Supplementary Material

Characterization of Bacterial Cellulose Produced by *Komagataeibacter maltaceti* P285 Isolated from Contaminated Honey Wine

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Legends of Supplementary Figures and Tables

Supplementary Figure S1. Final media pH of HS broth cultivated by *K. maltaceti* P285, *K. pomaceti* O277 and *K. nataicola* TISTR 975 and incubated at different temperatures for 7 days (A). (B) Final media pH of culture broth after cultivation in HS broth with varying initial media pH and incubated at 30°C for 7 days.

Supplementary Figure S2. Final media pH of modified MSM with varying carbon sources; citric acid (A), ethanol (B), glucose (C) and sucrose (D) cultivated by *K. maltaceti* P285, *K. pomaceti* O277 and *K. nataicola* TISTR 975 and incubated at 30°C for 7 days.

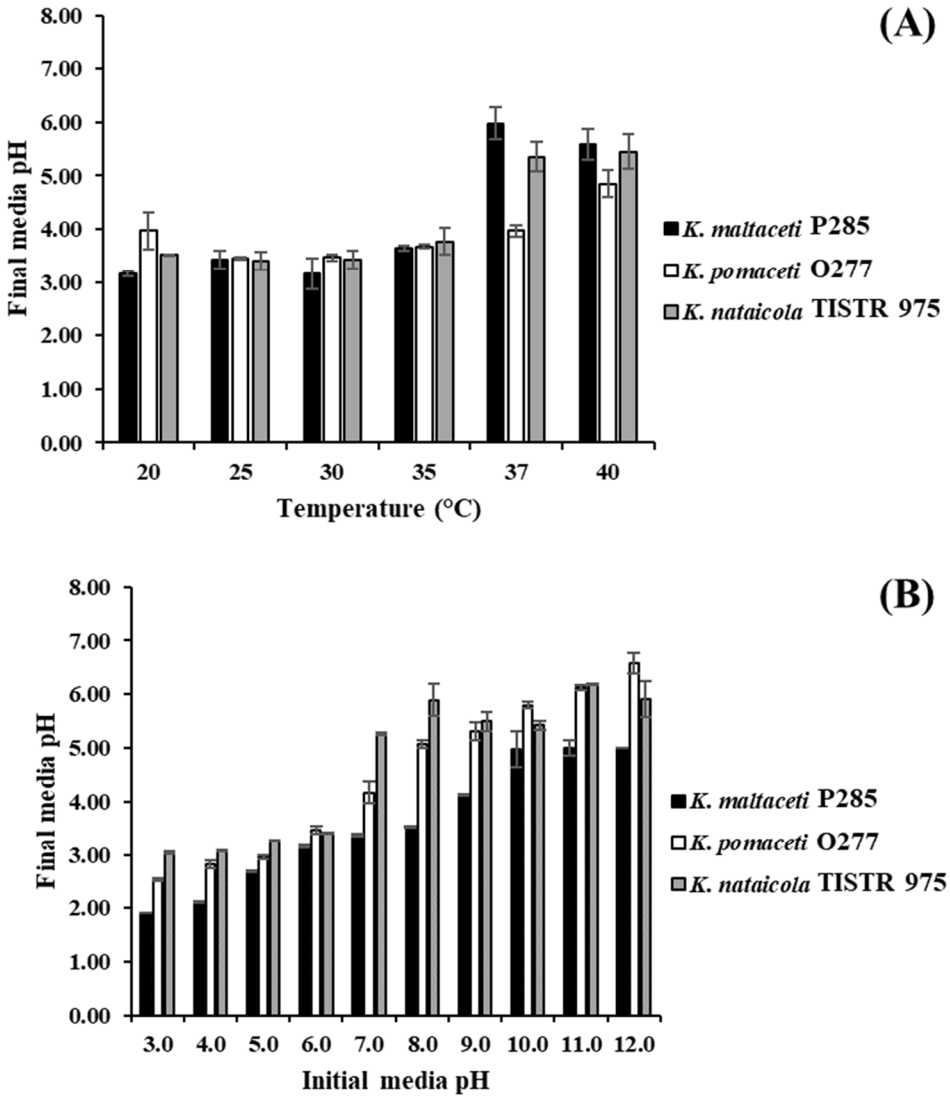
Supplementary Figure S3. Final media pH of modified MSM with different nitrogen sources; peptone (A), yeast extract (B), $(NH_4)_2HPO_4$ (C) and $NaNO_3$ (D) cultivated by *K. maltaceti* P285, *K. pomaceti* O277 and *K. nataicola* TISTR 975 and incubated at 30°C for 7 days.

