UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF HYDROPONIC FARMING SYSTEM

WAN MUHAMMAD AZAM IDRUS
BIN WAN SHAMSUDDIN

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ABSTRACT

Malaysia has been one of the country that has been affected by pandemic COVID-19 which limit the outdoor movement of residents. Therefore, the demand of food source are increasing during movement control order. Other than that, the rise of human population each year cause the decrease of area of land. As a result, the residents that live in flat houses has less space to plant vegetables. Hydroponic system is introduced to be one of the initiative to solve the problem. Thus, the objectives of this project are to fabricate a model or a prototype of the hydroponic system and to compare the difference between hydroponic and traditional farming system in terms of plant's growth. The approaches taken include developing design ideas, fabrication of a prototype and testing of the product. The expected outcomes of this project are that the CAD model and the product's prototype are succesfully been constructed. Aside from that, the hydroponic farming system is expected to be more efficient compared to the soil-based farming system. As a conclusion this project is an initiative for the flat house residents and others to involve in this field and to improve the production of food source in future industry.

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