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Additional Information

**Biotechnology for abiotic tolerance and nutritional improvement in selected genotypes of
Solanum melongena and *Cucurbita moschata***

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Tolerances to biotic and abiotic stresses as well as improving crop nutritional value are currently considered main breeding objectives. The goal of this work is to introduce the *BvSAT* gene that codifies a serine acetyl transferase, one of the enzymes responsible for the biosynthesis of the essential aminoacids cysteine and methionine, in selected genotypes. Concretely, into a genotype of *Solanum melongena* previously selected for its *Meloidogyne incognita* tolerance, and into a *Cucurbita moschata* genotype selected for its tolerance to viruses and fungi, and for its fruit quality. This gene has been also related to abiotic stress tolerance. The high influence of genotype on regeneration makes necessary to optimize the transformation protocols for each genotype of interest. We have developed two protocols that have permitted to regenerate transgenic plants from *Agrobacterium tumefaciens* infected explants. Twelve plants of eggplant and six plants of *C. moschata* were successfully grown under selective conditions. Insertion of *BvSAT* gene was confirmed by PCR in these first isolated plants. Evaluation of these materials is underway and may confirm if the introduced gene increases the value of these genotypes.

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