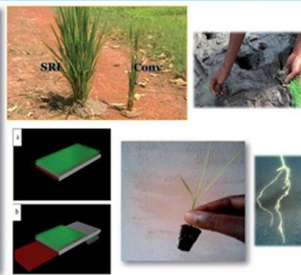
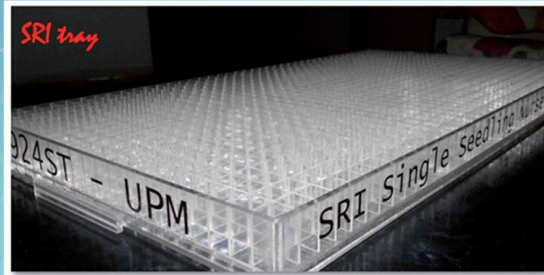




# SINGLE SEEDLING NURSERY TRAY FOR SRI PLANTING MACHINE

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## INTRODUCTION

In the rice production industry, seedling quality and transplanting skills play vital roles in promoting optimum yield. But the existing seedling raising methods remain a challenging constraint among SRI practitioners due to inaccurate mechanize adaptation of SRI planting and spacing standards. Therefore, this study was intended to develop a technique of SRI planting tray for raising seedling singly under conducive growing environment without root disturbance during field planting.

## INVENTION

The SRI single seedling nursery tray was designed to provide 924 viable seedlings for transplanting in paddy fields. Seeds were soaked and selected through a solution of 80g/L of NaCl. Seed placement in the tray was done with SRI seed picker and the most suitable gluing and dropping result was obtained at 150g/L of Tapioca (Starch) solution for placing 924 pre-germinated seeds at 100% success rate. The planting media has shown a significant influence on the growth of rice plant (seedling), whereby the mixture of soil with compost (1:1) was proved to be the best growing medium when raising rice seedling.

## BENEFITS

- Provides 942 root separated seedlings
- Serves with a seed picker
- Serves with a sliding base plate
- Reduces seedling production cost
- Low number of trays per area
- Low volume of seeds per area (4-5 kg/ha)
- No competition for water, nutrient, aeration and light
- Healthier seedlings

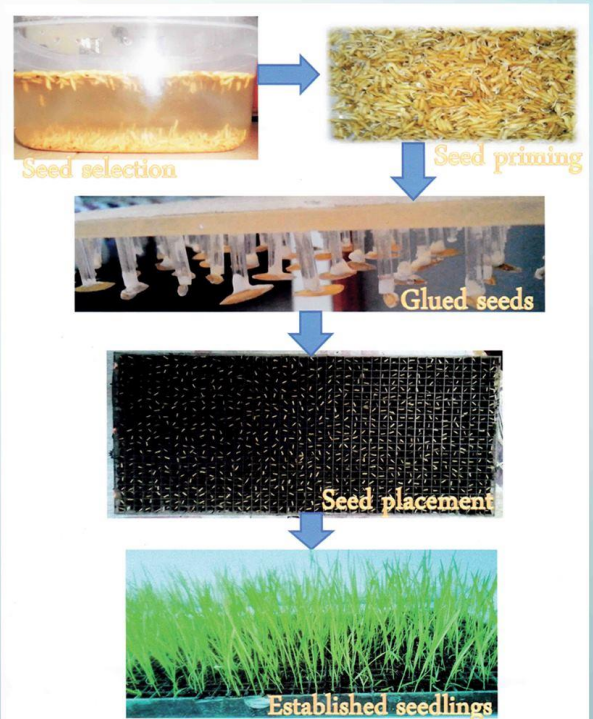
## USEFULNESS AND APPLICATION

- Potential to reduce labor
- SRI method can be adopted by many farmers
- Using SRI tray, rice planting method can be mechanized
- Increase rice yield through SRI practice

## POTENTIAL CONSUMERS

- Department of Agriculture
- Rice Granary Agencies (IADA, MADA, KEDA, KADA, KETARA)
- Agriculture industry
- Agricultural Engineering Industry
- SRI practitioners worldwide (Cambodia, Vietnam, Indonesia etc.)

## SEEDLING PREPARATION PROCEDURE



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