Analytical Methods

Electronic Supplementary Information – ESI †

Determination of DDT in Honey Samples by Liquid-Liquid Extraction with Low-Temperature Purification (LLE-LTP) Combined to HPLC-DAD

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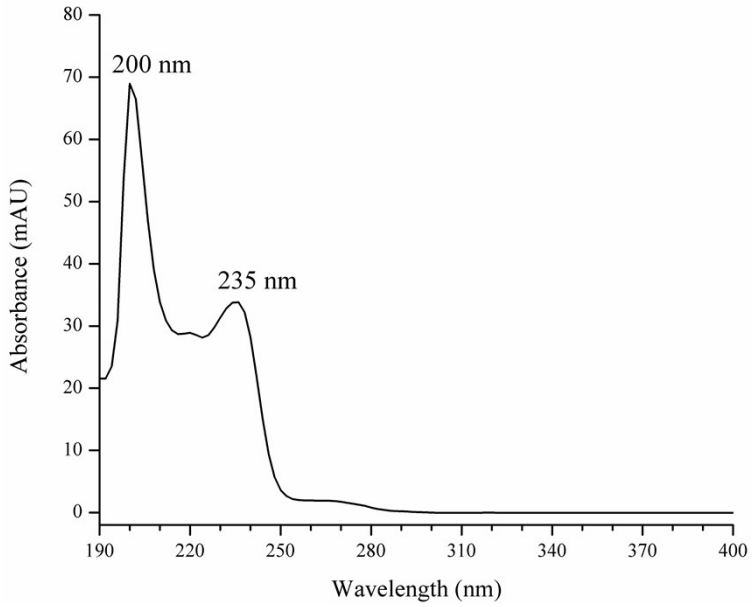

Fig. S1 Absorption spectrum in the ultraviolet region of the DDT standard solution at 1.0 mg L^{-1}

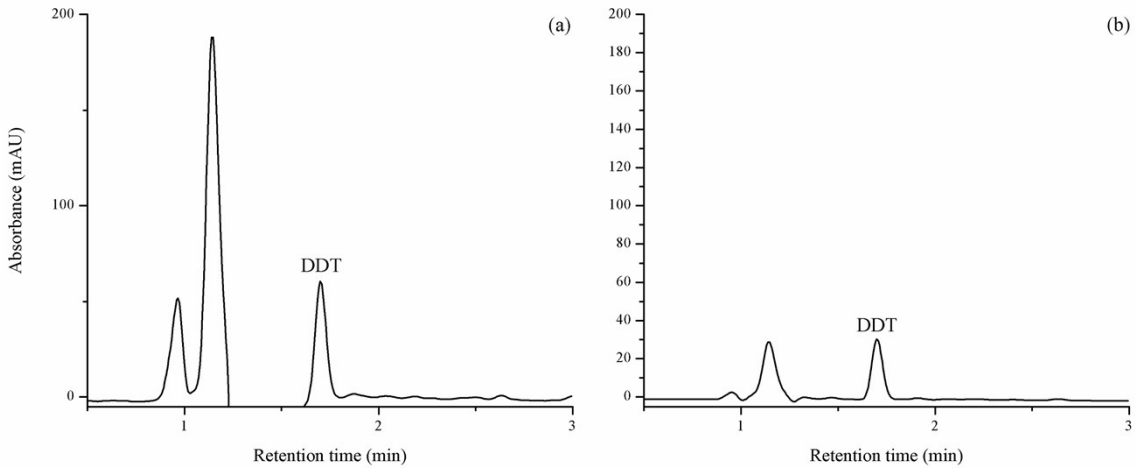

Fig. S2 Chromatograms of the DDT standard solution at 1.0 mg L^{-1}. Poroshell column, mobile phase MeOH:H_2O = 100:0 v/v, flow rate = 0.5 mL min^{-1} , column temperature = 30 ºC and λ = (a) 200 and (b) 235 nm

