

Graphene oxide-based probe for detecting Deltamethrin and Emamectin Benzoate Pesticides in Agricultural Run-off

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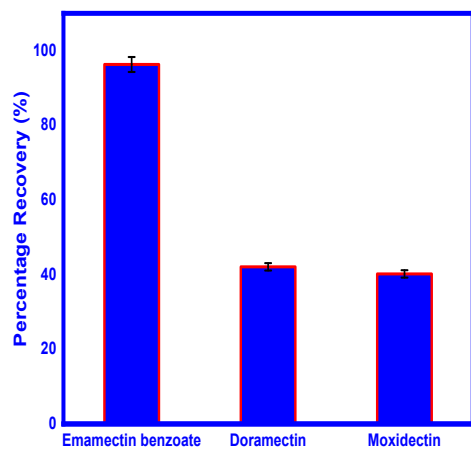
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(a)



(b)

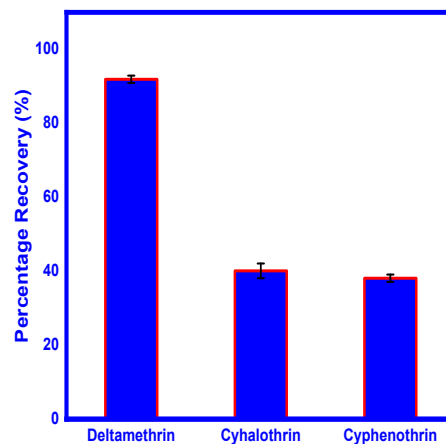


Figure S1. Percentage recoveries of (a) emamectin benzoate, doramectin, moxidectin and (b) deltamethrin , cyhalothrin, cyphenothrin.

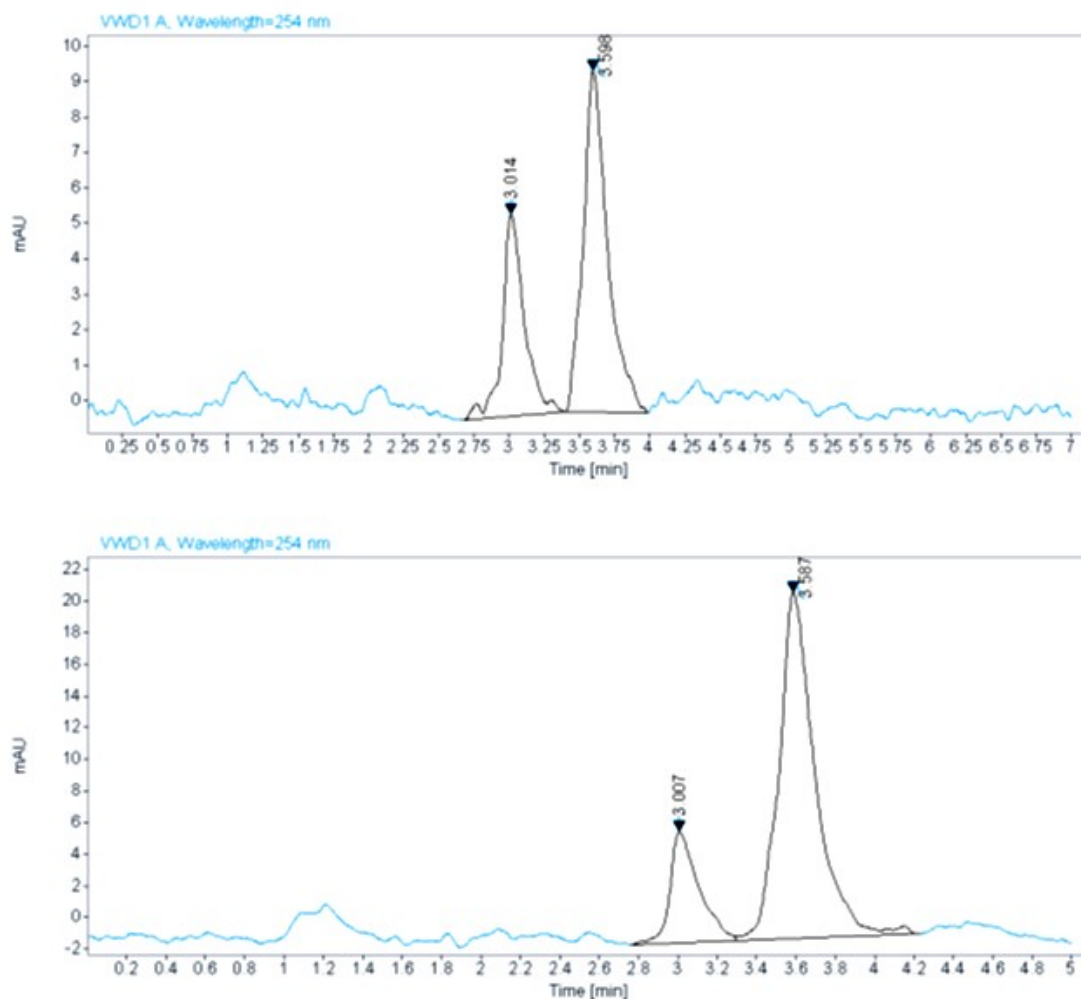


Figure S2: a) Chromatogram of real water sample spiked with standard deltamethrin and emamectin benzoate b) Chromatogram of the solution obtained after desorbing the pesticides adsorbed on the MI_{ormosil} (Ultra IBD 5-m 250 × 4.6 mm long C₁₈ column, mobile phase: acetonitrile/water (75:25 v/v) and a flow rate of 1 mL min⁻¹).

Table S 1: Central composite design for determining the binding capacity (q_e) of MI_{ormosil} for deltamethrin

Run	A Concentration (mg L⁻¹)	B Time (min)	C pH	q_e (mg g⁻¹)
1	55	17.5	7	31.70
2	100	5	10	39.07
3	55	17.5	10	34.27
4	55	17.5	4	28.82
5	10	5	4	21.36
6	100	17.5	7	38.74
7	100	30	10	42.21
8	10	30	10	26.61
9	55	17.5	7	30.84
10	55	5	7	28.22
11	10	30	4	25.40
12	10	5	10	22.17
13	100	30	4	35.15
14	55	30	7	35.18
15	10	17.5	7	23.58
16	55	17.5	7	31.44
17	100	5	4	38.30

Table S 2: Central composite design for determining the binding capacity (q_e) of MI_{ormosil} for emamectin benzoate

Run	A Concentration (mg L⁻¹)	B Time (min)	C pH	q_e (mg g⁻¹)
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1	55	17.5	7	16.90
2	100	5	10	20.21
3	55	17.5	10	25.21
4	55	17.5	4	12.18
5	10	5	4	2.50
6	100	17.5	7	7.14
7	100	30	10	13.77
8	10	30	10	4.82
9	55	17.5	7	17.02
10	55	5	7	17.80
11	10	30	4	4.40
12	10	5	10	12.91
13	100	30	4	6.10
14	55	30	7	16.82
15	10	17.5	7	4.34
16	55	17.5	7	15.80
17	100	5	4	5.14
