PB-19

Integration Sites Analysis of *PsGPD* Transgenic Rice with Enhances Tolerance to Salt Stress

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Climate change caused by global warming is expected to cause serious damage to agricultural productivity and movement of cultivated land. Salt stress is particularly an important abiotic stress that seriously affects plant growth and development. Transgenic potatoes expressing glyceraldehyde-3-phosphate dehydrogenase (GPD), isolated from *Pleurotus sajor-caju*, had increased tolerance to salt stress.

We transformed rice with *PsGPD* using Agrobacterium-mediated transformation. We advanced generation of *PsGPD* homozyous lines of independent transgenic rice that were selected single-copy/intergenic line. The transgenic lines showed that average survival rates improved compared to wild-type plants after re-watering.

Molecular characterization of Integration site analysis is essential for safety assessment and labeling of genetically modified organism (GMO). We confirmed Insertion sites and flanking sequences by adapter ligation PCR. Identification of genomic insertion sites of *PsGPD* transgene is useful for the biosafety assessment

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