

BESC - A Laccase enzyme regulating cell wall biosynthesis and recalcitrance in Populus

Disclosure Number

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Technology Summary

This gene is a key regulator of plant cell wall biosynthesis. Change in the expression level of this gene in Populus plants will result in altered cell wall chemistry. Specifically, manipulation of the expression level of this gene can lead to a change in the S/G lignin ratio in Populus plants and in increase in %C6 sugar release. This will facilitate more efficient conversion of biomass to sugar monomers during the fermentation process and lead to a desirable conversion rate of cellulosic ethanol.

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