

NADES-Assisted Extraction of Polyphenols from Coriander Seeds: A Systematic Optimization Study

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Table S1. Calibration data: regression equation, linearity range, coefficient of determination value (R^2), LOD and LOQ values.

Cpd	Regression Equation	Linearity range ($\mu\text{g/mL}$)	R^2	LOD* (ng/mL)	LOQ* (ng/mL)
Protocatheic acid	$y = 34382.41(\pm 984.34)x + 1043.08(\pm 127.25)$	0.25-2.5	0.9992	0.012	0.037
Chlorogenic acid	$y = 27274.77(\pm 821.48)x + 4021.01(\pm 206.79)$	0.25-5.0	0.9986	0.025	0.075
Caffeic acid	$y = 60206.50(\pm 1496.30)x + 7648.416(\pm 376.67)$	0.25-5.0	0.9991	0.021	0.063
p-Coumaric acid	$y = 55066.02(\pm 4144.86)x + 13737.04(\pm 1043.40)$	0.25-5.0	0.9992	0.063	0.189
Rutin	$y = 33579.30(\pm 866.19)x - 26486.17(\pm 1213.44)$	2.5-25	0.9990	0.119	0.361

*LOD and LOQ values were calculated as the standard deviation of the response (σ_y) on the slope of the calibration curve (b), according to the equations: $C_{LOD} = 3.3(\sigma_y/b)$ and $C_{LOQ} = 10(\sigma_y/b)$

Table S2. Method validation: evaluation of precision (RSD %) and accuracy (Recovery %) in the short- and log-term period (intra-day and inter-day precision and accuracy values).

Nominal Conc. ($\mu\text{g/mL}$)	Intra-day mean concentration ($\mu\text{g/mL}$)			Intra-day mean Precision (RSD%)			Intra-day Accuracy (Recovery)		
	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid
3.3	33.63	33.95	33.45	0.71	2.30	1.16	101.90	102.89	101.35
	33.84	33.45	33.32	1.67	2.66	1.91	102.54	101.37	100.97
	32.36	33.41	33.75	3.44	3.37	1.71	98.07	101.24	102.27
33	3.32	3.27	3.32	1.83	2.36	1.08	100.68	99.11	100.67
	3.25	3.33	3.34	1.69	1.85	3.23	98.42	100.86	101.10
	3.24	3.41	3.37	1.27	2.88	0.17	98.11	103.31	102.08

Nominal Conc. ($\mu\text{g/mL}$)	Inter-day mean concentration ($\mu\text{g/mL}$)			Inter-day Precision (RSD%)			Inter-day Accuracy (Recovery%)		
	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid	Chlorogenic acid	Caffeic acid	<i>p</i> -Coumaric acid
3.3	33.28	33.60	33.50	2.82	2.55	1.52	100.84	101.83	101.53
33	3.27	3.34	3.34	1.86	2.76	1.81	99.07	101.09	101.28

