MOLECULAR MAPPING FOR SALINITY TOLERANCE IN RICE

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It is estimated that saline soils cover from 400 to 950 million hectares of Earth’s surface. Accumulation of salt in the soil causes deleterious effects and leads to a reduction in plant production. Improvement of salt tolerance is one of the most important objectives of rice breeding programs in coastal areas. The broad aim of the current study is the identification of genes for salt tolerance in rice in order to develop salt tolerance genotypes. 300 genotypes were randomly chosen in a F2 population from the cross(TCCP266-1-2 x Giza177) (TCCP266-1-2 = Indica Tolerant variety) (Giza177=Japonica Sensitive variety) and grown in summer 2006 to produce F3 seeds. DNA was extracted from each of the F2 and used to construct a linkage map, using 185 out of 272 SSR markers that showed polymorphism between the two parental genotypes. Plots of F3 plants are presently in the field for phenotyping.