Supplementary Data

This supplementary data is a part of the paper entitled "Determination of Eugenol in Personal-Care Products by Dispersive Liquid-Liquid Microextraction Followed by Spectrophotometry Using *p*-Amino-*N,N*-dimethylaniline as a Derivatizing Agent".

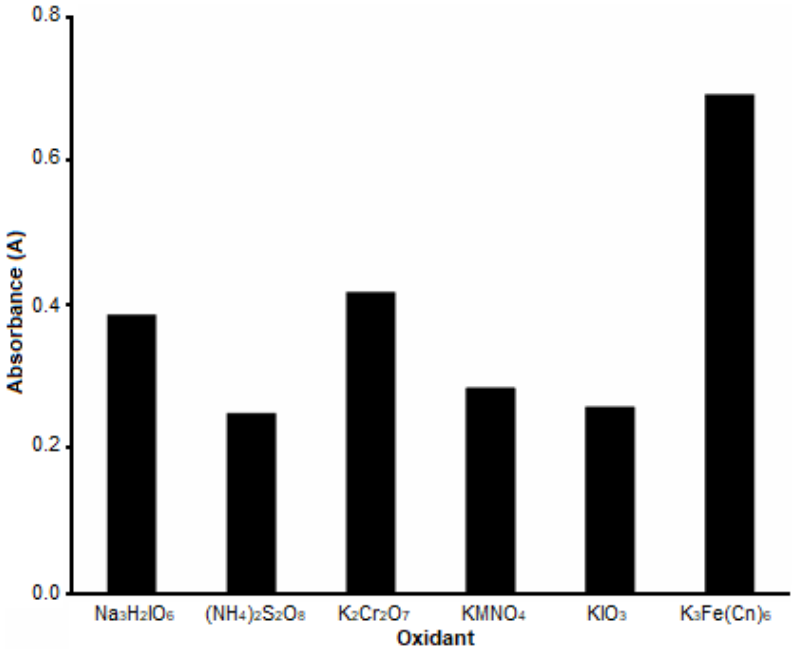

Fig A. Oxidant optimization for oxidative coupling of eugenol. Conditions: oxidant 0.4 mM, eugenol and PADA 0.2 mM; ammonium hydroxide 2 mM

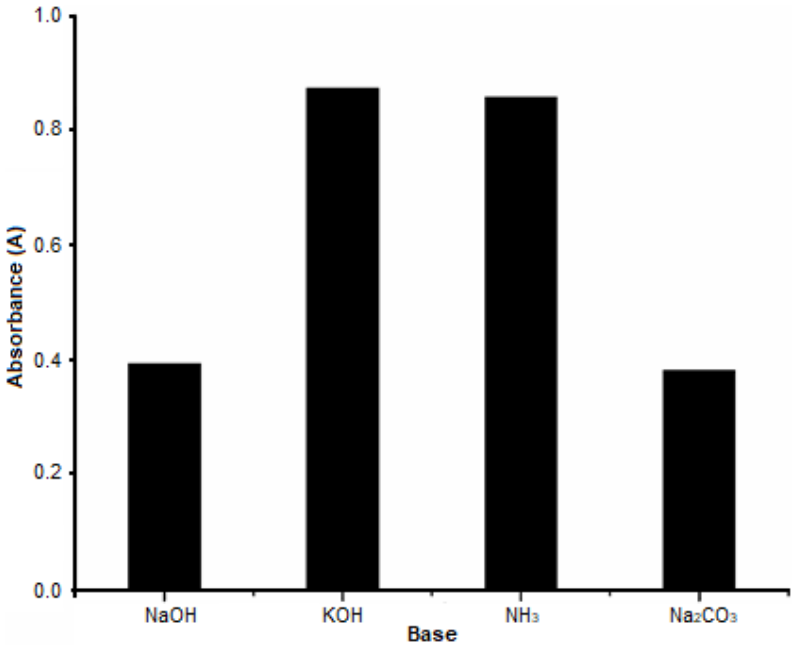

Fig B. Base optimization for oxidative coupling of eugenol. Conditions: base 2 mM, eugenol and PADA 0.2 mM, hexacyanoferrate 0.6 mM

Table A. Order of addition. Eugenol 0.2 mM, hexacyanoferrate 0.6 mM, potassium hydroxide 3 mM, PADA. 0.3 mM

	Order of addition				A
1	D	R	O	B	0.982
2	D	O	R	B	0.341
3	D	B	R	O	0.557
4	D	B	O	R	0.089
5	R	O	D	B	0.223
6	R	O	B	D	0.149
7	R	B	D	O	0.403
8	O	B	D	R	0.085
9	O	B	R	D	0.171
10	B	R	O	D	0.162