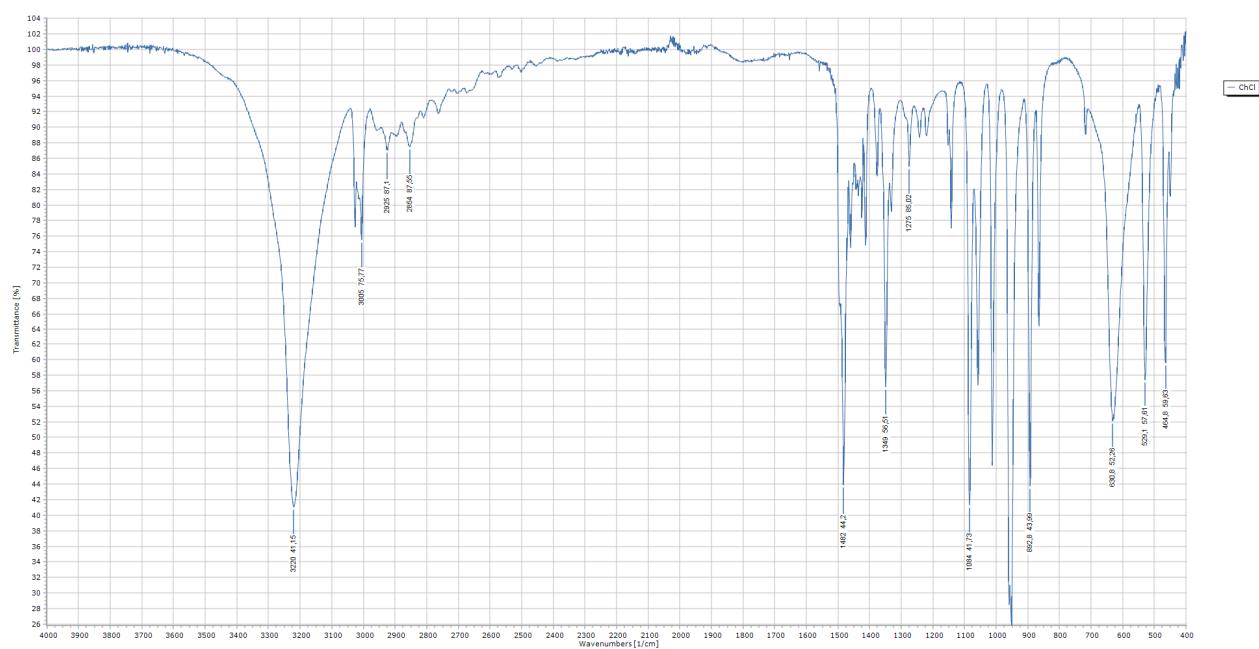


Figure S1. IR spectrum of Choline chloride

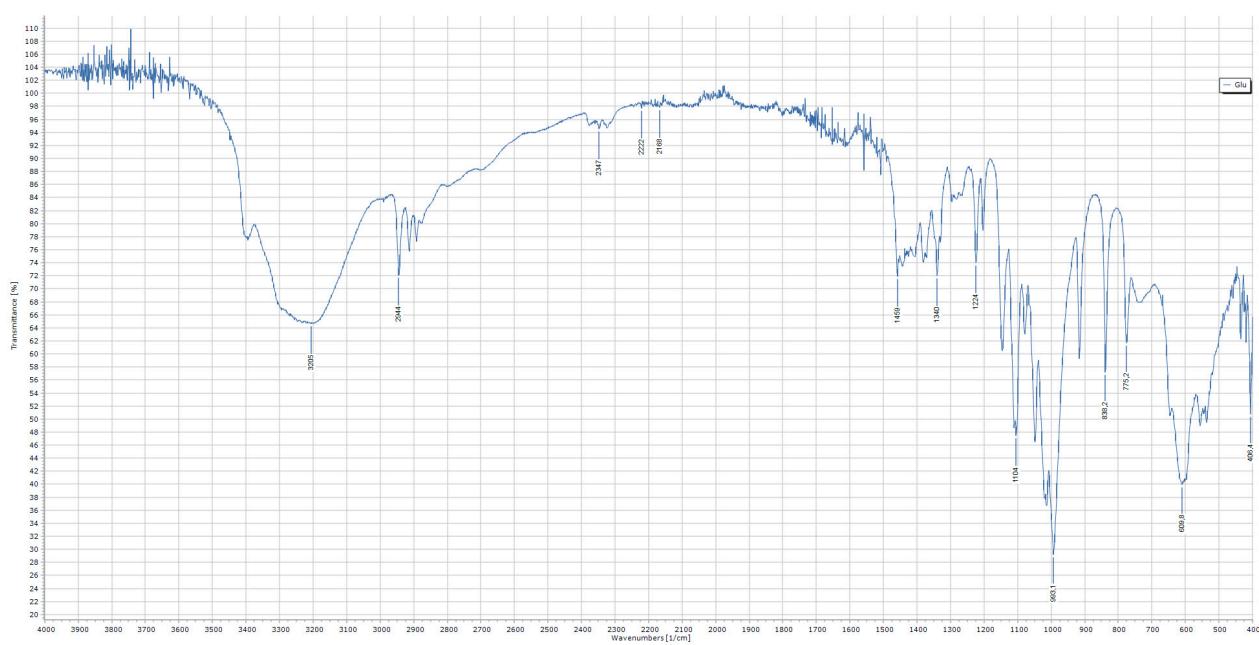


