

Supplementary material

Table 1S. Factorial design ANOVA results for BSG concentration and nitrogen source effect on enzyme activities at days 10 and 12 of culture with *Penicillium* sp. HC1

Factor	Endoglucanases (UL ⁻¹)		Cellobiohydrolases (UL ⁻¹)		β-glucosidases (UL ⁻¹)		Xylanases (UL ⁻¹)	
	F value	P value	F value	P value	F value	P value	F value	P value
Day 10								
A	903.9	< 0.0001	13.8	0.0002	387.3	< 0.0001	551.4	<0.0001
B	277.5	< 0.0001	61.9	< 0.0001	119.9	< 0.0001	283.5	<0.0001
A*B	175.7	< 0.0001	7.2	0.0012	41.6	< 0.0001	300.8	<0.0001
Model	383.2	< 0.0001	22.5	< 0.0001	147.6	< 0.0001	359.1	<0.0001
R ²	0.9942		0.9092		0.9850		0.9938	
adjusted R ²	0.9916		0.8689		0.9783		0.9910	
Adeq	55.501		15.132		33.225		46.091	
Prec								
Day 12								
A	377.0	<0.0001	38.63	<0.0001	619.08	<0.0001	85.19	<0.0001
B	238.4	<0.0001	252.17	<0.0001	283.45	<0.0001	24.65	<0.0001
A*B	218.3	<0.0001	53.26	<0.0001	64.69	<0.0001	88.20	<0.0001
Modelo	263.0	<0.0001	99.33	<0.0001	257.98	<0.0001	71.56	<0.0001
R ²	0.9915		0.9779		0.9914		0.9695	
adjusted R ²	0.9877		0.9680		0.9875		0.9560	
Adeq	52.229		26.540		41.715		26.538	
Prec								

A = BSG %(w/v)

B = Nitrogen source

Table 2S. ANOVA for reducing sugars as a function of independent variables 6 h of process.

Source	Mean Square	F value	p-value (Prob>F)
Model	120.69	182.82	< 0.0001
A- Xylanases dosage (U g ⁻¹)	7.70	58.32	< 0.0001
B- BSG % (w/v)	109.88	832.19	< 0.0001
AB	2.24	16.97	0.0004
A ²	0.42	3.15	0.0889
B ²	0.82	6.19	0.0205
Residual	3.04		
Lack of Fit	1.17	4.17	
Pure error	1.87		
Cor Total	123.73		
R ²	0.98		
R ² Adj	0.97		
R ² Pred	0.96		
Adeq Precision	36.85		

p-value <0.05 indicate model terms are significant.