

Assessment of a Fully Optimized DPX-Based Procedure for the Multiclass Determination of Pesticides in Drinking Water Using High-Performance Liquid Chromatography with Diode Array Detection

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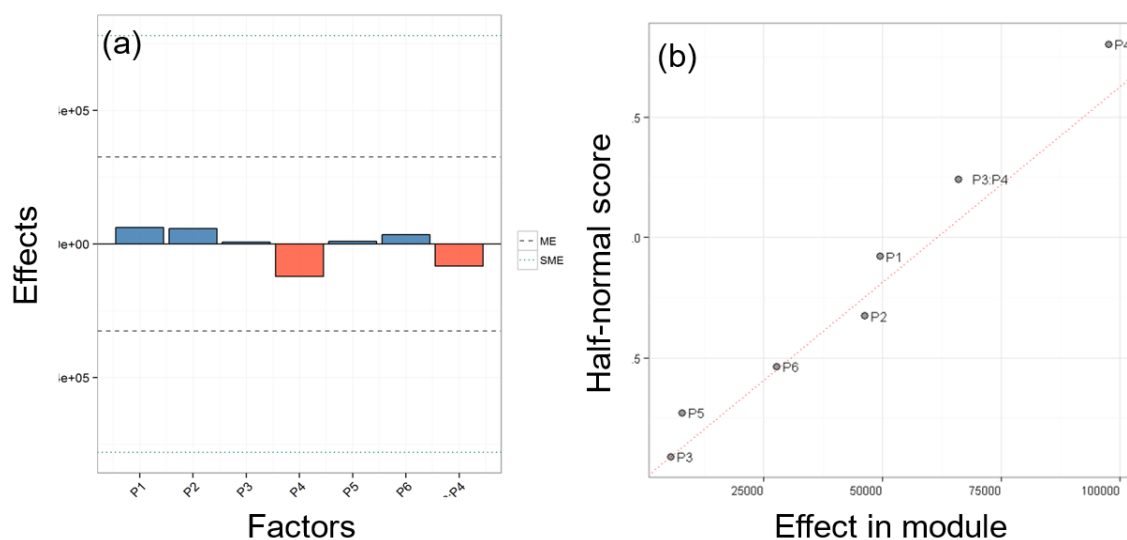


Figure S1. Robustness evaluation: (a) Lenth graph and (b) Daniel graph.

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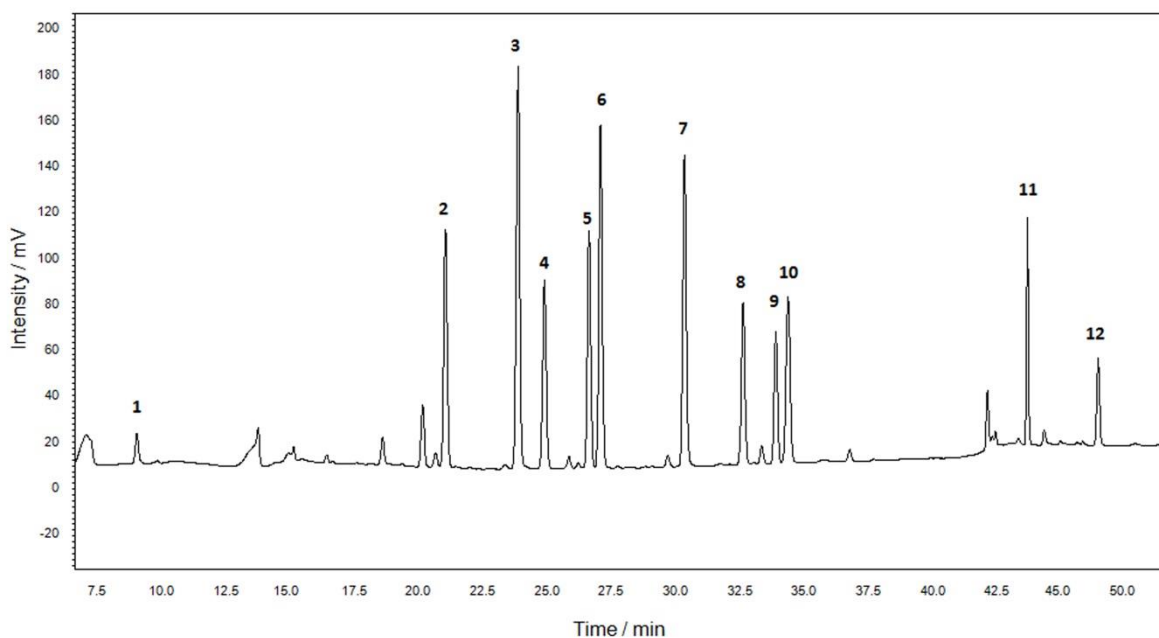


