Innovative Method of Raising Paddy Seedlings by an Economically Viable and Ecologically Sustainable Method: A Boon to Farmers

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The farmers in the rice production area across India and Asia are very much dejected over the condition of agriculture because of the issues like poor rainfall and labor availability, which are causing the downfall of agriculture. The farmers are following the mechanized and manual rice cultivation and raising the seedlings for the rice cultivation is a big issue. Currently the farmers are using 100% soil from the field and raise the seedlings which are not healthy and takes long time (25 to 30 days) for them to get transplanted in the main field. The innovative media contains 50% of Coconut coir, 30% of pressmud from Sugarcane industry and 20% of rice husk (percent by volume), which gives high quality seedlings. The rice seedlings produced by this method takes all required nutrients for its growth from the three added components. It takes only 14 days for the seedlings to get ready for transplanting. In the new media, the seedlings need to be watered only once a day and 4.5 times lesser than the current farmer practice. It can be raised in the backyard or on the roof top and the weight of one innovative seedling mat is 50% lesser in weight than the current farmer seedling mat. It can be easily rolled up for easy transportation and the media is bio-degradable. The cost of the new media is 33% lesser than the farmers current practice per hectare. This media will be a boon to the rice farmers across the world.

Awards Won:

U.S. Agency for International Development: USAID Global Development Innovation Second Place Award of $2000

ASU Rob and Melani Walton Sustainability Solutions Service: Award of $2,500

Monsanto Company: Monsanto Award for Innovation in Plant Sciences, Award of $2,500

Sigma Xi, The Scientific Research Honor Society: First Life Science Award of $2,000