

PERFORMANCE ENHANCEMENT OF AGRICULTURAL SOLAR SPRAYER

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Abstract :

A pressure sprayer is a device used to spray the liquids / soluble forms (i.e.; Pesticides , fertilizers , herbicides , etc) by using the petrol engines. It is cost as much or more to purchase and also it releases very toxic gases which harmful to farmer.

So we suggest to use Solar Operated Sprayer Machine which we fabricated.

This invention is about an agricultural pesticide sprayer, which uses solar energy as source of power for spraying. It consists of a solar panel of 20 W Capacity, a 12V DC battery, charged by solar energy received by the solar panel , a DC motor , operated by the battery, a pump, to spray the pesticide and a tank to hold the pesticide in the form of solution or liquid. The entire unit is portable and is operated by a labour.

As the equipment used by other external source of power and that it is operated by the user, it reduces drudgery, is quite economical and eco-friendly as it uses solar energy which can be easily affordable by small and marginal farmers.

We Enhanced the performance of Agricultural multy-Chargeble solar sprayer.

Introduction

The applications of pesticides using spraying equipment play an important role. The chemicals are widely used for increasing agricultural production through better insect and pest management. Spraying is one of the most effective and efficient technique for applying small quantity of liquid through fine droplets to protect the crops. In India, many versions of hand operated and power operated spraying equipments are being used.

Spraying of pesticides on crops like cotton, red gram. Farmers are facing the problem of coverage of large area within a short period of time as the pest attack is serious problem and spreads quickly.