

## **Agriculture Water Sprayer Seeder and Weeder**

Satchidanand Choure, Devika Gori, Harish Mohite, Vedant Shinde, Sumeet Jadhav

1 Ass.Prof. MECHANICAL ENGINEERING, BHARTI VIDYAPEETH INSTITUTE OF TECHNOLOGY, NAVI MUMBAI

2,3,4,5 STUDENT, MECHANICAL ENGINEERING, BHARTI VIDYAPEETH INSTITUTE OF TECHNOLOGY, NAVI MUMBAI

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### **ABSTRACT**

*The spraying is traditionally done by labour carrying backpack type sprayer which requires more human effort. The weeding is the generally done with the help of Bulls becomes for small land farmers. Similarly the seed sowing application is also done with the help of bulls, which in the present age is time consuming and laborious. So to overcome these above problems a machine is developed which will be beneficial to the farmer for the spraying and weeding operation along with the seed sowing application. A multifunction device will come in handy that can be put to use in different stages of farming as per requirement.*

**Keyword:** - WATER SPRAYER , SEED SOWER, WEEDER, and AGRICULTURE MULTIPURPOSE MACHINE

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Date of Submission: 29-05-2022

Date of acceptance: 10-06-2022

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### **I. INTRODUCTION**

Insects are largely responsible for the crop destruction. Insecticides or pesticides, a man made or natural preparation are used to kill insects or otherwise control their reproduction. These herbicides, pesticides, and fertilizers are applied to agricultural crops with the help of a special device known as a "Sprayer,"

A sprayer is a device used to spray a liquid. In agriculture, a sprayer is a piece of equipment that spray nozzles to apply herbicides, pesticides, and fertilizers to agricultural crops. Sprayers range in size from manportable units (typically backpacks with spray guns) to self-propelled units similar to tractors, with boom mounts of 60–151 feet in length.

Agricultural implement and machinery program of the government has been one of selective mechanization with a view to optimize the use of human, animal and other sources of power. In order to meet the requirements, steps were taken to increase availability of implements, irrigation pumps, tractors, power tillers, combine harvesters and other power operated machines and also to increase the production and availability of improved animal drawn implements. Special emphasis was laid on the later as more than 70% of the farmers fall in small and, marginal category.

A research program usually concentrates on the development of equipment suitable to a given farming conditions. The objective is to improve upon the performance of indigenous implements or develop a new implement that can either enhance labor productivity or appropriately mechanize the operation where a labor or power shortage hinders completing the task in time.

### **II. MATERIAL**

1. 35\*3 mm angle
2. Nut, bolt 3 inch
3. Wiring 12 meter
4. 2 sprayer
5. Container
6. Bearings
7. GI rod coupling
8. Water tank
9. Pipe & connector
10. 3 Switch board
11. Connector
12. MCB
13. DC gear motor
14. Motor pump

15. Silicon tube
16. 70\*4 wheels

### III. APPLICATION

1. This project is mostly used in the agriculture purpose for Multipurpose operation.
2. This project is **used** to give the pesticide to vegetable.
3. This project is used for gardening purpose.

### IV. ADVANTAGES

1. It increased the productivity of the agriculture.
2. It reduced the time of sprinkler the pesticide.
3. The effort required is reduced.
4. The capacity of the project is more for handling the large quantity of pesticide.
5. Our project is mostly used in ruler areas where the electricity problem.
6. No requirement of any A, C, electrical device require to run the project.
7. Cost of our project is very less.
8. The output of our project is very large as compared to run pump. Cost of our project is very less.

### V. CONCLUSION

The concept of group project was included in our engineering syllabus with the view to inculcate within us the application ability of the theoretical concept of design and production engineering to practical problems. So also to help us to learn to work more as a team rather than an individual. In completing our project titled “AGRICULTURE SEED SOWER, WEEDER & WATER SPRAYER REPORT” as per our time estimate gives us immense pleasure and a feeling of achievement. During the course of project we encountered numerous problems which we overcame with the able guidance of our project guide. This project report presents a brief mention of our efforts. Project work has given us good exposure to the practical field which in the future is definitely going to help us.



### **ACKNOWLEDGEMENT**

We express our sincere gratitude towards the faculty members who made this project work successful. We would like to express our thanks to our guide Prof. Sachin Choure for hearted co-operation and valuable suggestions, technical guidance throughout the project work.

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