

An Ethno-Scientific Approach for Restoration of South Indian Heritage Rice Varieties

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Abstract : The South Indian peninsula has rich diversity of both heritage and conventional rice varieties. With the prime focus set on high yield and increased productivity, a number of traditional/heritage rice varieties have dwindled into the forgotten past. At present, in the face of climate change, the hybrids and conventional varieties struggle for sustainable yield. The need of copious irrigation and high nutrient inputs for the hybrids and conventional varieties have cornered the farming and research community to resort to heritage rice varieties for their sturdy survival capability. An ethno-scientific effort has been taken in the Cauvery delta tracts of South India to restore these traditional/heritage rice varieties. A closer field level performance evaluation under organic condition has been undertaken for 10 heritage rice varieties. The morpho-agronomic characterization across vegetative and reproductive stages have revealed a pattern of variation in duration, plant height, number of tillers, productive tillers, etc. The shortest duration was recorded for a variety with the vernacular name of 'Arubadaam kuruvai'. A traditional rice variety called 'Maapillai samba' is claimed to impart instant energy. The supernatant water of the overnight soaked cooked rice of Maapillai samba is a source of instant energy. The physico-chemical analysis of this variety is being explored for its instant nutritional boosting ability. Wide spectrum of nutritional characters including palatability and marketability preferences has also been analyzed for all these 10 heritage rice varieties. A 'Farmer's harvest day festival' was organized, providing opportunity for the 'Cauvery delta farmers' to identify the special features and exchange their views on these standing golden ripe paddy varieties directly. The airing of their ethnic knowledge pooled with interesting scientific investigations of these 10 rich heritage rice varieties of South India undertaken will be elaborately discussed enlightening the perspectives on the pathway of resurrection and restoration of this heritage of the past.

Keywords : biodiversity, conservation, heritage, rice, traditional, varieties

Conference Title : ICRRD 2020 : International Conference on Rice Research and Development

Conference Location : Paris, France

Conference Dates : November 19-20, 2020