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Survey and Screening of Quantitative Trait Loci (QTL) Associated with Early Stage Cold Tolerance in Different Genotypes of Rice (*Oryza sativa L*.)

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Abstract: A study was conducted in 2013-14 to survey 37 QTLs using 84 SSR markers and have screened 14 QTLs, which are strongly associated with development of early stage cold tolerance in rice. Out of 52 rice genotypes studied, 13 genotypes had shown higher ability to overcome the cold stress and BR-11 which had shown presence of five QTLs. Out of 14 screened QTL, qCSH2 was present in five genotypes and contribute 16.6 per cent to cold stress tolerance.

Keywords: Rice, Cold tolerance, Germination, Screening, SSR, QTLs