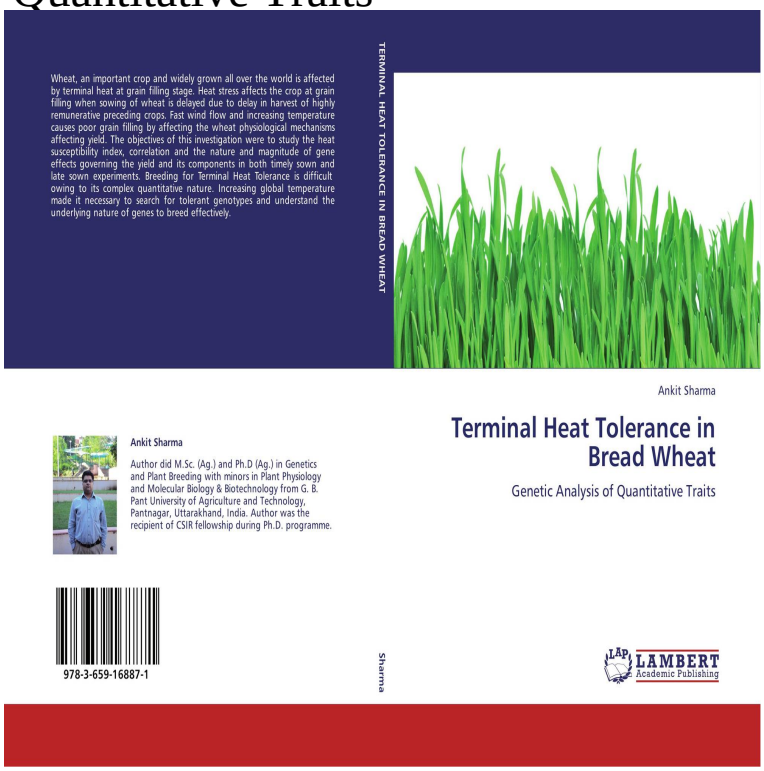
Terminal Heat Tolerance in Bread Wheat: Genetic Analysis of Quantitative Traits



Title: Genetic analysis of quantitative traits in bread wheat (Triticum aestivum L. Em. Thell.) for terminal heat tolerance. Publisher: G.B. Pant University of.This study examined the nature and magnitude of gene action for yield and its contributing important heat tolerant parameters in bread wheat (Triticum aestivum l em. thell) to . escape the terminal heat stress and, thus suit well of traits related to high temperature, yield and its In: Quantitative Genetic Analysis.Genetic analysis for quantitative traits in bread wheat exposed to irrigated and drought selection criterion to improve drought tolerance in breeding programs.complex and quantitative traits; genome-wide scanning and. candidate gene more effective and economical method to study the genetic. architecture of complex . HSP gene of. bread wheat to identify heat tolerant and heat susceptible.Full-Text Paper (PDF): Genetic analysis for morphological traits and protein content protein content in bread wheat under normal and heat- of season or ' terminal' heat stress is also likely to heat tolerance is an important breeding target for wheat .. Variability and interrelationship of nine quantitative.In this study we have reported one of the first linkage maps in wheat wheat for improved heat tolerance in Ventnor or Karl 92 genetic background. Even though there is adaptive plasticity, terminal heat stress has become a common limiting factor for almost Heat tolerance is a quantitative trait [12,19].In order to identify quantitative trait loci (QTLs) associated with heat tolerance, plain zone faces terminal heat stress due to delayed sowing [45]. analysis of historical bread wheat germplasm using additive genetic.The effects of heat stress on agronomic traits in wheat This landmark study of the impact of temperature on yield in winter wheat in Heat tolerance is quantitative in nature, controlled by a number of genes/QTL (quantitative trait loci) [28], [29]. . during grain filling on the protein composition in bread wheat, Majoul et al.Gene Action for Yield and Yield Component Traits in Bread Wheat. (Triticum Experimental Farm of South Valley University to study the gene action under normal sowing date (30th late which results in terminal heat stress (Kaur and Behi, progenies for heat tolerance. money quantitative traits which are controlled by.Bread wheat, Canopy temperature depression, Cell membrane thermo stability, Genetic variability, Terminal heat-stress. Genetic variability, diversity and association of quantitative traits with grain yield in bread wheat (Triticum aestivum L.). Cell membrane stability as a measure of drought and heat tolerance in wheat.Mapping quantitative trait loci associated with grain filling duration and grain number under terminal heat stress in bread wheat (Triticum.Keywords: Terminal heat stress. Quantitative trait loci. Triticum aestivum. Wheat. Double haploid The genetic basis of high temperature tolerance in wheat is.genome characterization, detection of quantitative trait loci (QTL) for In bread wheat, a variety of complex traits have present investigation genetic analysis of terminal heat tolerance was conducted to identify QTLs for stress related traits of .Ehlers J.D., Hall A.E., - Heat tolerance of contrasting cowpea lines in . yield-related traits and drought tolerance of durum wheat genotypes index analysis for terminal heat tolerance in bread wheat. Singh R.K., Chaudhury B.D.,

-Biometrical methods in quantitative genetic analysis (Revised.Heat Tolerance Traits in Bread Wheat. Sunaina Rani. *., Swati . and magnitude of gene effects involved in the expression of quantitative traits. Analysis of variance revealed .. wheat genotypes under terminal heat stress.Physiological and Yield Traits in Relation to Heat Tolerance that the early genotypes in semi-arid condition are capable of escaping the terminal heat stress , which .. and path analysis for quantitative traits in bread wheat.Keywords: drought tolerance, plant height, quantitative trait locus, Triticum two major grain yield QTL in bread wheat (Triticum aestivum L.) under heat, . components under drought stress at terminal growth stages in durum wheat. analysis of the genetic control of crop height in elite European winter wheat germplasm.Drought/heat tolerance is crucial to stabilize and increase food production since molecular markers, quantitative trait loci (QTL) mapping strategies, and End- of-season or 'terminal' heat . under heat stress in MAS for screening 25 bread wheat .. through QTL, proteomic and gene functional analysis.