



Hongos endófitos: ventajas adaptativas que habitan en el interior de las plantas [

2006

text (article)

Analítica

Endophytic fungi often develop a systemic and mutually beneficial association with their hosts. A wide range of economically important plants have been reported to harbor endophytes. In these symbiotic mutualisms, both host and symbiont gain benefits from the association. The fungus obtains nutrients from its host and in return it provides protection from abiotic (environmental stresses) and biotic stresses (pest and insect attacks) to its host plant. Endophytes have been shown to confer enhanced fitness to their hosts such as enhanced tillering, drought tolerance, root growth, overall enhanced plant growth. This work describes the detection, isolation and genetic transformation of an endophytic fungus, *Acremonium implicatum*, from *Brachiaria brizantha* accession CIAT 6780. The results open possibilities for exploiting the qualities of an introduced gene as a reporter and study the interactions between *A. implicatum* and its host *Brachiaria*. Furthermore, it also provides options to use a transformed *A. implicatum* as a vehicle for production and delivery of gene products of agronomic interest into the host plant in order to enhance protective benefits and other traits of agronomic importance that will contribute to improved plant productivity. Key words: genetic transformation, gene reporter, green fluorescent protein (GFP), plant-endophyte interaction.

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Editorial: 2006

Tipo Audiovisual: genetic transformation gene reporter green fluorescent protein (GFP) plant-endophyte interaction Transformación genética Gen reportero Proteína verde fluorescente (GFP) Interacción planta-endófito

Documento fuente: Revista Corpoica: Ciencia y Tecnología Agropecuaria, ISSN 0122-8706, Vol. 7, Nº. 2, 2006, pags. 55-57

Nota general: application/pdf

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Lengua: Spanish

Enlace a fuente de información: Revista Corpoica: Ciencia y Tecnología Agropecuaria, ISSN 0122-8706, Vol. 7, Nº. 2, 2006, pags. 55-57

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