**DESIGN AND FABRICATION OF FERTILIZER SPREADER MACHINE**

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**ABSTRACT**

A fertilizer spreader machine is a mechanical device designed to distribute fertilizer evenly across a field or garden. This machine is commonly used in agriculture to ensure that crops receive the necessary nutrients for healthy growth and a high yield. The spreader typically consists of a hopper, a spinning disc, and a spreading mechanism that distributes the fertilizer as the machine moves across the field. Some fertilizer spreaders may also include advanced features such as GPS technology to improve accuracy and efficiency. Proper use of a fertilizer spreader machine can help farmers and gardeners increase productivity and reduce costs associated with manual fertilization methods. This project report focuses on designing and developing a fertilizer spreader machine for agricultural applications. The machine is designed to distribute fertilizers evenly across a field or garden to ensure that crops receive the necessary nutrients for healthy growth and a high yield.

The report covers the various aspects of the machine, including its design, fabrication, and testing. The design phase involved developing the specifications for the machine, selecting the appropriate components, and creating a 3D model using computer-aided design software. The fabrication phase involved building the machine, including the hopper, spinning disc, and spreading mechanism. The testing phase involved evaluating the performance of the machine under various conditions, including different types of fertilizers, speeds, and terrains. The results of the testing demonstrated that the fertilizer spreader machine could distribute fertilizers evenly and efficiently and was a cost-effective alternative to manual fertilization methods. Overall, this project report provides a comprehensive overview of the design and development of a fertilizer spreader machine and its potential benefits for agricultural applications.