

Supplementary Material

Optimization of Yeast, Sugar and Nutrient Concentrations for High Ethanol Production Rate Using Industrial Sugar Beet Molasses and Response Surface Methodology

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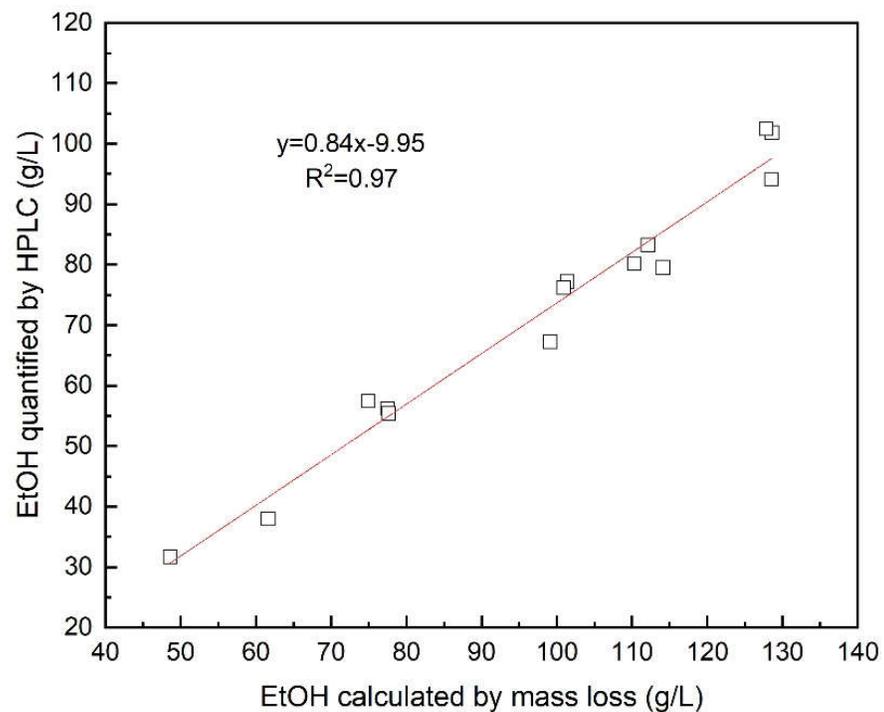


Figure S1. Linear regression between experimental ethanol concentrations calculated by mass loss and quantified by HPLC.

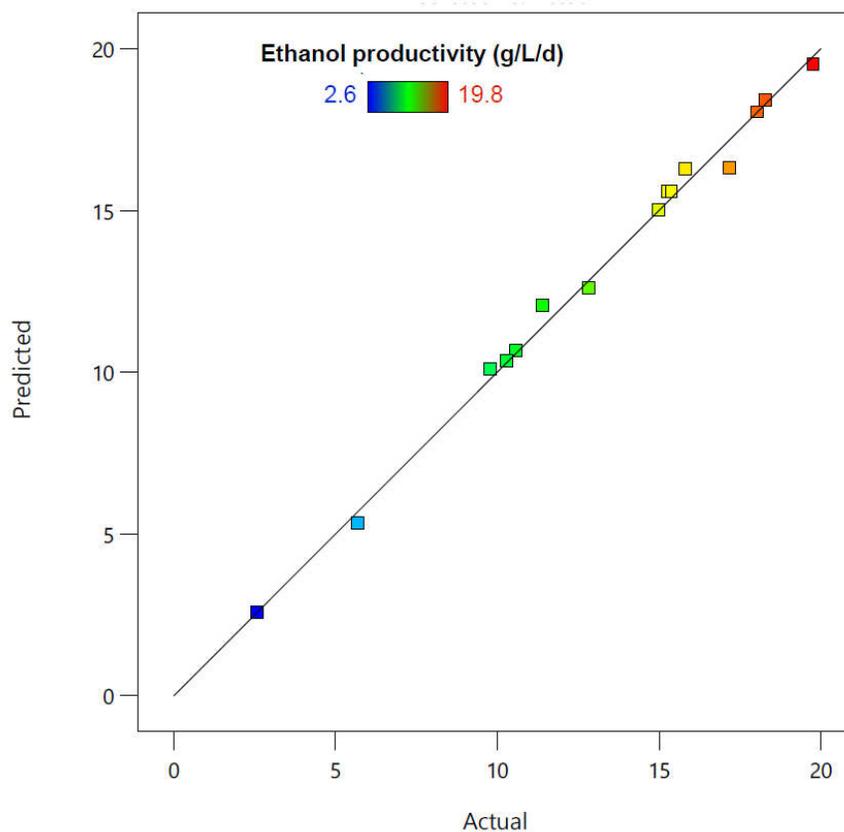


Figure S2. “Predicted versus obtained” analysis of the ethanol productivity values generated through the CCD-RSM. The color scale refers to the ethanol productivity values ranging from 2.6 (blue) to 19.8 (red) g/L/d as described in the figure caption.

Table S1. Fermentation performances of the confirmation experiments designed during the process optimization.

Parameter	Scenario A	Scenario B
Final ethanol concentration (g/L)	80.2 ± 0.9	86.0 ± 1.4
Ethanol yield (%)	88.5 ± 1.0	94.9 ± 1.6
Experimental productivity (g/L/d)	19.5 ± 0.2	21.0 ± 0.3
Predicted productivity (g/L/d)	19.8	18.6
Error (%)	1.5	12.9