Figure S2. Chromatogram obtained from a tap water sample spiked with the analytes at $200 \mu\text{g L}^{-1}$. The extraction was performed under optimized conditions. Elution order: (1) carbendazim; (2) simazine; (3) carbofuran; (4) atrazine; (5) diuron; (6) 2,4-D; (7) 2,4,5-T; (8) tebuconazole; (9) parathion-methyl; (10) metolachlor; (11) 4,4'-DDD; and (12) 4,4'-DDE.

Table S1. ANOVA table for each analyte

	df	Sum of squares	Mean squares	F value	F
Carbendazim					
Regression	1	6.97×10^{10}	6.97×10^{10}	1207.98661	5.24×10^{-5}
Residual	3	1.73×10^8	5.77×10^7	—	—
Total	4	6.99×10^{10}	—	—	—
Simazine					
Regression	1	4.37×10^{11}	4.37×10^{11}	398586.3695	8.76×10^{-9}
Residual	3	3.29×10^6	1.10×10^6	—	—
Total	4	4.37×10^{11}	—	—	—
Carbofuran					
Regression	1	1.22×10^{12}	1.22×10^{12}	11676.46113	1.75×10^{-6}
Residual	3	3.13×10^8	1.04×10^8	—	—
Total	4	1.22×10^{12}	—	—	—
Atrazine					
Regression	1	2.79×10^{11}	2.79×10^{11}	13699.95678	1.37×10^{-6}
Residual	3	6.10×10^7	2.03×10^7	—	—
Total	4	2.79×10^{11}	—	—	—
Diuron					
Regression	1	3.36×10^{11}	3.36×10^{11}	11415.80845	1.36×10^{-9}
Residual	5	1.47×10^8	2.95×10^7	—	—
Total	6	3.36×10^{11}	—	—	—
2,4-D					
Regression	1	7.31×10^{11}	7.31×10^{11}	4474.0105	7.36×10^{-6}
Residual	3	4.90×10^8	1.63×10^8	—	—
Total	4	7.31×10^{11}	—	—	—

Table S1. ANOVA table for each analyte (cont.)

	df	Sum of squares	Mean squares	F value	F
2,4,5-T					
Regression	1	5.07×10^{11}	5.07×10^{11}	5533.68696	5.35×10^{-6}
Residual	3	2.75×10^8	9.17×10^7	–	–
Total	4	5.08×10^{11}	–	–	–
Tebuconazole					
Regression	1	1.84×10^{11}	1.84×10^{11}	22726.156	6.44×10^{-7}
Residual	3	2.43×10^7	8.09×10^6	–	–
Total	4	1.84×10^{11}	–	–	–
Parathion-methyl					
Regression	1	2.99×10^{10}	2.99×10^{10}	7869.10415	1.27×10^{-4}
Residual	2	7.60×10^6	3.80×10^6	–	–
Total	3	2.99×10^{10}	–	–	–
Metolachlor					
Regression	1	3.47×10^{11}	3.47×10^{11}	8533.90901	8.23×10^{-8}
Residual	4	1.63×10^8	4.06×10^7	–	–
Total	5	3.47×10^{11}	–	–	–
4,4'-DDD					
Regression	1	2.77×10^{10}	2.77×10^{10}	566.599	1.62×10^{-4}
Residual	3	1.47×10^8	4.89×10^7	–	–
Total	4	2.78×10^{10}	–	–	–
4,4'-DDE					
Regression	1	6.40×10^9	6.40×10^9	514.10029	1.88×10^{-4}
Residual	3	3.73×10^7	1.24×10^7	–	–
Total	4	6.43×10^9	–	–	–

df: degree of freedom; F: significance; 2,4-D: 2,4-dichlorophenoxy acetic acid; 2,4,5-T: 2,4,5-trichlorophenoxy acetic acid; 4,4'-DDD: dichlorodiphenyldichloroethane; 4,4'-DDE: dichlorodiphenyldichloroethylene.