ABSTRACT

Energy use in the world today continues to develop over time. The ever-increasing growth of the human population is accompanied by an ever-increasing need for energy as well. So a solution is needed to meet these energy needs. Earth batteries can be a solution to this problem, because earth batteries are a cheap energy alternative that is affordable to the public. This research was conducted to observe the effect of anode and cathode distance on the current, voltage and power produced by earth batteries. Magnesium and copper are used as electrodes and for electrolytes using humus soil and compost.

The distances given between electrodes were 5 cm, 10 cm, 15 cm, 20 cm, 25 cm, and 30. The best output results obtained in this experiment were measurements at an electrode distance of 5 cm and a time of 0 minutes. These results obtained a current output of 0.000195 Amperes, 5.78 Volts, and 0.0011271 Watts in compost soil media. The smaller distance can provide greater output.

Keywords: Earth Battery, Electrode, Distance, Soil, Electrolyte