

## SOLAR POWERED KNAPSACK SPRAYER WITH TILTING ARRANGEMENT

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It is a modified battery operated sprayer which can be used in places facing long electricity power cuts, where electrically charging the battery is not possible. This innovation uses solar power to continuously charge the battery and provide a cutoff beyond a range of voltages to minimize the variation in droplet size generation. A novel feature of the sprayer is the tilting arrangement provided so that the solar panel could be given the desired inclination of  $15^{\circ}$ - $18^{\circ}$  N-S so as to maximize the catch of incident sun rays, depending on the direction of travel of the operator.

**Practical applicability** : Using this technology can result in Saving of costly pesticide, Saving of environment and Better control of insects, ultimately, resulting in reduced cost of cultivation.

**Commercial Potential** : Sprayer manufacturers, Farm implements manufacturers, private entrepreneurs, agro-industries



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