

형질전환 벼에서 Cyanobacterial Sucrose-Phosphate Synthase 유전자의 발현

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Sucrose-phosphate synthase (SPS) is a key regulatory enzyme in sucrose synthesis. To investigate the role of SPS in carbon partitioning, we produced transgenic rice plants overexpressing a cyanobacterial SPS from *Synechocystis* sp. PCC 6803. The gene was expressed under the control of the maize Ubil promoter in transgenic plants. Southern and Northern blot analyses confirmed the integration and the expression of the transgene in four transgenic rice lines. All of the four transgenic lines analyzed showed abnormal vegetative and reproductive developments. Analysis of SPS activities and primary metabolites in the transgenic rice plants will be presented.