International Journal of Advance Research in Science and Engineering

Volume No. 10, Issue No. 07, July 2021

www.ijarse.com



DESIGN AND FABRICATION OF AUTOMATIC SPRAY MACHINE

Mr.Sharique Hayat¹, Rana Prithvi Singh², Ravi Kumar³, Pradeep Singh⁴, Sandeep Kumar⁵, Shariq Hussain.

HOD (Mechanical Engineering)¹, Scholar (Mechanical Engineering)^{2,3,4,5}, Buddha Institute of Technology, Gida, Gorakhpur, Utter Pradesh, India

ABSTRACT

The spraying is traditionally done by labour carrying back pack type sprayer which requires more human effort. The weeding is the generally done with the help of Bulls becomes for small and farmers. Similarly the seedsowing application is also done with the help of bulls, which laborious. So to over come the see 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. Amulti function device will come in handy that can be puttouse in different stages off arming as per requirement.

INTRODUCTION

- 1. A sprayer is a machine use to apply liquid chemicals on plants to control pest and diseases.
- 2. can also be used to apply herbicides to control weeds and to spray micronutrient to enhance the plant.
- 3. In agriculture, a sprayer is a piece of equipment that is used to apply herbicides, pesticides, and fertilizers on agriculture crops.

Project Modol



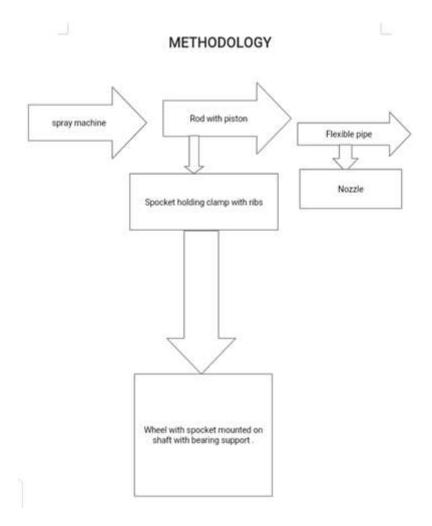
International Journal of Advance Research in Science and Engineering

Volume No. 10, Issue No. 07, July 2021

www.ijarse.com







WORKING:

The connecting link is engaged to the piston of the sprayer pump which moves forward and backward to give pump action and increase pressure inside the pump which is further used to spray the pesticide when the valve is opened on the sprayer pipe.

The sprayer pump can be just as important as the sprayer type itself as there are many sprayer pump

International Journal of Advance Research in Science and Engineering

Volume No. 10, Issue No. 07, July 2021

www.ijarse.com



design types with various construction materials, inlet/outlet sizes, and performance specifications. Commonly sprayer pump types include diaphragm, centrifugal, and roller pumps.

APPLICATION:

- 1. Agriculture
- 2. Floriculture
- 3. Horticulture
- **4.** Spraying of germicide

ADVANTAGES:

- 1. Human effort in pumping is saved.
- 2. tiresome as compared to the conventional sprayer as the tank is carried on vehicle.
- 3. the capacity of spraying. pumping outputs per rotation of crank, so tank charging is faster.

CONCLUSION

- 1. The motive behind developing this equipment is to create mechanizations which will help to minimize effort of farming.
- 2. It is suitable for the spraying at minimum costs for the farmers so that he can afford it, of the many product available.

REFERENCE:

1. Principles of applied entomology

by K N RAGUMOORTHI

M R SRINIVASAM

2. M. A. Miller, B. L. Steward, M. L. Westphalen Effects of multimode four wheel steering on sprayer Machine performance, American Society of Agricultural Engineers ISSN 0001-2351