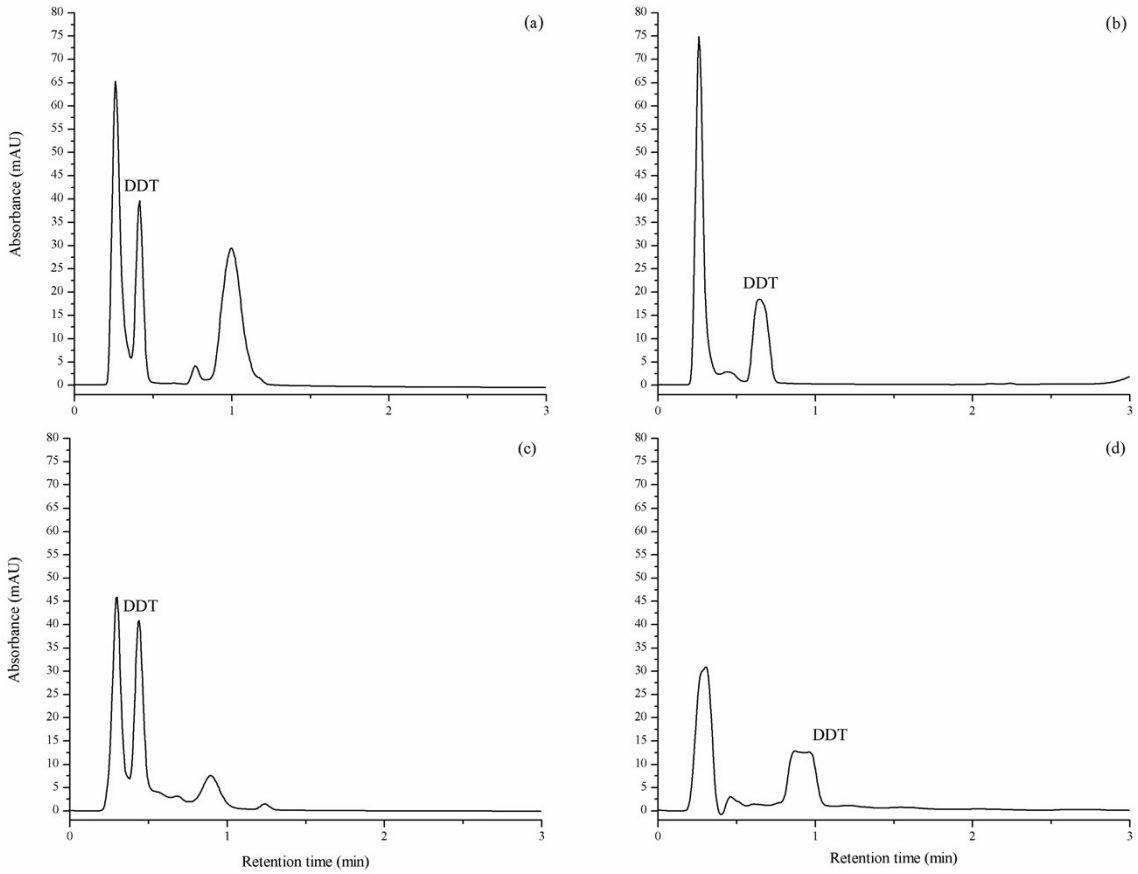

Fig. S3 Chromatograms of the DDT standard solution at 1.0 mg L^{-1}. Zorbax column, flow rate = 0.5 mL min^{-1}, column temperature = 30 ºC, λ = 235 nm, mobile phase composed of (a) ACN:H_2O = 100:0 (v/v), (b) ACN:H_2O = 90:10 (v/v), (c) MeOH:H_2O = 100:0 (v/v) and (d) MeOH:H_2O = 90:10 (v/v)

