Supplemented Table S1. Concentration of sugars and inhibitors in sugarcane bagasse hydrolysate

Compounds		**Concentration (g/L)**
Sugars	Total sugar	20.2 ± 3.12[c]
	Xylose	17.15 ± 0.15[a]
	Glucose	1.87 ± 0.08[cd]
	Arabinose	3.14 ± 0.094[b]
Inhibitors	Acetic acid	1.06 ± 0.03[ac]
	Furfural	0.27 ± 0.015[b]
	HMF	0.09 ± 0.004[ac]

[abcd] the mean values bearing different letters within the same column are significantly different at the level $p < 0.05$ using Duncan's multiple range test.

Supplemented Table S2. Matrix design for experimental and predicted values of efficiency of ethanol production (after Plackett-Burman) from SCB using *M. guilliermondii* H1 at 40 °C for 48 h

	Independent variables								Ethanol concentration (g/L)	
Run	A	B	C	D	E	F	G	H	actual	predict
1	3	20	0.05	0.2	0.5	3	4	0.3	6.36 ± 0.07a	6.40
2	0.1	40	0.05	0.2	0.1	0.3	4	3	8.87 ± 0.055bc	9.02
3	3	40	0.01	2	0.5	0.3	4	3	9.48 ± 0.072b	9.66
4	3	20	0.01	2	0.1	3	4	3	6.79 ± 0.063ac	6.61
5	0.1	20	0.05	2	0.5	0.3	6	3	7.71 ± 0.1c	7.42
6	3	20	0.05	2	0.1	0.3	6	0.3	7.82 ± 0.075ab	8.11
7	3	40	0.01	0.2	0.5	0.3	6	0.3	10.15 ± 0.11b	9.97
8	0.1	40	0.01	2	0.1	3	6	0.3	9.08 ± 0.085a	9.12
9	0.1	20	0.01	0.2	0.1	0.3	4	0.3	5.17 ± 0.04c	5.02
10	0.1	20	0.01	0.2	0.5	3	6	3	5.96 ± 0.051bd	6.25
11	3	40	0.05	0.2	0.1	3	6	3	11.08 ± 0.094a	10.93
12	0.1	40	0.05	2	0.5	3	4	0.3	8.62 ± 0.037cd	8.58

A: NH_4SO_4 (g/L); B: Substrate concentration (g/L); C: $ZnSO_4.7H_2O$ (g/L); D: $MgSO_4.7H_2O$ (g/L); E: $MnSO_4.H_2O$ (g/L); F: KH_2PO_4 (g/L); G: pH; H: $CaCl_2.2H_2O$ (g/L)

[abcd] the mean values bearing different letters within the same column are significantly different at the level $p < 0.05$ using Duncan's multiple range test.

Supplemented Table S3. Matrix design for experimental and predicted values of efficiency of ethanol production (after Box-Behnken) from SCB using *M. guilliermondii* H1 at 40 °C for 48 h.

Run	A:$(NH_4)_2SO_4$ (g/L)	B:Substrate concentration (g/L)	C:pH	Ethanol concentration (P, g/L)	
				actual	predicted
1	0.1	30	4	6.99 ± 0.066a	7.04
2	1.55	20	6	7.85 ± 0.048bc	7.83
3	1.55	40	6	11.12 ± 0.087ac	11.15
4	1.55	30	5	10.27 ± 0.082b	10.28
5	3	30	6	10.48 ± 0.054bc	10.43
6	1.55	30	5	10.22 ± 0.049a	10.28
7	1.55	20	4	6.35 ± 0.033c	6.32
8	0.1	30	6	8.63 ± 0.065c	8.67
9	1.55	30	5	10.34 ± 0.086ac	10.28
10	3	40	5	10.85 ± 0.093ab	10.86
11	1.55	40	4	8.87 ± 0.061a	8.89
12	3	20	5	7.64 ± 0.043d	7.71
13	0.1	40	5	9.22 ± 0.065ac	9.15
14	0.1	20	5	6.41 ± 0.034cd	6.40
15	1.55	30	5	10.3 ± 0.057d	10.28
16	3	30	4	8.33 ± 0.029bd	8.29
17	1.55	30	5	10.26 ± 0.064ae	10.28

[abcde] the mean values bearing different letters within the same column are significantly different at the level $p < 0.05$ using Duncan's multiple range test.