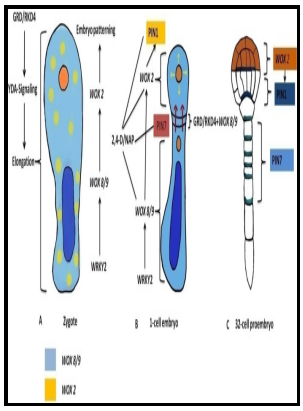
Molecular aspects of direct somatic embryogenesis in alfalfa (medicago)

De Montfort University - Characterization of somatic embryogenesis



Description: -
-Molecular aspects of direct somatic embryogenesis in alfalfa (medicago)
-Molecular aspects of direct somatic embryogenesis in alfalfa (medicago)
Notes: Thesis (Ph.D.) - De Montfort University, Leicester 1996.
This edition was published in 1996

Tags: #Changes #in #protein #pattern #during #different #developmental #stages #of #somatic #embryos #in #chickpea, #Biologia #Plantarum

CAB Direct

First of all, our results of RNA-seq revealed significant difference of plant transcriptomes for the four alfalfa cultivars each inoculated with two rhizobial strains in comparison. The Plant Journal, 22, 531-541. Then, we compared to down-regulated genes and found that they shared 2581 genes lower panel of Fig.

Journal: Physiology and molecular biology of plants / Publication Year: 2018 / Source: 2018 v.24 no.2

Plant Cell 5: 1411—1423 1993. Effective one- and two-cultivar specificity biotypes E1 vs. The developmental program of such meristematic cells can then be redirected to form somatic embryos, depending on the imposed culture environment.

Agronomically adapted alfalfa plants with high levels of somatic embryogenesis

The kinase assays were performed as described in Materials and methods. Alfalfa regeneration is mainly based on somatic embryogenesis and few studies have reported regeneration of alfalfa via organogenesis. Example 4 New Alfalfa Genotype with Improved Somatic Embryogenesis and Reduced Leaf Senescence Transgene PSAG12-IPT ipt, a cytokinin biosynthetic gene from Agrobacterium tumefaciens, under the control of the promoter from a senescence-associated gene SAG12 can be introduced into leaf or petiole cells of the newly-developed alfalfa clones CW-R97-037-001 and CW-R97-037-005 by Agrobacterium-mediated transformation.

Plant transcriptome analysis reveals specific molecular interactions between alfalfa and its rhizobial symbionts below the species level

The second generation of in vitro tissue-culture induced seedlings of E.

Molecular Biology of Somatic Embryogenesis

The functional annotation and pathway assignment based on GO and KEGG revealed high diversity of functional proteins and metabolic pathways

in M. Tissue was incubated under optimum conditions of enzymatic degradtion 6 h. The presence and stable integration of transgenes in recovered plants were confirmed by polymerase chain reaction using transgene-specific primers and Southern blot hybridization using the npt II gene probe.

Molecular Biology of Somatic Embryogenesis

Breeders have had less success in breeding for yield and quality per se see, e. In somatic asexual embryogenesis, embryo-like structures, which can develop into whole plants in a way analogous to zygotic embryos, are formed from somatic tissues. Interestingly, several abscisic acid activated genes such as annexin, ferritin and aldose reductase were identified in a cDNA library from alfalfa cells exposed to embryogenic induction.

Recent Progress of Transgenic Technology Development for Alfalfa

The identity of the construct was confirmed by sequencing. As demonstrated by this review, there is a real need for alfalfa plants that combine adaptation, productivity, winterhardiness, and disease resistance with high levels of somatic embryogenesis.

Related Books

- Foldable intraocular lenses
- Media, culture and society in Malaysia
- Essays on photography - the unknown Conan Doyle
- Carry on - reflections from a war
- Narcotráfico - amenaza al crecimiento sostenible del Perú : estudios sobre coca, cocaína, seguridad