

RESEARCH PAPER

Morphological characterization of major paddy cultivars in seed chain of Tamil Nadu

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Abstract : Morphological characterization of 13 paddy varieties in seed chain of Tamil Nadu were done using 31 morphological traits in a field trial carried out in Paddy Breeding Station (PBS) of Tamil Nadu Agricultural University, Coimbatore during 2011 - 2012. The results of morphological characterization clearly indicated that the plant characters showed no variation among the varieties, while the grain characters showed clear variation among the varieties. Cluster analysis based on morphological characters grouped the varieties of medium and long slender grain type in one cluster and short bold grain type into another cluster at about 65% similarity level. The similarity indices range of 0.52 to 0.90 indicated remarkable homogeneity among the rice cultivars in the present study. So advanced technologies like molecular methods can be employed for unambiguous and quick identification of similar or closely related varieties.

Key Words: Rice, Morphological, Cluster analysis, Similarity

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