Figure S2. IR spectrum of Glucose

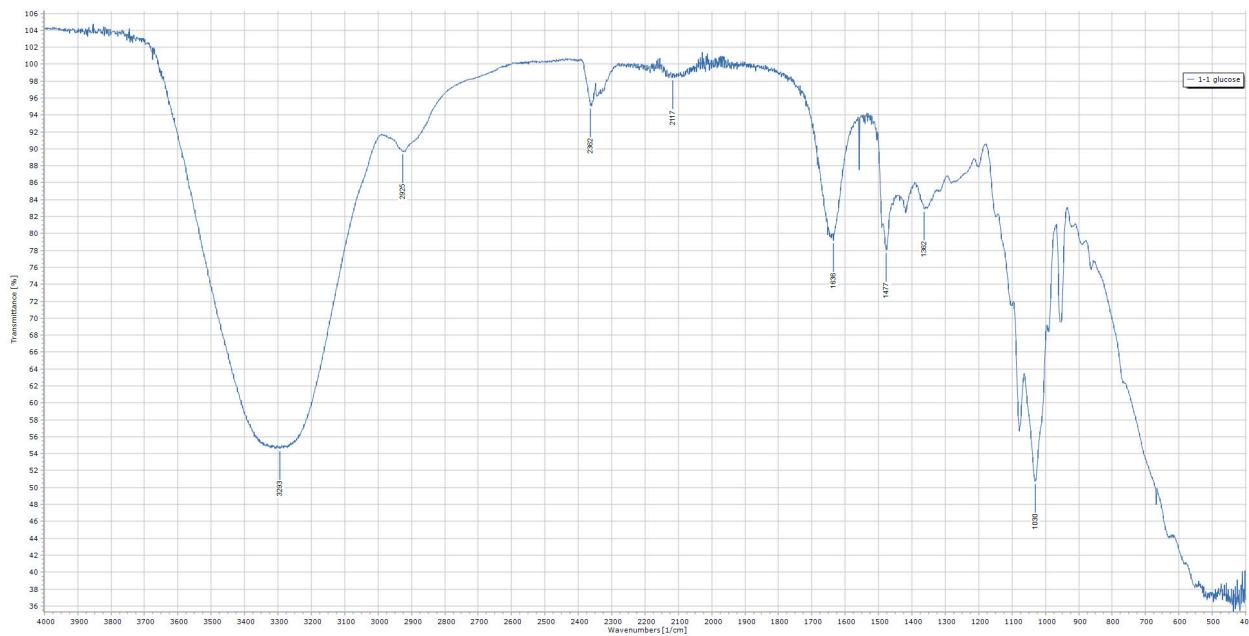


Figure S3. IR spectrum of ChCl:Glu

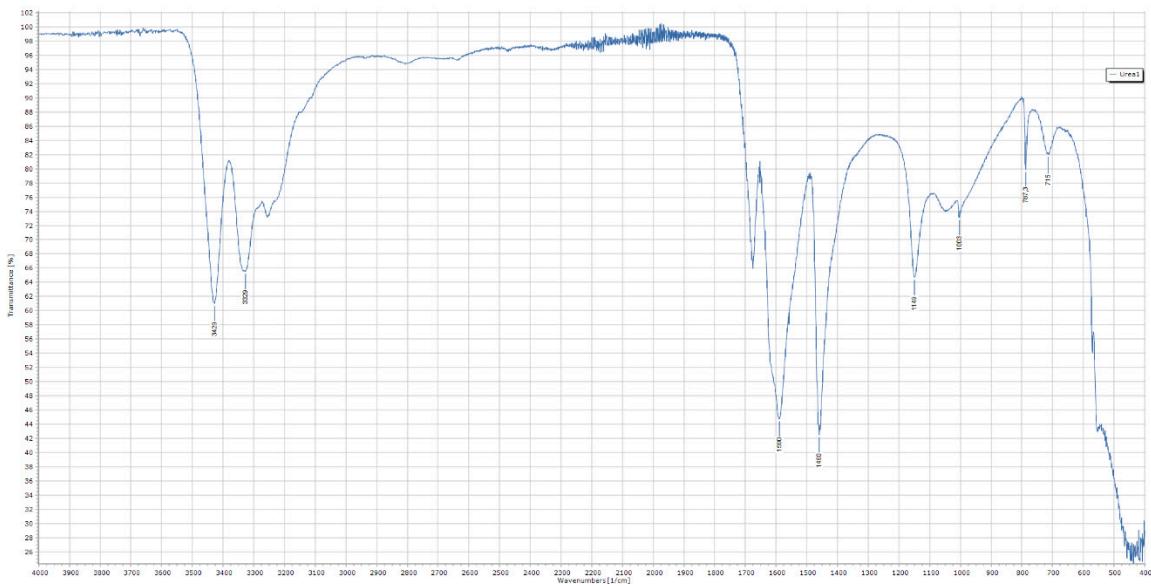


