

Molecular Breeding R.G., BioGreen 21 Program, RDA (Ramada Plaza Jeju, November 2-3, 2005)

과제 일련번호: 25

## Development of transgenic potato plants with enhanced tolerance to environmental stresses

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*Arabidopsis SIK* (*Stress Inducible Kinase, AtSIK*) is known to function as a negative regulator of osmotic stress signaling in plants and also induced by various environmental stresses. In order to see the function of the *AtSIK* gene in transgenic potato plants, the *AtSIK* gene under the control of dual CaMV35S promoter was introduced into a potato cultivar (*Solanum tuberosum* L. cv. Taedong) using an *Agrobacterium*-mediated transformation system. Putative transgenic plants were selected from MS medium containing 50 mg/L kanamycin and confirmed by both PCR and RT-PCR. These results showed the *AtSIK* gene was successfully introduced into potato plants. These transgenic potato plants will be further used to analyze the levels of tolerance to various environmental stresses compared to non-transgenic potato plants.

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† 주관과제명 (과제책임자): 형질전환 기술을 이용한 수분 stress 저항성 감자 품종 개발  
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‡ 총연구기간 (년차): 2003년 - 2005년 (3년차)