PROJECT DOCUMENTATION

Index:-

* Project Name:
* Work Process:
* Scope & Purpose:
* Existing System:
* Proposed System:
* Project Analysis:
* Software Requirement Specification:
* Front End Technologies Used:
* Financial Cost:
* Future Scope &Conclusion:

1. **Project Name:**
2. Fighting Pests With Sound Waves, Not Pesticides
   1. About sound wave:

In physic, sound is a vibration that propagates as an acoustic wave, through a transmission medium like solid, liquid and gas. In human physiology and psychology, sound is the reception of such waves and their perception by the brain. The advantage of using ultrasonic waves is this action does not cause environmental pollution, does not cause sounds that affect the human ear because of its frequency beyond the normal human hearing range, and can kill pastes and larvae of the field thermally due to heat effects caused, and other effects.

1. **Work process:**

The device detects the incoming male call and emits a fake female response call through the buzzer before any neighboring psyllids can answer. When the male bug comes near the device, he gets snagged and immobilized on an adhesive surface. The insects subjected to the noise were four times less likely to find a mate than other psyllids. When a male psyllid wants to mate, he alerts a female by sitting on a leaf and buzzing his wings to send vibrations along leaves and branches. To disrupt that activity, this device containing a piezoelectric buzzer and a microphone wired to a microcontroller.

* As we all know that our country is a agricultural country. So this is the very easy to use and pesticides free way to control the paste of the field.

1. Scope & Purpose:

* As we all know that our country is a agricultural country. So removal of pesticides should be our first priority.
* The farmer can start the machine and move between the lines of crops.
* The machine will automatically emit the ultra-sonic sound which kills the insects and its larvae.

1. **Existing system:**

As it is develop for the farmers use only, so the farmer can use it with the applying of given preventive measures. Most of the farmers are not educated so that the farmer should learn how to run this machine with our experts with free cost.

1. **Proposed system:**

The main theme of this project is to farmer can cultivate their crops without the loss of their crops due to paste, insects. And also the theme is to replace the pesticides with killing of insects with sound. And also to cultivate the healthy vegetables.

1. **Project analysis:**

This application has been divided in to only one module.

* User module(farmer)

1. **Software requirement Specification:**

* Software used: Android Studio, Google chrome
* Client-Side Technologies: HTML, CSS, Bootstrap, Data table, PHP, JavaScript
* Data Base Server: DB MySQL
* Operating System: Windows

1. **Front End Technologies used:**

* HTML(Hypertext Mark-up Language)
* CSS(Cascading Style Sheet)
* Bootstrap (Library of HTML, CSS)

1. **Financial cost:**

As it is developed for agriculture purpose and for making the machine which emits a sounds a little high cost will be applied for this project. But if we will host this project it will not be too costly. It must be cheap as we are expected but also it wills around 20000 to 30000.

1. **Future Scope & Conclusion:**

In Florida, the Asian citrus psyllid, an aphid-size creature that feeds on the stems and leaves of citrus trees, cost the juice business $3.6 billion between 2006 and 2012. The real damage from “citrus greening” comes from bacteria spread by the bug, which causes leaves to turn yellow and kills the tree in a few years. We are working to lower the price of the device, which costs between 10000 and 15000 and only covers two feet of a tree. In the short term, sound will not trump pesticides in fighting the Asian citrus psyllid. “Looking ahead, we’re expecting, however, that the psyllids will become resistant to the pesticides and that the costs of the new technology will continue to decrease.

Our country also known as agriculture country can take a advantage from this project. It is easy to use and pesticides free. We can get healthy vegetables.