**A PROJECT REPORT ON FABRICATION OF MULTI NOZZLE WHEEL**

**SPRAYING IN AGRICULTURE**

**Submitted in practical fulfilment of the requirement**

**For the award of the degree of**

**Bachelor of Technology**

**In**

**MECHANICAL ENGINEERING**

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**2014-2018**

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**DEPARTMENT OF MECHANICAL ENGINEERING**

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**CERTIFICATE**

This is to certify that the project report entitled

**DESIGN AND IMPLIMENTATION OF SOLAR FERTILIZER**

**BROADCASTER**

Being submitted by

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In the Partial fulfilment of requirements for the award of BACHELOR OF TECHNOLOGY to JNTU, Anantapur. This record is a bonefide work carried out by them under my guidance and supervision. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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**Date: Examiner 1:**

**Place: Examiner 2:**

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**DECLARATION**

We declare that this written submission represents our own ideas and where other ideas or words have been included we have adequately sited and referenced and original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented any ideas or fabricated any data in our submission we understand that any violation of the above will be cause for disciplinary action by the institute and also can evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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We are greatly indebted to Mr**. K. CHIRANJEEVI REDDY**

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**ABSTRACT**

As India is agriculture based country and 70% people do farming and related work. Agriculture is required to be boomed to enhance the gross domestic product (GDP) of the country by improving the productivity.

The productivity of the crops can be increased with the help of pest control. Pesticide spraying is the necessary procedure in cultivation of the crops. The present idea deals with the designing and fabrication a pesticide sprayer which will be useful and affordable to the farmers which will assist to increase the productivity of crops.

Though this project an attempt has been done to improve the method of spraying the pesticide that will enhance the productivity and increase the formers income. So we have designed a pesticide spraying machine which will not improves productivity but also will reduce the effort of the farmers. The machine will save the time of the formers as well as efficiency in spraying. This model carrier’s multi nozzle pesticides sprayer pump which will perform spraying at maximum rate in minimum time. Constant flow valves can be applied at nozzle to have uniform nozzle pressure.

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**NOMENCLATURE**

Dp - Pitch circle diameter

Tp - Teeth on pinion

Tg - Teeth on gear

L - Length of chain

D - Diameter of wheel

K - Number of chain

P - Pressure drop

Np - Number of plants

Q - Pump discharge

k - Bending co-efficient

f - Friction factor

hfE - Loss at entry

hft - Total losses

hfo - Loss at out

Do - Outer dia of pinion

Di - Inner dia pinion

Dg - Diameter of gear

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