Supplementary Figure S4. Final media pH of sugarcane (A) and honey (B) solutions when cultivated by *K. maltaceti* P285, *K. pomaceti* O277 and *K. nataicola* TISTR 975 and incubated at 30°C for 7 days.

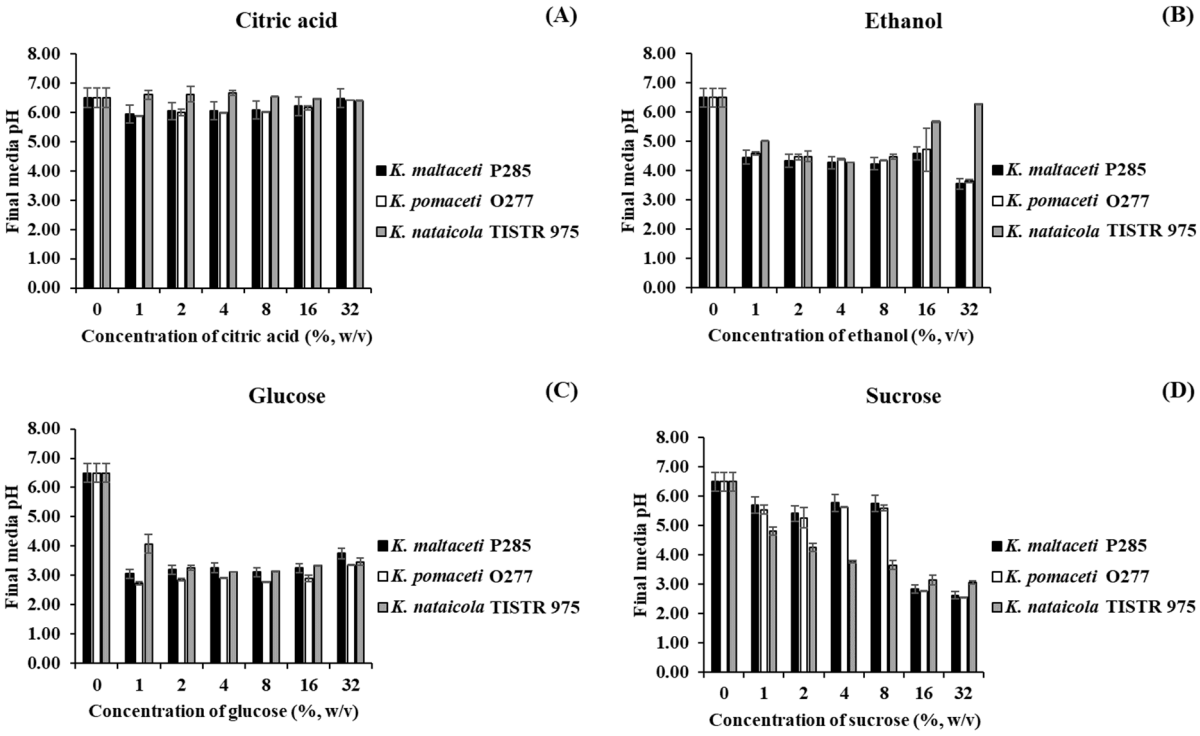
Supplementary Figure S5. Final media pH of modified sugarcane (S1 and S2) and honey (H1 and H2) solutions when cultivated by *K. maltaceti* P285, *K. pomaceti* O277 and *K. nataicola* TISTR 975 and incubated at 30°C for 7 days. The HS broth and the solutions of sugarcane (8%, *w/v*; CS) and honey (1:4 of honey : water ratio; CH) supplemented with 0.2% (*w/v*) yeast extract, pH 6.0 were used as controls.

Supplementary Table S1. Dry mass of bacterial cellulose produced by *K. maltaceti* P285 and *K. pomaceti* O277 when cultured in modified MSM with different concentrations of carbon and nitrogen sources The *K. nataicola* TISTR 975 was used as a control. Data expressed mean ± standard deviation of three independent experiments. The difference letters were considered statistically significant ($p < 0.05$).