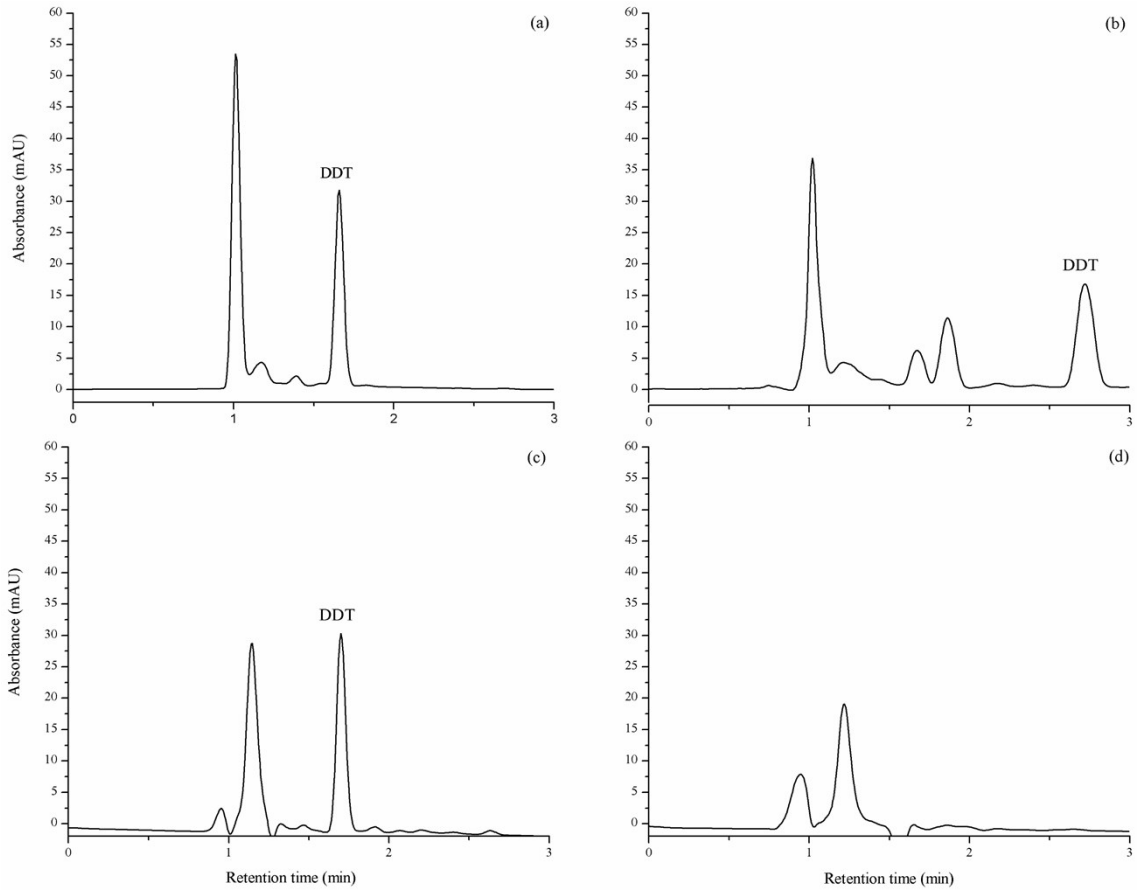

Fig. S4 Chromatograms of the DDT standard solution at 1.0 mg L^{-1}. Poroshell column, flow rate = 0.5 mL min^{-1}, column temperature = 30 ºC, λ = 235 nm, mobile phase composed of (a) ACN:H_2O = 100:0 (v/v), (b) ACN:H_2O = 90:10 (v/v), (c) MeOH:H_2O = 100:0 (v/v) and (d) MeOH:H_2O = 90:10 (v/v)

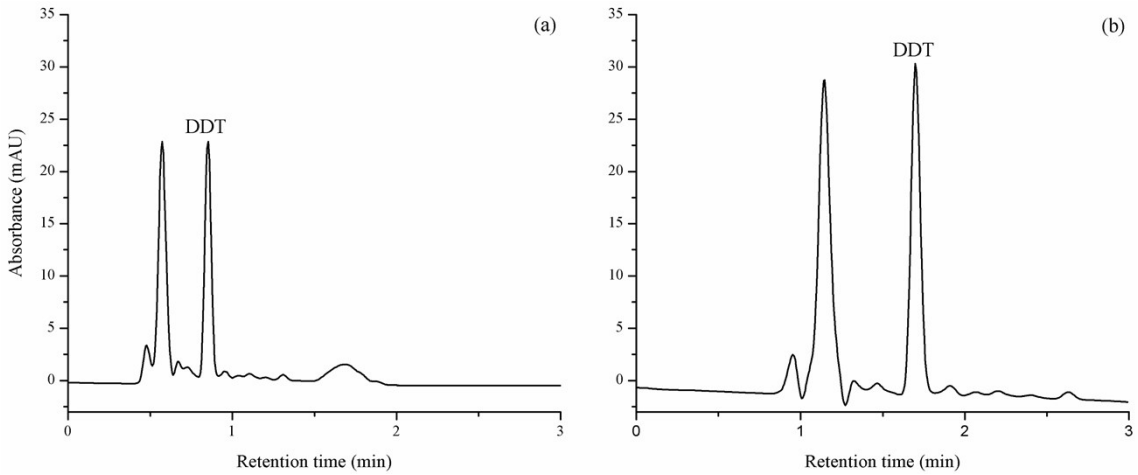

Fig. S5 Chromatograms of the DDT standard solution at 1.0 mg L^{-1}. Poroshell column, mobile phase MeOH:H_2O = 100:0 v/v, column temperature = 30 ºC, λ = 235 nm, flow rate = (a) 1.0 mL min^{-1} and (b) 0.5 mL min^{-1}

