
Markers associated with a QTL for grain yield in wheat under drought

F. M. Kirigwi

gains due to the harsh agricultural conditions (Lantican et al. 2002). By 2020, demand for wheat in marginal environments will rise 40% over current levels (Rosegrant et al. 2001), a demand unlikely to be met unless wheat productivity in these environments is increased (Lantican et al. 2002).

It is difficult to make progress for grain yield and yield components under drought as they are complex characters that are influenced by environmental factors and are characterized by low heritabilities and large genotype · environment interactions under drought conditions (Smith et al. 1990). Molecular markers associated with quantitative trait loci (QTL)

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polymorphism between Dharwar Dry and Sitta was lower than expected, given the origins of the cultivars. The Dharwar Dry/Sitta cross consists of tolerant to

of studies as undue influence of plants with extreme phenological characteristics can be mitigated. The remaining variability represents the useful variation available to the breeder for practical plant improvement. Additionally, procurement of good phenotypic data for traits such as drought tolerance is far more difficult to develop compared to the creation of genetic maps. The presence of a high quality set of phenotypic data far outweighed any slight potential disadvantages associated with population structure. disadvantages a0es

map to this region of wheat chromosome 4AL but are

