Highly sensitive detection of chemically modified thio-organophosphates by an enzymatic biosensing device: an automated robotic approach.

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Supplementary Table S1. MRM Transitions and Mass Spectrometry Settings

Analyte	RT (min)	Q1 (Da)	Q2 (Da)	DP (V)	EP (V)	CE (V)	CXP (V)	Reference
Paraoxon - methyl 1	7.2	248.1	90.1	71	10	37	16	1
Paraoxon - methyl 2	7.2	248.1	202.1	71	10	27	10	1
Paraoxon - ethyl 1	7.7	276.1	220.0	69	10	19	6	2
Paraoxon - ethyl 2	7.7	276.1	248.1	69	10	13	6	2
Phosmet 1	8.1	318.0	160.0	61	10	17	10	2
Phosmet 2	8.1	318.0	133.0	61	10	49	11	2
Parathion - methyl 1	8.2	264.0	125.0	85	10	25	8	3
Parathion - ethyl 1	9.0	292.0	236.0	80	10	20	7	2
Parathion - ethyl 2	9.0	292.0	264.0	80	10	15	7	2
Coumaphos 1	9.2	363.0	227.0	100	10	36	10	2
Coumaphos 2	9.2	363.0	307.0	100	10	25	10	2
Tolclofos - methyl 1	9.7	301.0	268.9	59	10	23	6	2
Tolclofos - methyl 2	9.8	301.0	175.0	59	10	35	6	2
Diazinon 1	10.0	305.0	169.0	80	10	27	11	2
Diazinon 2	10.0	305.0	153.0	80	10	28	11	2
Pirimiphos - methyl 1	10.4	306.1	164.1	75	10	29	6	2
Pirimiphos - methyl 2	10.4	306.1	108.0	75	10	40	6	2
Chlorpyrifos 1	10.8	350.0	198.0	82	10	29	9	2

Chlorpyrifos 2	10.8	350.0	97.0	82	10	49	9	2

References:

(1) Fillâtre, Y.; Rondeau, D.; Daguin, A.; Jadas-Hecart, A.; Communal, P.-Y. Multiresidue Determination of 256 Pesticides in Lavandin Essential Oil by LC/ESI/SSRM: Advantages and Drawbacks of a Sampling Method Involving Evaporation under Nitrogen. *Anal. Bioanal. Chem.* **2014**, *406* (5), 1541–1550.

