

Three-dimensional chitosan/graphene oxide aerogel for high-efficiency solid-phase extraction of acidic herbicides in vegetables

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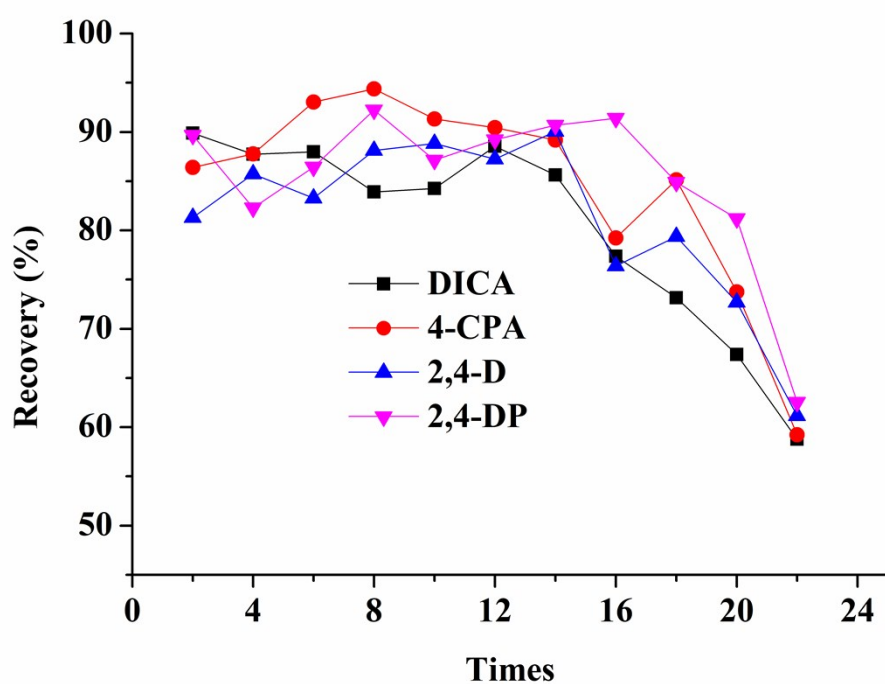


Fig. S1 Repeatability of the CS/GOA@Sil.

Table S1 The BET surface area (a), total pore volume (v) and average pore width (w) of different sorbents.

	a (m ² g ⁻¹)	v (cm ³ g ⁻¹)	w (nm)
GOA@Sil	306.54	0.78	10.13
CS/GOA@Sil	290.56	0.78	10.80

Table S2 Comparison of methods used for the determination of selected acidic herbicides.

Sample matrix	Method	Sorbent/extractant	Sorbent (mg)/ extractant (mL)	LODs	Ref.
Rice	MSPE-HPLC-UV	Polyethyleneimine modified reduced GO	5.4	DICA, 4 ng g ⁻¹ ; 2,4-D, 6 ng g ⁻¹ ; 2,4-DP, 6 ng g ⁻¹ .	1
Water	LLLME	NaOH	0.005	4-CPA, 1.2 ng mL ⁻¹ ; 2,4-DP, 0.2 ng mL ⁻¹ .	2
Apple juice	SPE-cLC	[Poly(divinylbenzene-co- <i>N</i> -vinylpyrrolidone)]-sulfonic acid groups	60	2,4-D, 7 µg kg ⁻¹ ; 2,4-DP, 10 µg kg ⁻¹ .	3
River water	SPE-EME	GO	-	2,4-DP, 0.3 ng mL ⁻¹ .	4
Chives and cabbage	SPE-HPLC-UV	CS/GOA@Sil	30	DICA, 1 µg L ⁻¹ ; 4-CPA, 1 µg L ⁻¹ ; 2,4-D, 1 µg L ⁻¹ ; 2,4-DP, 1.5 µg L ⁻¹ .	This work

LLLME, liquid-liquid-liquid microextraction; cLC, capillary liquid chromatography; EME, electro membrane extraction.

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