*(D = eugenol, R=PADA, O = hexacyanoferrate B = potassium hydroxide), A = Absorbance

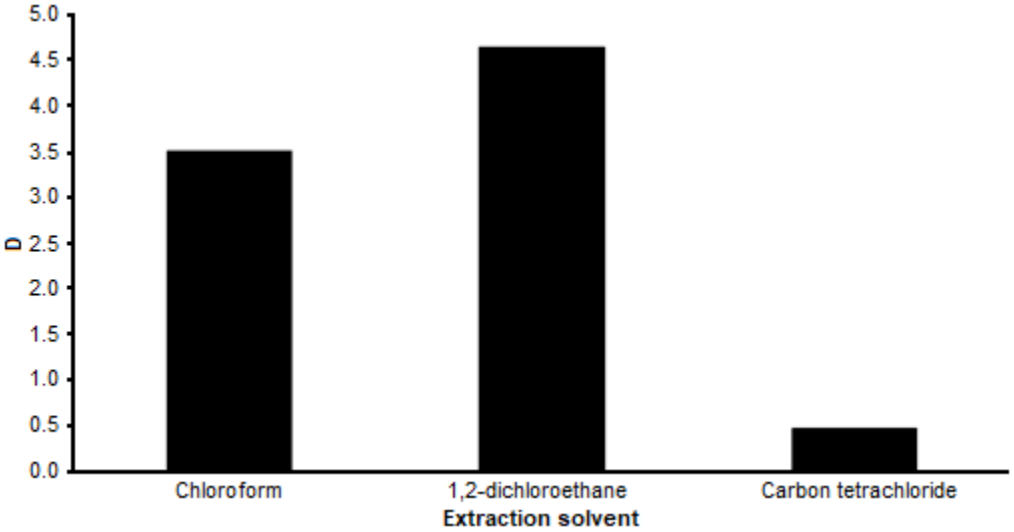

Fig C. DLLME extraction solvent study. conditions: eugenol 0.2 mM, t dispersive solvent (acetone) 25 µL, the volume of aqueous phase (dye) 14 mL, KCl 20 mM, centrifugation 5 min at 1100 rpm

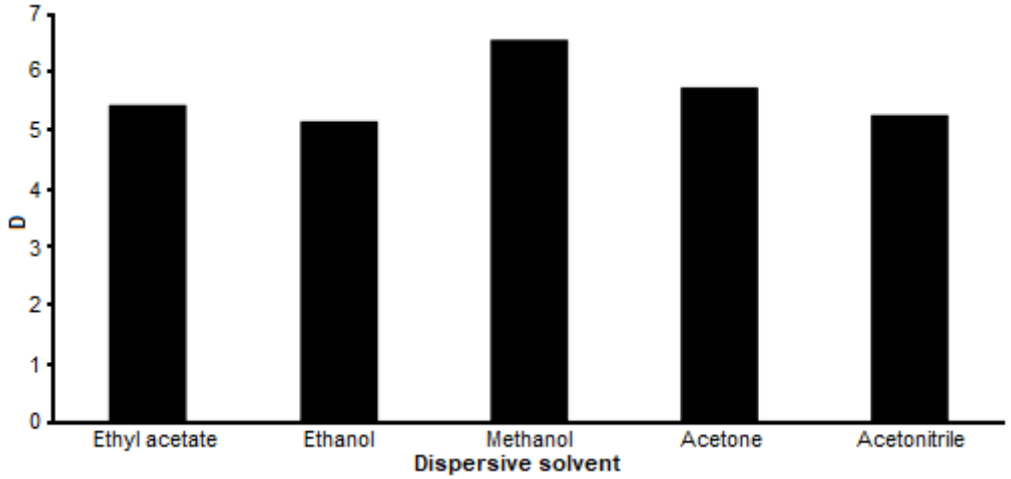

Fig D. DLLME dispersive solvent study conditions: dispersive solvent 25 µL, eugenol 0.2 mM, (extraction solvent) 550 µL, aqueous phase (dye) 14 mL, KCl 20 mM, centrifugation 5 min at 1100 rpm

