stems. An electrochemical cell of 1 M H_2SO_4 provided a voltage of 0.71 V and a current of 15.67 mA. The electrochemical reaction of this cell was fast and resulted in rapid decomposition of the electrodes. The electrochemical cell of liquid extracted from the banana stem provided a voltage of 0.5 V and a current of 2.5 mA. However, the electrodes did not decomposed as rapidly as for the sulfuric acid cell. A battery of cells prepared from banana liquid extract generated sufficient electricity to operate a variety of domestic electrical appliances.