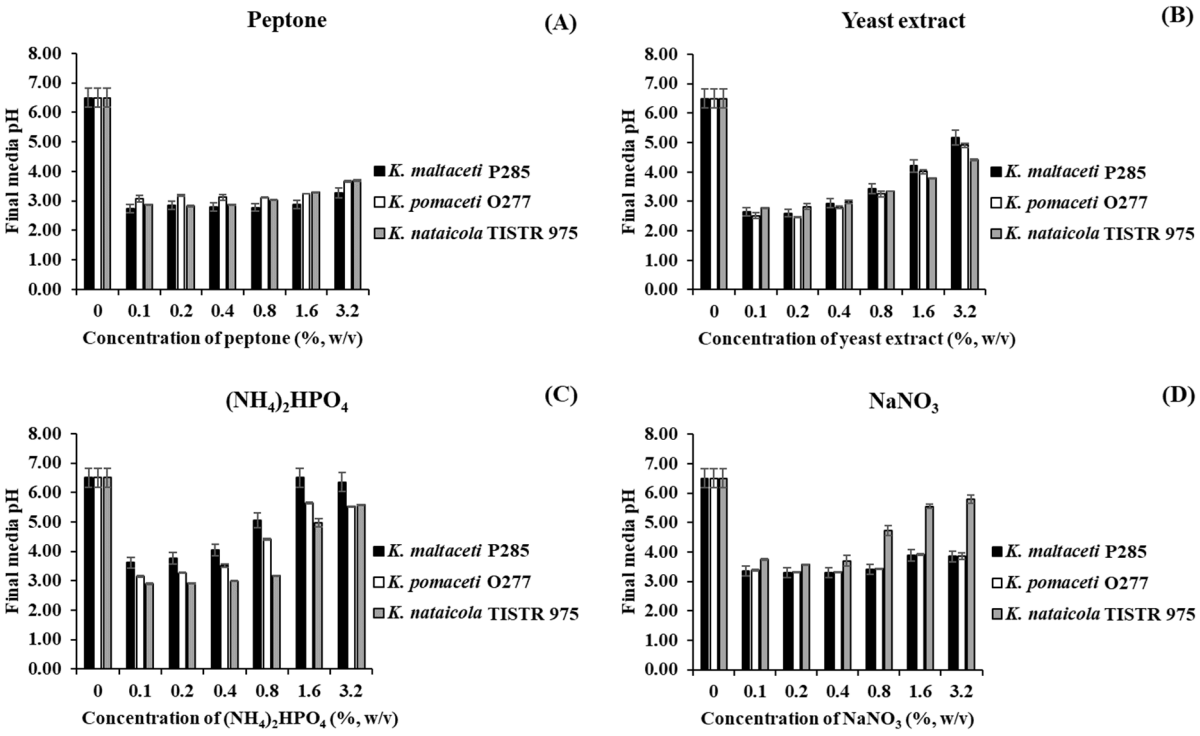
Supplementary Figure S1



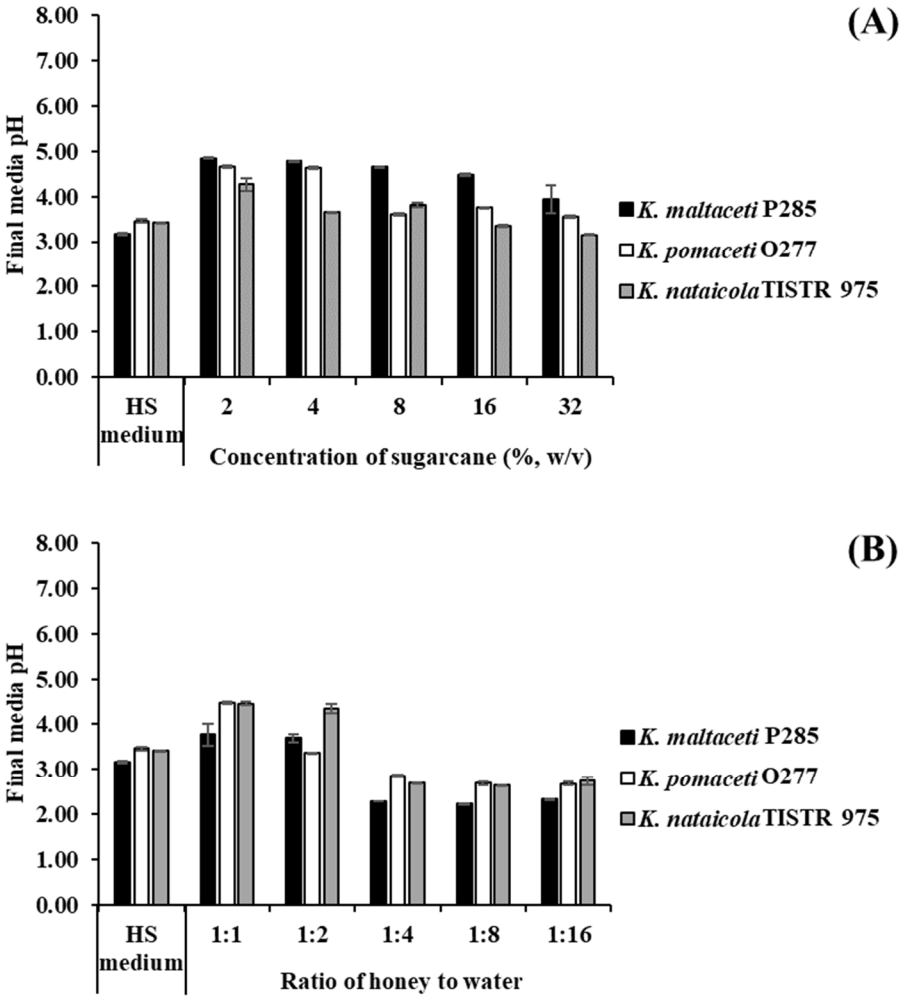
Supplementary Figure S2



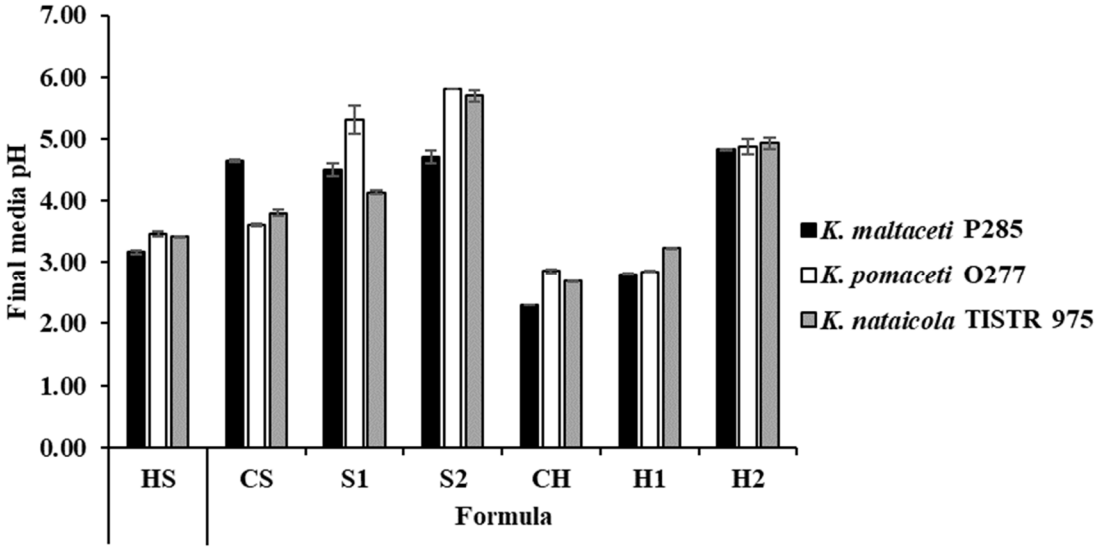
Supplementary Figure S3



Supplementary Figure S4



Supplementary Figure S5



Supplementary Table S1

	Dry weight of cellulose (g/L)											
Carbon source concentration	*Komagataeibacter maltaceti* P285				*Komagataeibacter pomaceti* O277				*Komagataeibacter nataicola* TISTR 975			
	Citric acid	Ethanol	Glucose	Sucrose	Citric acid	Ethanol	Glucose	Sucrose	Citric acid	Ethanol	Glucose	Sucrose
0%	0^{a}	0^{a}	0^{f}	0^{g}	0^{a}	0^{a}	0^{f}	0^{g}	0^{d}	0^{a}	0^{f}	0^{g}
1%	0^{a}	0^{a}	1.2 ± 0.1^{e}	0.6 ± 0.0^{f}	0^{a}	0^{a}	1.2 ± 0.2^{e}	1.2 ± 0.1^{f}	0.2 ± 0.1^{c}	0.1 ± 0.0^{a}	2.9 ± 0.0^{e}	0.7 ± 0.1^{f}
2%	0^{a}	0^{a}	3.0 ± 0.1^{d}	1.7 ± 0.1^{e}	0^{a}	0^{a}	3.0 ± 0.1^{d}	3.3 ± 1.1^{e}	0.6 ± 0.1^{b}	0^{a}	7.3 ± 0.1^{d}	1.6 ± 0.2^{e}
