PESTICIDE SPRAYING BOT USING BLUETOOTH

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OBJECTIVE

If a Pesticide got sprayed on humans, it causes acute health effects which include stinging eyes, rashes, blisters, blindness, nausea, dizziness, diarrhea and death. Examples of known chronic effects are cancers, birth defects, reproductive harm, immunotoxicity, neurological and developmental toxicity, and disruption of the endocrine system. More than that, Spraying of random amount of pesticides to plants turns them to poisonous. We need to identify the type of pest in the plants and we need to use the pesticides accordingly. Each plants should be sprayed specific amount of pesticides to maintain its healthy state. So There is a need a robot which can spray required amount of pesticides to each plant and it should also identify the type of pest. By these spraying of pesticide on humans and spraying larger that the required amount of pesticides in plants can be avoided.

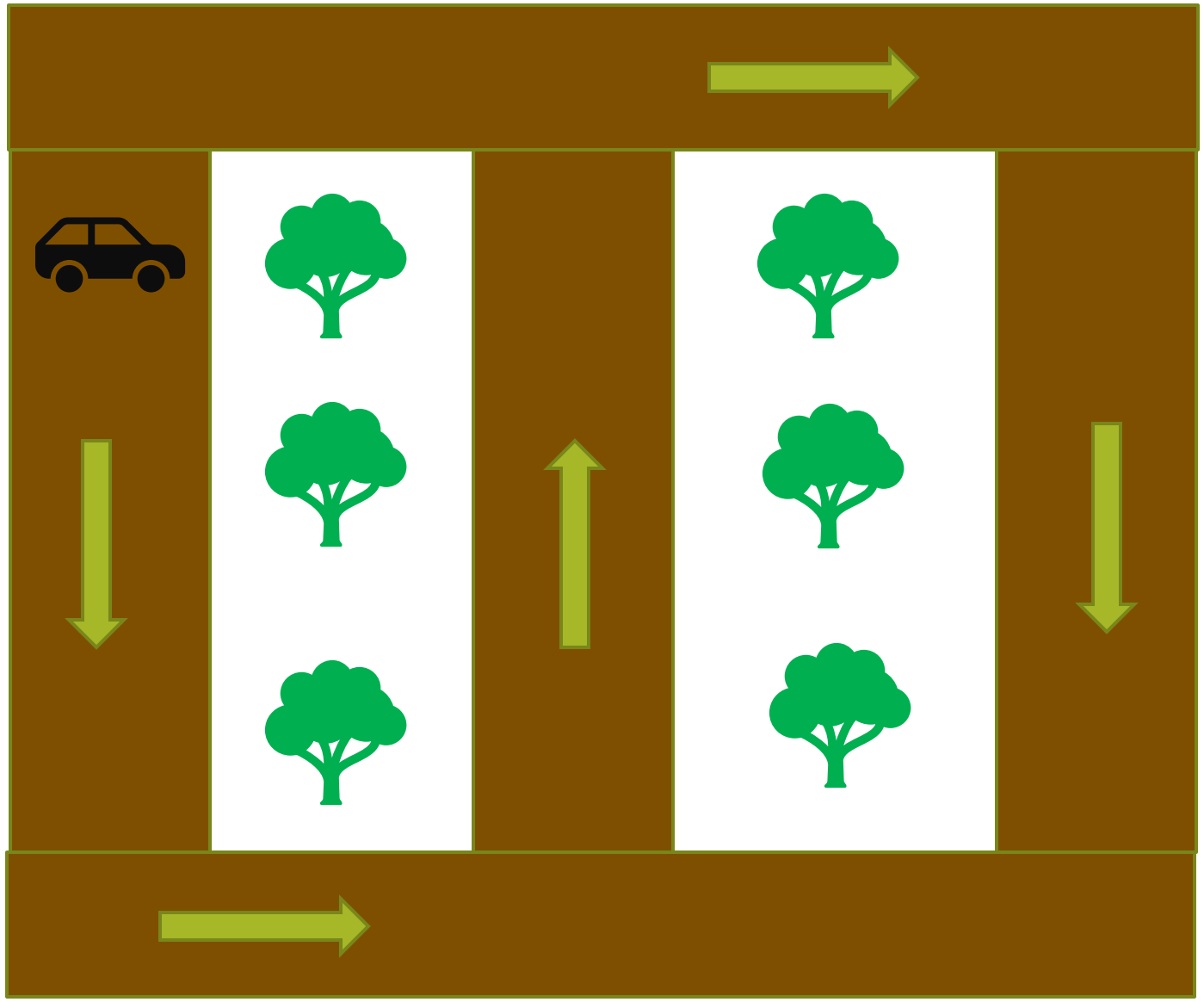
COMPONENTS REQUIRED:

- ESP 32 CAM
- BLUETOOTH MODULE
- ARDUINO UNO MICROCONTROLLER
- MOTOR DRIVER BOARD
- BO MOTORS
- WATER PUMP MOTOR AND CONNECTING PIPES
- BATTERY AND CONNECTING WIRES

WORKING

Our Robot will run through the gaps between each rows of plants. The movements of robot will be controlled by app using Bluetooth module. We can view the plants through ESP 32 CAM, So that the amount of pesticides sprayed to the plant can be decided and sprayed accordingly by operating through the app. By camera view we can know the condition of each plants and identify its status. We will come to know about the disease if it had. We can also identify the type of pest present on the plants.

MOVEMENT



Future works

1. We are planning to construct a complete Autonomous Pesticide spraying bot which will be done by image processing through ESP 32 CAM

2. By Image processing, we are making the robot to identify the type of pest present in the plants .

3. To reduce the size of the body and make it more efficient and useful.