

BESC - A heavy metal transporter enhancing woody quality for biofuels production

Disclosure Number

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Technology Summary

The gene, a heavy metal transporter, can be used to (i) alter glucose and xylose release, (ii) alter syringyl to guaiacyl ratio in cell walls (iii) manipulate cellulose fiber extension, cell death, lignin content, and secondary cell wall formation, (iv) alter hexose and pentose sugar composition in the cell wall for biofuel production, (v) enhance resistance to pests and pathogens (vi) enhance plant growth, and the promoter associated with this gene can be used for tissue specific gene expression.

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