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RESEARCH ARTICLE

Evaluation of morphological parameters in relation to seed yield in aromatic rice during *Kharif*

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SUMMARY

A study was undertaken to evaluate the morphological parameters, dry matter production and yield in eight aromatic rice genotypes during *Kharif* 2010-2011. The aromatic rice genotypes differed significantly with respect to plant height, number of tillers, number of leaves, root parameter (root length, root volume and root weight), area of top three leaves including flag leaf, yield and harvest index. Results on morphological characteristics measurement showed that highest plant height and lowest plant heights were recorded in genotype Chittimuthyalu and RNR 2378, respectively. Maximum number of tillers and number of leaves were recorded in genotype RNR 2354. Root parameters like root length, root volume and root weight were highest in genotype RNR 2354 and lowest in Pusa1121. Maximum combined leaf area of first three leaves from the top including flag leaf were found in genotype RNR 2354 and minimum was recorded with genotype Pusa1121. Highest dry matter and grain yield were recorded in genotype RNR 2354 and the lowest grain yield was recorded by Pusa 1121. Root volume, root weight, root length, number of leaves, number of effective tillers and flag leaf area were found positively associated with dry matter production and grain yield in aromatic rice.

Key Words : Number of tillers, Leaf number, Flag leaf area, Root parameters, Dry matter production, Yield

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