4%	0^{a}	0^{a}	4.2 ± 0.2^{c}	3.2 ± 0.2^{d}	0^{a}	0^{a}	4.4 ± 0.9^{c}	6.2 ± 1.4^{d}	0.9 ± 0.1^{a}	0^{a}	15.1 ± 0.6^{c}	2.1 ± 0.1^{d}
8%	0^{a}	0^{a}	7.2 ± 0.4^{b}	4.2 ± 0.2^{c}	0^{a}	0^{a}	8.2 ± 0.4^{b}	8.1 ± 0.7^{c}	0.5 ± 0.2^{b}	0^{a}	20.5 ± 0.6^{b}	5.3 ± 1.2^{c}
16%	0^{a}	0^{a}	11.3 ± 0.6^{a}	4.9 ± 0.2^{bc}	0^{a}	0^{a}	11.9 ± 1.6^{a}	9.4 ± 0.2^{b}	0^{d}	0^{a}	21.7 ± 0.6^{a}	8.0 ± 1.1^{b}
32%	0^{a}	0^{a}	1.2 ± 0.1^{e}	6.7 ± 0.3^{a}	0^{a}	0^{a}	1.2 ± 0.4^{e}	12.8 ± 1.3^{a}	0^{d}	0^{a}	16.0 ± 0.5^{c}	16.7 ± 1.2^{a}
Nitrogen source concentration	*Komagataeibacter maltaceti* P285				*Komagataeibacter pomaceti* O277				*Komagataeibacter nataicola* TISTR 975			
	Peptone	Yeast extract	$(NH_4)_2HPO_4$	$NaNO_3$	Peptone	Yeast extract	$(NH_4)_2HPO_4$	$NaNO_3$	Peptone	Yeast extract	$(NH_4)_2HPO_4$	$NaNO_3$
0%	0^{d}	0^{e}	0^{d}	0^{c}	0^{c}	0^{e}	0^{e}	0^{c}	0^{g}	0^{f}	0^{e}	0^{e}
