Use of Manihot esculenta as an Alternative for Phytoremediation of Soil

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Manihot esculenta is a plant known as cassava. It has been used as a plant fertilizer, but it has not been tested to extend the viable life of a plant during the phytoremediation process. This research intents to find a solution to the everyday-increasing problem of soil pollution through an innovative eco sustainable approach, as the one being evaluated on this study. Three soil samples were prepared and poured into three different pots. Two of the soil samples (sample A and B) were contaminated with 157.73mL of used motor oil. All samples were exposed to the same light and temperature conditions for a 24-hour period, including the control factor (Sample C). Sample A was treated with a cassava fertilizer, while Sample B was only exposed to the contaminant. After planting the selected phytoremediation plant (sunflower) the observations were recorded and analyzed for sixteen days. The results showed that the cassava fertilizer was effective in a way that it provided a barrier for the plant in Sample A during the process of phytoremediation.This data supports the hypothesis that the use of Manihot esculenta extends the viable life of plants in the process of phytoremediation.

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