

## **Towards obtaining waxy cassava (*Manihot esculenta* Crantz) by silencing the GBSSI gene**

Starch is a polymer of glucose molecules that can appear as linear or ramified chains. The formers are known as amylose and the latter amylopectin. Starch with 100% amylopectin is the raw material essential to produce adhesives, foods, fabrics and papers among other goods. We developed a genetic construct carrying the gene GBSSI from cassava in sense and antisense orientation, which was then transformed back into the same plant to silence this gene. All constructs were confirmed by sequencing and they were introduced into the cultivar TMS60444, from which plants were regenerated and transferred to the field. These TMS60444 plants expressed the scorable gene gus, and integration of the hptII gene was confirmed with RealTime PCR. For other cultivars like CM3306-4 y MCol2215 we have still to confirm the transgenic status of the regenerated plants. Confirmation of silencing of GBSSI is underway after the plants produce roots and bulking starts on them.

**Keywords:** Starch, silencing, GBSSI, amylose, amylopectin

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