0.1%	1.6 ± 0.0^{c}	1.3 ± 0.1^{d}	1.3 ± 0.0^{b}	2.8 ± 0.1^{a}	2.0 ± 0.0^{b}	1.0 ± 0.0^{d}	2.9 ± 0.0^{b}	2.8 ± 0.1^{a}	3.9 ± 0.2^{f}	5.9 ± 0.5^{e}	5.0 ± 0.6^{c}	6.5 ± 0.0^{b}
0.2%	1.7 ± 0.2^{c}	1.2 ± 0.0^{d}	1.7 ± 0.1^{a}	3.0 ± 0.1^{a}	2.0 ± 0.2^{b}	1.0 ± 0.0^{d}	3.9 ± 0.9^{a}	3.0 ± 0.0^{a}	5.0 ± 0.3^{e}	6.3 ± 0.3^{e}	3.9 ± 0.1^{d}	7.3 ± 0.5^{a}
0.4%	2.3 ± 0.0^{b}	1.3 ± 0.1^{d}	1.6 ± 0.2^{a}	3.1 ± 0.2^{a}	2.8 ± 0.8^{ab}	1.0 ± 0.2^{d}	3.6 ± 0.0^{a}	3.1 ± 0.2^{a}	6.1 ± 0.2^{d}	7.6 ± 0.8^{d}	6.5 ± 0.5^{b}	7.5 ± 0.1^{a}
0.8%	1.7 ± 0.0^{c}	3.8 ± 0.2^{c}	1.1 ± 0.1^{b}	1.6 ± 0.1^{b}	2.0 ± 0.3^{b}	3.1 ± 0.2^{c}	2.6 ± 0.1^{c}	1.6 ± 0.1^{b}	9.6 ± 1.5^{c}	9.8 ± 0.3^{c}	11.1 ± 0.2^{a}	2.2 ± 0.3^{c}
1.6%	1.7 ± 0.1^{c}	7.1 ± 0.4^{b}	0.9 ± 0.0^{c}	1.5 ± 0.1^{b}	2.1 ± 0.1^{b}	5.7 ± 0.0^{b}	2.0 ± 0.0^{d}	1.6 ± 0.0^{b}	15.6 ± 0.8^{b}	13.0 ± 0.6^{b}	10.7 ± 0.2^{a}	2.1 ± 0.1^{c}
3.2%	2.7 ± 0.1^{a}	11.9 ± 0.6^{a}	0^{d}	0^{c}	3.3 ± 0.3^{a}	9.6 ± 0.1^{a}	0.3 ± 0.0^{e}	0^{c}	18.1 ± 0.5^{a}	21.1 ± 0.2^{a}	0^{e}	0.7 ± 0.0^{d}