Figure S4. IR spectrum of Urea

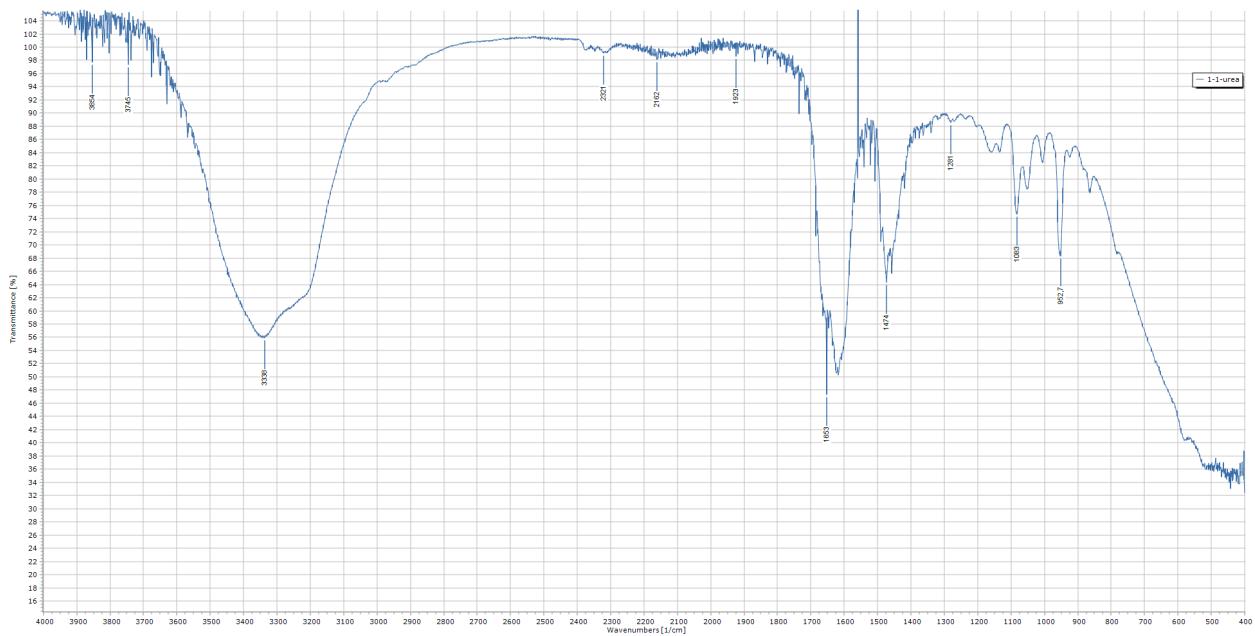


Figure S5. IR spectrum of ChCl:Ur

