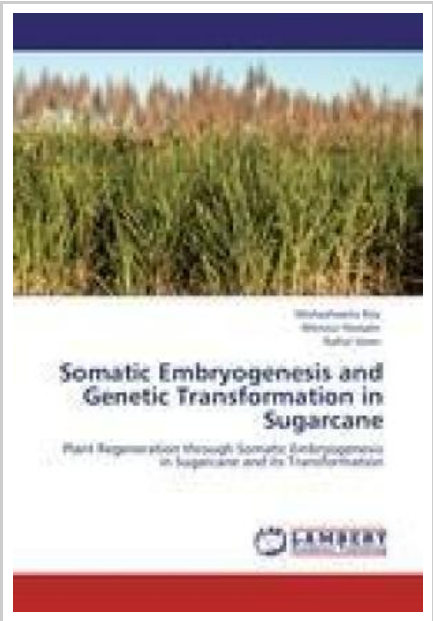

Somatic Embryogenesis and Genetic Transformation in Sugarcane

By Mohashweta Roy

LAP Lambert Academic Publishing Jun 2012, 2012. Taschenbuch. Book Condition: Neu. 220x150x10 mm. This item is printed on demand - Print on Demand Neuware - An efficient protocol for somatic embryogenesis and subsequent plant regeneration was developed for sugarcane variety Isd-16 using leaf sheath explants of 3, 6 and 12-months-old field grown plants. Explants from 6-month-old plant showed the best response and produced highest percentage of calli on MS + 3.0 mg/l 2,4-D. L-proline 25mg/l significantly enhanced somatic embryogenesis. The embryos germinated well on half-strength MS and developed into plantlets. Somatic embryo derived plants under field condition showed considerable variation in morphological, agronomical and biochemical characters. For genetic transformation the calli were co-cultivated with A. tumefaciens strain LBA4404 harboring a binary plasmid pCAMBIA1303 containing hpt (hygromycin phosphotransferase) gene as a selectable marker and a -glucuronidase (gus) reporter gene in the T-DNA region. The transient expression of gus in hygromycin resistant calli and regenerated plants was confirmed by GUS flurometric assay. PCR analysis of genomic DNA from regenerated plants revealed that the hpt gene was integrated in the transgenic plants. 164 pp. Englisch.

Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehended everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

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Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

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