

Enhanced Lycopene Extraction from Tomato Peels by Optimized Mixed-Polarity Solvent Mixtures

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Supplementary Material

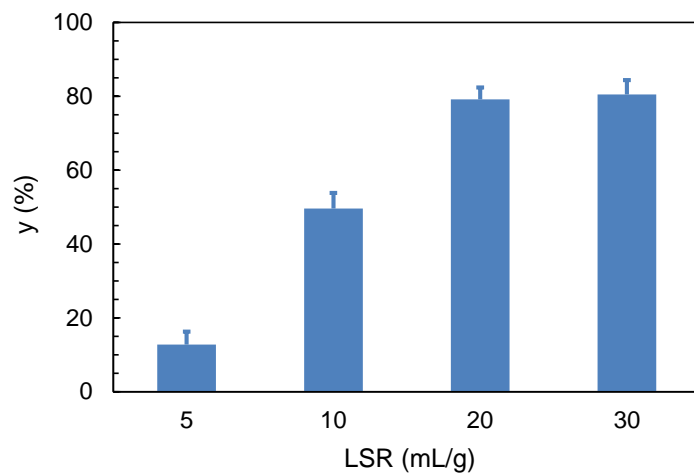


Figure S1. Effect of liquid-to-solid ration (LSR) on lycopene extraction yield (y).

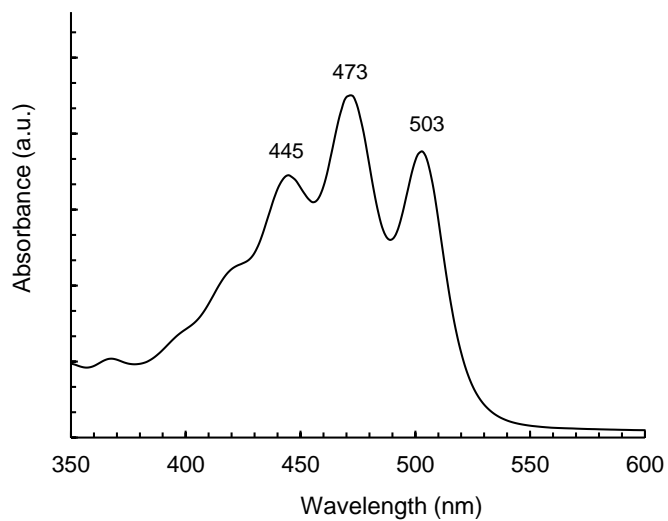


Figure S2. Absorption spectrum of lycopene in the visible region, with its three characteristic peaks.

Table S1. Estimated model coefficients at 10, 25 and 40 °C for the ternary system *n*-hexane(1)–ethanol(2)–acetone(3). SE is the standard error and VIF the variance inflation factor associated at each model coefficient.

	T = 10 °C			T = 25 °C			T = 40 °C		
	Value	SE	VIF	Value	SE	VIF	Value	SE	VIF
<i>a</i> ₁	3.16	2.79	1.77	4.01	5.43	1.77	8.74	3.19	1.77
<i>a</i> ₂	2.37	2.79	1.77	2.00	5.43	1.77	13.81	3.19	1.77
<i>a</i> ₃	36.81	2.79	1.77	63.74	5.43	1.77	81.13	3.19	1.77
<i>a</i> ₁₂	47.29	15.81	2.21	130.33	30.77	2.21	225.67	18.11	2.21
<i>a</i> ₁₃	23.23	15.81	2.21	69.39	30.77	2.21	44.69	18.11	2.21
<i>a</i> ₂₃	18.74	15.81	2.21	24.79	30.77	2.21	83.17	18.11	2.21
<i>a</i> ₁₂₃	537.79	102.77	2.36	785.12	200.05	2.36	654.00	117.74	2.36

Table S2. Estimated model coefficients at 10, 25 and 40 °C for the ternary system ethyl lactate(1)–ethanol(2)–acetone(3). SE is the standard error and VIF the variance inflation factor associated at each model coefficient.

	T = 10 °C			T = 25 °C			T = 40 °C		
	Value	SE	VIF	Value	SE	VIF	Value	SE	VIF
<i>a</i> ₁	6.88	1.24	1.77	18.51	2.33	1.91	44.01	4.66	1.77
<i>a</i> ₂	3.62	1.24	1.77	5.45	2.33	1.91	14.58	4.66	1.77
<i>a</i> ₃	35.67	1.24	1.77	61.64	2.33	1.91	78.96	4.66	1.77
<i>a</i> ₁₂	-2.96	7.04	2.21	-11.35	12.71	2.21	0.65	26.40	2.21
<i>a</i> ₁₃	2.54	7.04	2.21	32.76	12.71	2.21	-27.73	26.40	2.21
<i>a</i> ₂₃	17.76	7.04	2.21	21.88	12.71	2.21	78.18	26.40	2.21
<i>a</i> ₁₂₃	-312.03	45.76	2.36	-379.22	82.63	2.36	-796.43	171.65	2.36