EVALUATION OF SALT TOLERANCE, YIELD AND QUALITY OF AROMATIC RICE VARIETIES (*Oryza sativa* L.) IN SOC TRANG PROVINCE

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Summary

Soc Trang province has a large area of cultivated aromatic rice in the Mekong delta. In 2016 Ke Sach, Long Phu and Tran De districts are severely affected by salinity in Soc Trang province. Therefore, the selection of good quality rice varieties adapted to local conditions is an urgent requirement. The experiment was conducted through the main contents is to determination of the varieties of salinity tolerance of in the nutrient solution to 3 conductivity levels of NaCl 8 dS/m, 10 dS/m, 12 dS/m, DNA molecular marker, soil evaluation and salinity variation combined with the comparative trials randomized complete block design (RCBD) was applied for 10 treatments with three replications at Ke Sach, Long Phu and Tran De. Other traits such as agronomic traits, yield components, quality were analyzed at the same time. In this experiment were selected RVT, OM9915, OM7347, OM6162 and OM4900 can salt tolerance at the seedling stage in nutrient solution > 8 dS/m it also had the saltol quantitative trait locus (QTL) genes related with RM8094, RM10793 on the chromosome 1; OM9915, OM7347, OM6162 were selected after testing at three places have maturity time of about 101-105 days, with the yield of 6.0-6.6 ton/ha in practical terms EC 1.37-2.33 dS/m and grain length 7.4-7.5 mm, Amylose content 9.2%-11.1%, gel consistency level 3, fragrant and have fragrant genes suitable to the practical conditions of Soc Trang province.

Keywords: *Salt tolerance, yield, quality, aromatic rice, Soc Trang province*.