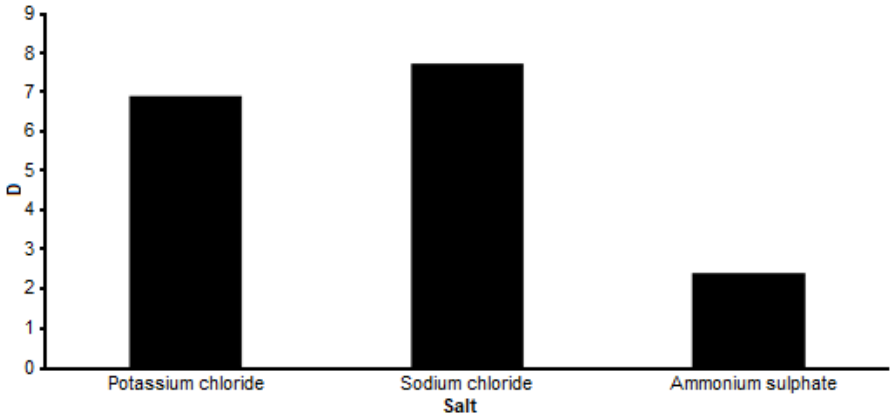

Fig E. DLLME salt selection: eugenol 0.2 mM, (extraction solvent) 550 µL, (dispersive solvent) 100 µL, aqueous phase (dye) 14 mL, centrifugation 5 min at 1100 rpm

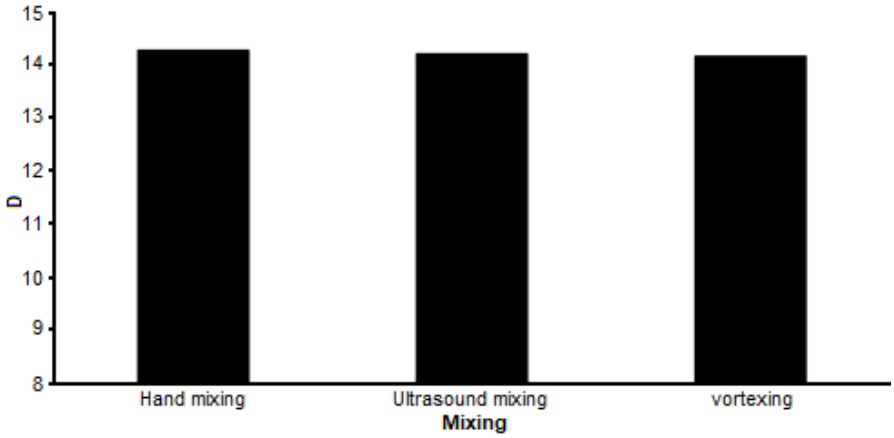

Fig F. DLLME reagent mixing effect. Conditions: eugenol 0.2 mM, sodium chloride 28 mM, (extraction solvent) 550 µL, (dispersive solvent) 100 µL, aqueous phase (dye) 14 mL, centrifugation 5 min at 1100 rpm

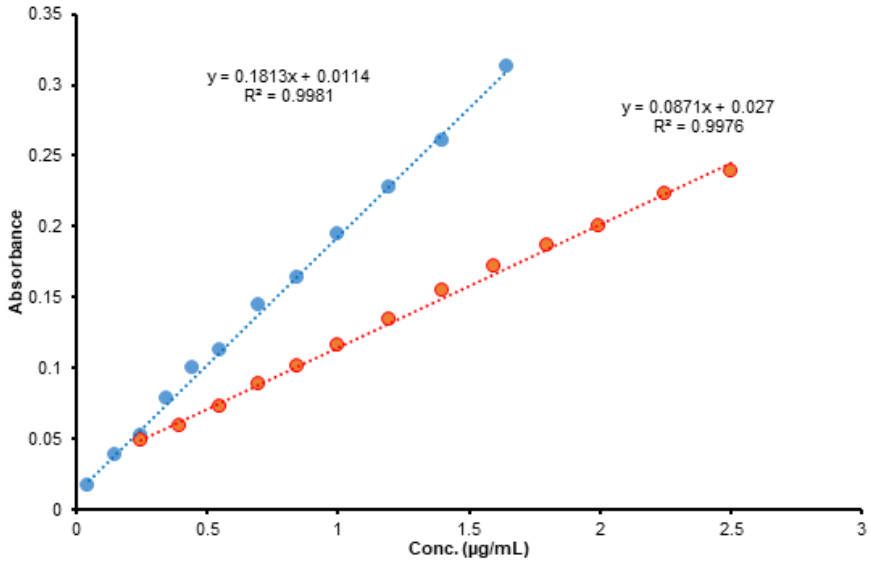

Fig G. Calibration curves for eugenol A. the Derivatization reaction mixture (red symbols) B. DLLME method (blue symbols), both under optimal conditions