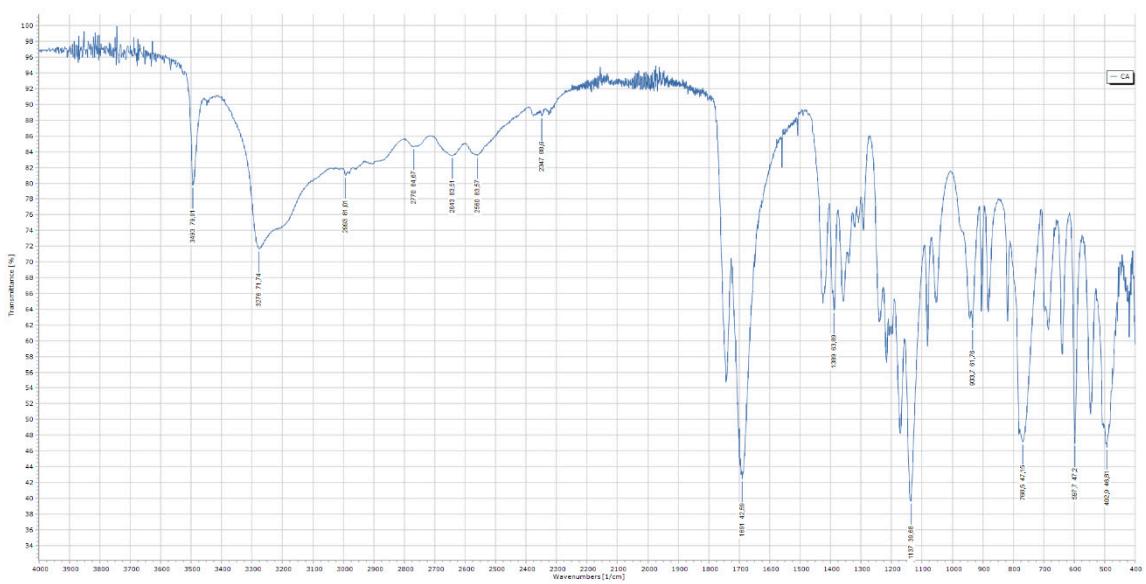


Figure S6. IR spectrum of Citric acid

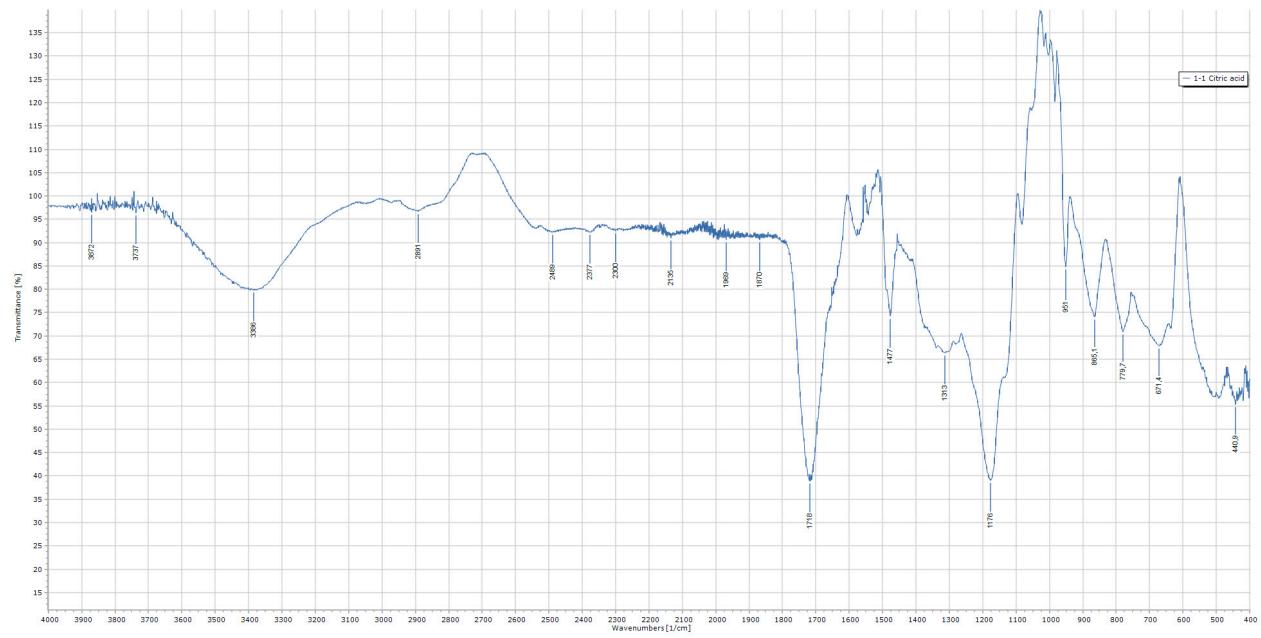


Figure S7. IR spectrum of ChCl:CA