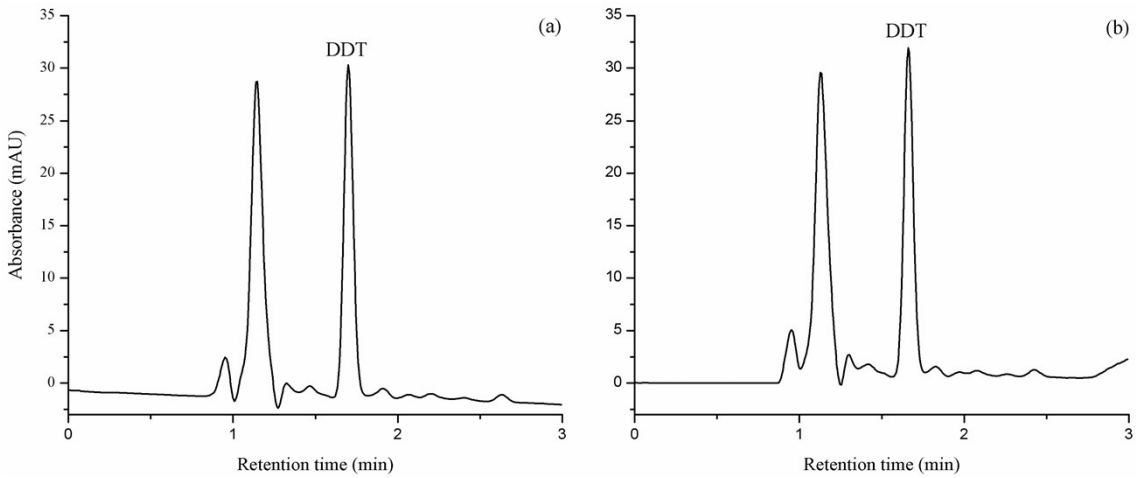

Fig. S6 Chromatograms of the DDT standard solution at 1.0 mg L^{-1}. Poroshell column, mobile phase MeOH:H_2O = 100:0 v/v, flow rate = 0.5 mL min^{-1}, λ = 235 nm and column temperature = (a) 30 ºC and (b) 40 ºC

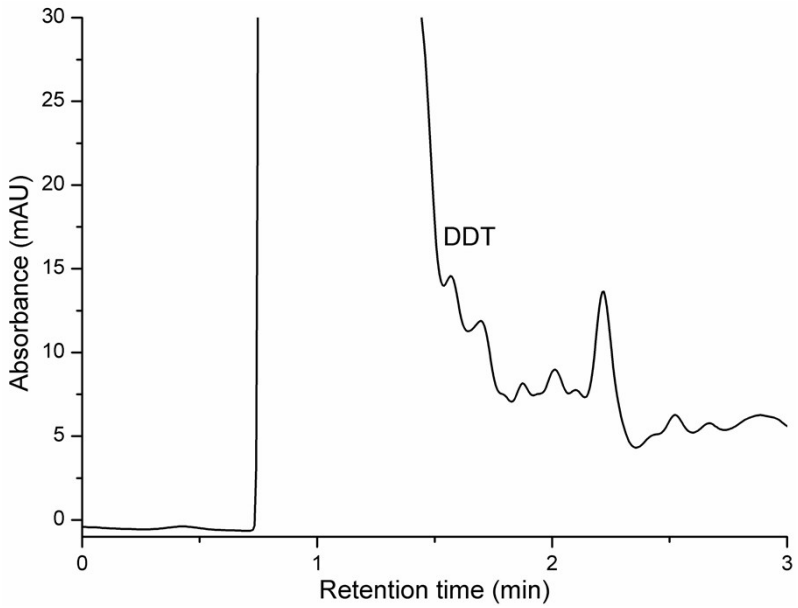

Fig. S7 Chromatogram of spiked extract with DDT at 8 μgkg^{-1}, corresponding to the LOQ

