

Supplementary Materials: Prebiotic activity of poly- and oligosaccharides obtained from *Plantago major* L. leaves

Paolina Lukova, Mariana Nikolova, Emmanuel Petit, Redouan Elboutachfaiti, Tonka Vasileva, Plamen Katsarov, Hristo Manev, Christine Gardarin, Guillaume Pierre, Philippe Michaud, Ilia Iliev and Cédric Delattre

Additional tables

Below are the tables, which present the results from the performed statistical analyses using Three-Way ANOVA and Tukey's HSD tests for post-hoc evaluation.

Table 1. Tests of Between-Subjects Effects and Tukey's HSD test (Three-Way ANOVA), evaluating the statistical significance of the independent variables (bacterial strain, carbon source and time) and their combinations on the dependant variable (OD 600).

Tests of Between-Subjects Effects (Dependent Variable: OD 600)										
	Corrected Model	Intercept	Bacterial strain (A)	Carbon source (B)	Time (C)	A*B	A*C	B*C	A*B*C	
Sig.	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	
Partial Eta²	.997	.998	.928	.990	.995	.946	.822	.975	.849	
R² = .997 (R²Adj. = .996)										
Tukey HSD Test (Dependent Variable: OD 600)										
Time (I)	0 h					3 h				
Time (J)	3 h	6 h	10 h	14 h	20 h	0 h	6 h	10 h	14 h	20 h
(I-J)**	-.719*	-.943*	-1.199*	-1.460*	-1.715*	.719*	-.224*	-.480*	-.741*	-.996*
Std. Error	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118
Sig.	< 0.0005					< 0.0005				
Time (I)	6 h					10 h				
Time (J)	0 h	3 h	10 h	14 h	20 h	0 h	3 h	6 h	14 h	20 h
(I-J)**	.943*	.224*	-.256*	-.517*	-.772*	1.199*	.480*	.256*	-.261*	-.516*
Std. Error	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118
Sig.	< 0.0005					< 0.0005				
Time (I)	14 h					20 h				
Time (J)	0 h	3 h	6 h	10 h	20 h	0 h	3 h	6 h	10 h	14 h
(I-J)**	1.460*	.741*	.517*	.261*	-.256*	1.715*	.996*	.772*	.516*	.256*
Std. Error	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118	.0118
Sig.	< 0.0005					< 0.0005				

**Mean difference between Time point (I) and Time point (J).

Table 2. Tests of Between-Subjects Effects (Three-Way ANOVA), evaluating the statistical significance of the independent variables (bacterial strain, carbon source and time) and their combinations on the dependant variables (fermentation products: total lactic acid, acetic acid and ethanol).

Fermentation products	Total lactic acid		Acetic acid		Ethanol	
	Sig.	Partial Eta ²	Sig.	Partial Eta ²	Sig.	Partial Eta ²
Corrected Model	< 0.0005	.999	< 0.0005	1.000	< 0.0005	.984
Intercept	< 0.0005	.999	< 0.0005	1.000	< 0.0005	.973
Carbon source (A)	< 0.0005	.996	< 0.0005	.999	< 0.0005	.750
Bacterial strain (B)	< 0.0005	.984	< 0.0005	.879	< 0.0005	.787
Time (C)	< 0.0005	.999	< 0.0005	.999	< 0.0005	.951
A*B	< 0.0005	.978	< 0.0005	.985	< 0.0005	.948
A*C	< 0.0005	.995	< 0.0005	.999	< 0.0005	.644
B*C	< 0.0005	.972	< 0.0005	.979	< 0.0005	.756
A*B*C	< 0.0005	.972	< 0.0005	.991	< 0.0005	.916
Determination	R ² = .999 (R ² _{Adj.} = .999)		R ² = .999 (R ² _{Adj.} = 0.999)		R ² = .984 (R ² _{Adj.} = .976)	

Table 3. Tests of Between-Subjects Effects (Three-Way ANOVA), evaluating the statistical significance of the independent variables (bacterial strain, carbon source and time) and their combinations on the dependant variables (enzyme activity: α -galactosidase, α -glucosidase and β -xylosidase activity).

Enzyme activity	α -galactosidase		α -glucosidase		β -xylosidase	
	Sig.	Partial Eta ²	Sig.	Partial Eta ²	Sig.	Partial Eta ²
Corrected Model	< 0.0005	.996	< 0.0005	.997	< 0.0005	.997
Intercept	< 0.0005	.993	< 0.0005	.998	< 0.0005	.996
Carbon source (A)	< 0.0005	.112	< 0.0005	.398	< 0.0005	.504
Bacterial strain (B)	< 0.0005	.983	< 0.0005	.977	< 0.0005	.990
Time (C)	< 0.0005	.990	< 0.0005	.995	< 0.0005	.992
A*B	< 0.0005	.959	< 0.0005	.955	< 0.0005	.946
A*C	< 0.0005	.897	< 0.0005	.627	< 0.0005	.978
B*C	< 0.0005	.984	< 0.0005	.980	< 0.0005	.982
A*B*C	< 0.0005	.954	< 0.0005	.958	< 0.0005	.954
Determination	R ² = .996 (R ² _{Adj.} = .995)		R ² = .997 (R ² _{Adj.} = .996)		R ² = .997 (R ² _{Adj.} = .996)	