



Studies on the Genetic Basis for Thermotolerance

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Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Basics, Genetic Screen for Thermotolerance, Thermotolerance in Transgenic Line | Vast tracts of land are available for arable food production which is especially located in arid regions. For crops they will need to show improved drought tolerance and thermotolerance. There are two approaches were used to identify the genetic basis for improved thermotolerance. In one set of approaches a gain-of-function heat stress screen was performed on a collection of Activation Tagged lines. Three mutants have been isolated; in subsequent generations one of the lines developed a hypersensitive phenotype, another reverted to wild type, whilst the third retained its thermotolerant phenotype. In the other set of approaches transgenic lines carrying a construct designed to constitutively express a MYB transcription factor were characterized. This MYB has been shown to confer salinity tolerance. Quantitative PCR demonstrated the expression of some response genes in the transgenic lines. These transgenic lines were shown to have an improved thermotolerance. This studies should provide strong preliminary pictures on the genetic engineering for thermotolerance and should be especially useful to research and academic player in plant science field. | Format: Paperback | Language/Sprache: english | 128 pp.



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Reviews

This book will never be straightforward to start on looking at but extremely exciting to read. I actually have read through and that i am sure that i am going to gonna go through once more again in the future. I am happy to explain how this is the very best book i have read through in my individual lifestyle and may be he best publication for at any time.

-- **Estrella Howe DVM**

This type of publication is almost everything and helped me looking forward and much more. I am quite late in start reading this one, but better then never. You wont really feel monotony at whenever you want of your own time (that's what catalogs are for relating to if you ask me).

-- **Prof. Buddy Leuschke**