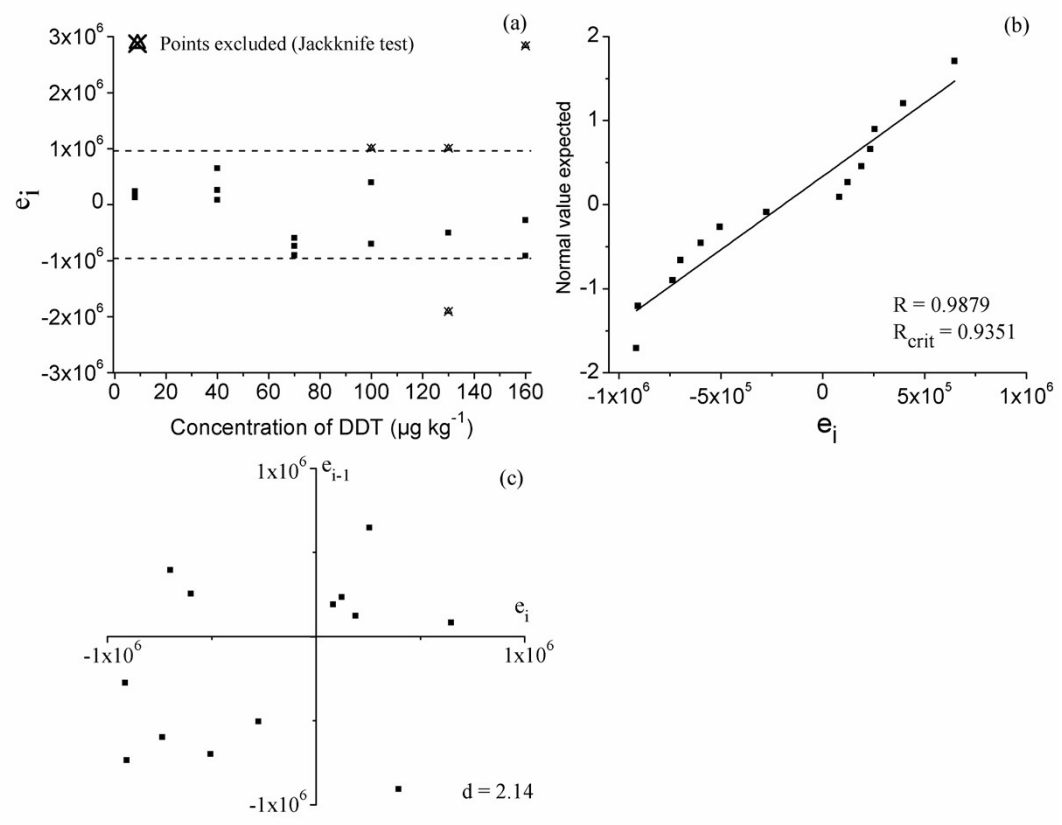

Fig. S8 Obtained graphs in the linearity assessment of the LLE-LTP method. (a) Linear regression residuals after the exclusion of extreme values by the Jackknife test, (b) normal probability of regression residuals by the Ryan-Joiner test and (c) Autocorrelation of regression residuals by the Durbin-Watson test. e_i, residual; R, correlation coefficient of Ryan-Joiner test; d, Durbin-Watson statistics

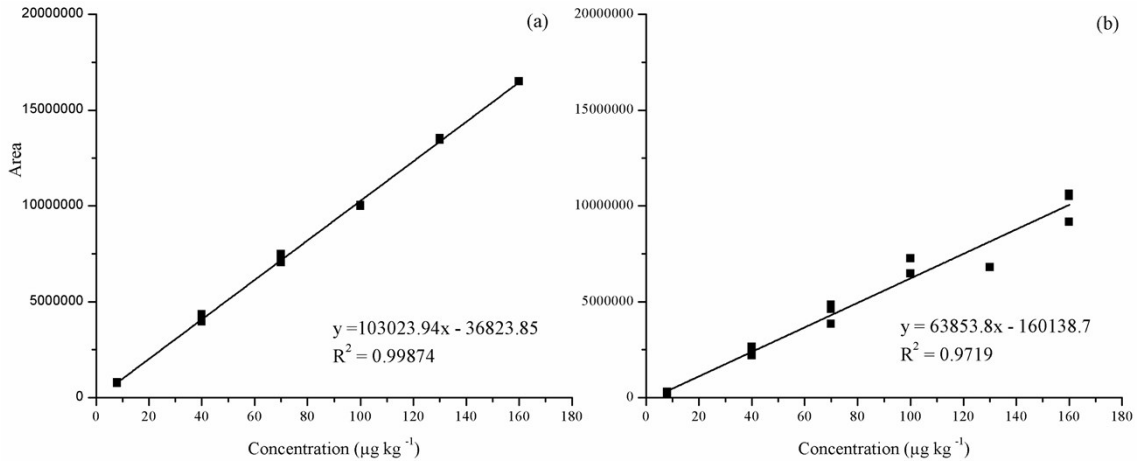

Fig. S9 Analytical curves of DDT solutions in (a) acetonitrile and (b) matrix extracts. R^2, determination coefficient