MECHANICAL ENGINEERING DESIGN (MEC 322)

FINAL REPORT

NAME OF PROJECT:

PWP SPRAYER

FACULTY : FACULTY OF MECHANICAL ENGINEERING

SEMESTER 5

PROJECT TITLE : PWP SPRAYER (POISON WHEEL PUMP SPRAYER)

PREPARED FOR : SIR AHMAD NAJMIE BIN RUSLI

GROUP MEMBERS :

NO	NAME	STUDENTS ID
1.	NUR AZAREENA BINTI AZMAN	2017227948
2.	MUHAMAD HAIQAL BIN HIPUL	2017227866
3.	MUHAMMAD HAFIZUDDIN BIN MUHAMAD HARIS	2017220534
4.	MUHAMMAD HAZIQ NAQIUDDIN BIN HAMKA	2017227892

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NUR AZAREENA BINTI AZMAN
Student of Mechanical Engineering
Class B
Faculty of Mechanical Engineering

ABSTRACT

In Malaysia, Farmers are the backbone that contributes in increasing the economy of this country. However, farmer had given less and less priority in inventing a model that would make their work easier and good for their health. For example, for the backpack poison sprayer, the farmer had to carry it everywhere that he needs to use the poison for his plantation and also, they need to pumped it manually and repeatedly to pump out the poison. This kind of thing is not good for the farmer's health as they tend to get backpain and easily gets tired. In our project, we innovate something new based on the old pump which we called it as PWP Sprayer. PWP Sprayer stands for Poison Wheel Pump Sprayer. PWP Sprayer had been innovate specially for farmers to prevent them from getting backpain and also to reduce their work to poison. PWP Sprayer is a manual machine that do not need motor or another electrical component to generate it. It is 100% manual as it generates the power to pump out the poison through the rotation of the front wheel. The torque of the wheel affects the power to pump out the poison. Plus, the power to pump out the poison affect the amount of poison sprayed out. PWP Sprayer works when we pushed it forward to the direction that we needed to sprayed. The farmer now can simply push the machine and this can save a lot of work and time. The tank is located at the middle of the machine. Moreover, the farmer cannot have to carry the tank at their back anymore and this kind of thing can prevent them from getting back pain.

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