SELECTION OF SALTY TOLERANT RICE VARIETIES TO BE ADAPTED TO SILINITY AREAS IN QUANG NAM PROVINCE, VIETNAM

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Summary

Field experiments were conducted over 10 salty tolerance rice varieties, designed in randomized complete block (RCB), 3 replicates in summer-autumn 2012 and winter-spring 2012 - 2013 seasons in Duy Xuyen district, Quang Nam province in order to identify rice varieties which have short growth duration, high yield, good quality, pest resistance and good adaptation to local salinity conditions. The results indicated that most of tested salt-tolerant rice varieties had short and medium growth duration (95 -108 days in summer - autumn and 110 – 120 days in winter - spring seasons), while the control variety (Xi23) was medium and long duration (116 days in summer-autumn and 128 days in winter-spring seasons). There were three varieties, namely OM8104, MNR3 and CM2 had many good parameters such as: short plant, short growth duration, high and concentrated tillering, good morphological criteria, pest resistance, salt tolerance and high dry matter. The varieties attain high grain yield in both seasons such as: OM8104 attain 4.38 tons/ha in Summer-Autumn 2012 and 8.69 tons/ha in Winter-Spring 2012 – 2013 seasons, MNR3 attain 4.20 tons/ha and 8.23 tons/ha and CM2 attain 4.04 tons/ha and 8.64 tons/ha. Moreover, OM8104 and MNR3 varieties were good commercial criteria and good quality. As results, OM8104 and MNR3 varieties need to conduct on-farm productive trials in different saline areas in order to early incorporate into the rice variety structure of Quang Nam province.

Key words: Climate change, high yield, Quang Nam, salty tolerant rice variety, salinity.