

SUPPLEMENTARY MATERIAL

Proceeding Paper

Natural Deep Eutectic Solvents as Main Solvent for the Extraction of Total Polyphenols of Orange Peel [†]

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Table S1. ANOVA Proline:Malic Acid.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Model***	4.089×10^7	9	4.543×10^6	6.70	< 0.0001
A- Ratio*	2.908×10^6	1	2.908×10^6	4.29	0.0423
B- NADES*	3.708×10^6	1	3.708×10^6	5.47	0.0224
C- Extraction Time*	5.811×10^6	1	5.811×10^6	8.58	0.0047
AB	32121.61	1	32121.61	0.0474	0.8283
AC	93849.96	1	93849.96	0.1385	0.7110
BC	7.428×10^5	1	7.428×10^5	1.10	0.2990
A ² ***	1.104×10^7	1	1.104×10^7	16.29	0.0001
B ²	5.880×10^5	1	5.880×10^5	0.8677	0.3550
C ²	1.042×10^6	1	1.042×10^6	1.54	0.2194
Residual	4.405×10^7	65	6.776×10^5		
Lack of Fit***	3.006×10^7	12	2.505×10^6	9.49	< 0.0001
Pure Error	1.399×10^7	53	2.639×10^5		
Cor Total	8.494×10^7	74			

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table S2. ANOVA Betaine: Citric Acid.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Model***	2.910×10^8	9	3.233×10^7	6.09	< 0.0001
A- Ratio	1.080×10^7	1	1.080×10^7	2.04	0.1595
B- NADES	96222.55	1	96222.55	0.0181	0.8934
C- Extraction Time	95995.26	1	95995.26	0.0181	0.8935
AB	17291.98	1	17291.98	0.0033	0.9547
AC***	1.870×10^8	1	1.870×10^8	35.25	< 0.0001
BC	2.090×10^7	1	2.090×10^7	3.94	0.0523
A ² **	5.015×10^7	1	5.015×10^7	9.45	0.0033
B ² *	2.291×10^7	1	2.291×10^7	4.32	0.0425
C ²	1.678×10^7	1	1.678×10^7	3.16	0.0811
Residual	2.811×10^8	53	5.305×10^6		
Lack of Fit**	1.090×10^8	8	1.363×10^7	3.56	0.0028
Pure Error	1.721×10^8	45	3.825×10^6		
Cor Total	5.721×10^8	62			

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table S3. ANOVA Choline Chloride: Glycerol.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Model***	1.018×10^7	9	1.132×10^6	13.09	< 0.0001
A- Ratio***	3.263×10^6	1	3.263×10^6	37.73	< 0.0001
B- NADES***	2.350×10^6	1	2.350×10^6	27.17	< 0.0001
C- Extraction Time	1.946×10^5	1	1.946×10^5	2.25	0.1378
AB**	6.686×10^5	1	6.686×10^5	7.73	0.0069
AC	1.410×10^5	1	1.410×10^5	1.63	0.2056
BC	1.306×10^5	1	1.306×10^5	1.51	0.2229
A ² **	23941.56	1	23941.56	0.2769	0.6003
B ² *	39911.38	1	39911.38	0.4615	0.4990
C ²	606.47	1	606.47	0.0070	0.9335
Residual	6.399×10^6	74	86476.66		
Lack of Fit	7.740×10^5	13	59536.69	0.6456	0.8059
Pure Error	5.625×10^6	61	92217.97		
Cor Total	1.658×10^7	83			

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table S4. ANOVA Choline Chloride; Fructose.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Model***	1.702×10^8	9	1.892×10^7	18.94	< 0.0001
A- Ratio	5.453×10^7	1	5.453×10^7	54.60	< 0.0001
B- NADES	91612.76	1	91612.76	0.0917	0.7629
C- Extraction Time***	4.680×10^7	1	4.680×10^7	46.87	< 0.0001
AB	2.256×10^6	1	2.256×10^6	2.26	0.1372
AC*	4.086×10^6	1	4.086×10^6	4.09	0.0468
BC*	4.963×10^6	1	4.963×10^6	4.97	0.0289
A ²	3.759×10^5	1	3.759×10^5	0.3764	0.5415
B ²	1.295×10^6	1	1.295×10^6	1.30	0.2585
C ² ***	2.749×10^7	1	2.749×10^7	27.53	< 0.0001
Residual	7.190×10^7	72	9.987×10^5		
Lack of Fit***	6.951×10^7	13	5.347×10^6	131.83	< 0.0001
Pure Error	2.393×10^6	59	40560.86		
Cor Total	2.421×10^8	81			

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$