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FINE QTLs MAPPING FOR SALINITY TOLERANCE IN RICE

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Rice (Oryza sativa) is one of the agronomically and nutritionally important cereal crops. It is a major source of food for more than 2.7 billion people on a daily basis and is planted on about onetenth of the earth's arable land. Soil salinity is considered one of the major and widespread abiotic stresses, limiting rice production worldwide. A project aiming to identify chromosomal regions associated salinity tolerance is being carried out. A total of nine rice genotypes, including three Egyptian and six introduced varieties having three different degrees of salinity tolerance (tolerant, moderate and sensitive) are being used. DNA polymorphism (SSR) among genotypes, differing in salt tolerance, was assessed. A total of 272 SSR primer pairs covering the whole rice genome were used. Results indicated that 80% of the all tested primers showed polymorphic pattern among these genotypes. The number of alleles ranged from two with RM 428 to six with RM 206 primers. F2 plants are being grown to perform the phenotypic and genotypic characterisation.