

Modification in Automated Aeroponic Indoor Air Purifier (Pavana) and its Feasibility Analysis

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Abstract: Indoor air pollution is becoming an increasingly genuine issue with the progression of chemical-based building materials as they tend to exert pollutants like benzene, formaldehyde, CO, CO₂ etc. Lot of researchers have produced various ideas of air purifiers concentrated on removing only one or in some cases more than one type of pollutants. But the issue with them is cost, aesthetics, and efficiency in removing multiple pollutants simultaneously. The easiest solution for this can be found in nature. There are several species of plants capable of removing different air pollutants efficiently. Here in this project, we are trying to design an eco-friendly indoor air purifier using bamboo. In this purifier we will be using an aeroponic system for providing water and nutrients to all the plants, which will be removing the pollutants from the air. Aeroponic is a plants cultivation technique in which the roots hang suspended in the air while nutrient solution is delivered to them in the form of fine mist. Depending upon the observed result

Keywords: Pollutant, Purifier, Bamboo, Water, Nutrient