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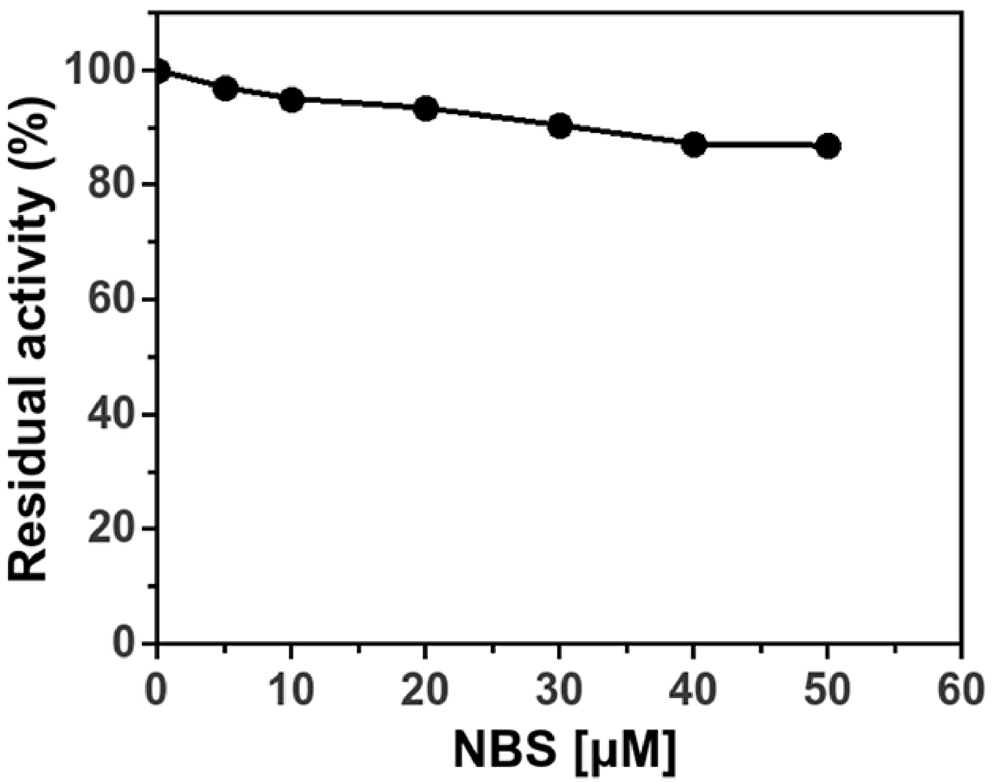
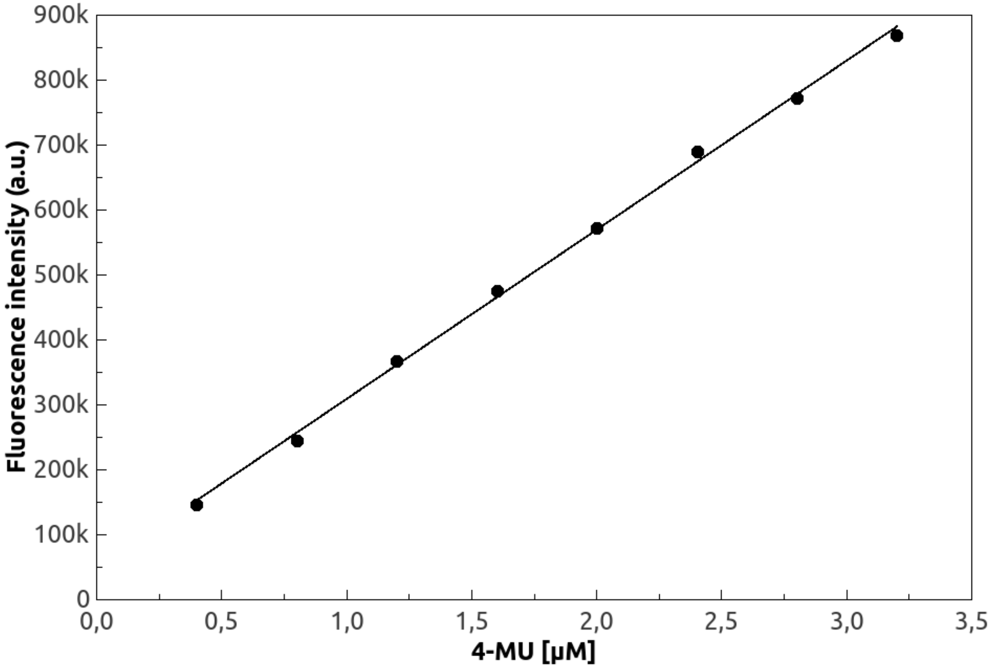
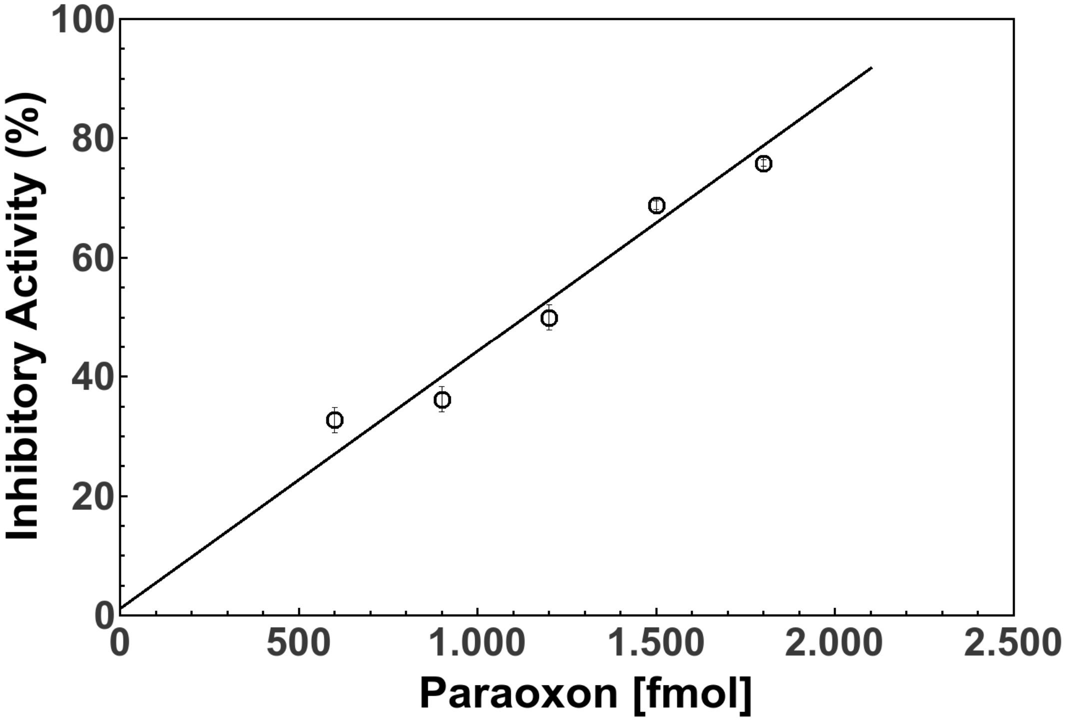
(3) Feng, X.; He, Z.; Wang, L.; Peng, Y.; Luo, M.; Liu, X. Multiresidue Analysis of 36 Pesticides in Soil Using a Modified Quick, Easy, Cheap, Effective, Rugged, and Safe Method by Liquid Chromatography with Tandem Quadruple Linear Ion Trap Mass Spectrometry. *J. Sep. Sci.* **2015**, *38* (17), 3047–3054.



Supplementary Figure S1. Plot of EST2 residual activity in presence of increasing NBS concentration levels.



Supplementary Figure S2. Calibration curve of fluorescence intensity at increasing concentration levels of 4-MU in HEPES buffer, measured using the robotic workstation.



Supplementary Figure S3. Calibration curve of inhibitory activity at increasing concentration levels of Paraoxon in HEPES buffer in presence of enzy