

Supplementary data

Bimetallic metal organic framework based dispersive solid phase extraction followed by using a carbon dot solution as the elution solvent; Application in the extraction of imidacloprid and acetamiprid in pepper samples

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Table S1. Comparison of the proposed method by other works.

Method	Sample	Analyte	LOD ^{a)}	LOQ ^{b)}	LR ^{c)}	r ^{2 d)}	RSD ^{e)} (%)	Ref.
SPME-HPLC-UV ^{f)}	Fruits and vegetables	Imidacloprid	0.15	0.5	0.5-200	0.9988	2.3-3.5	[S1]
		Acetamiprid	0.30	1.0	1.0-500	0.9990	2.6-3.7	
MSPE-HPLC-UV ^{g)}	Water	Imidacloprid	0.01	0.03	0.03-100	0.9998	3.8	[S2]
		Acetamiprid	0.03	0.10	0.10-100	0.9998	4.1	
DSPE-LC-MS ^{h)}	Lemon	Imidacloprid	0.05	0.15	0.15-100	1.000	6.1	
		Acetamiprid	0.03	1.0	0.10-100	1.000	7.9	
		Acetamiprid	0.05	-	0.2-2000	0.996	6.4	
QuEChERS-UPLC-Q-TOF/MS ^{h)}	Chili	Imidacloprid	1.0	3.0	3.0-2000	0.9976	2.4-7.7	[S3]
		Acetamiprid	0.02	0.05	0.05-500	0.9989	3.8-4.1	
DSPE LC-MS/MS ⁱ⁾	Bell pepper	Imidacloprid	0.44	1.4	1.4-500	0.991	5.6	Current study
		Acetamiprid	0.32	1.0	1.0-500	0.992	4.7	

^a Limit of detection ($\mu\text{g L}^{-1}$).^b Limit of quantification ($\mu\text{g L}^{-1}$).^c Linear range ($\mu\text{g L}^{-1}$).^d Coefficient of determination.^e Relative standard deviation.^f Solid phase microextraction-high-performance liquid chromatography-ultraviolet detection.^g Magnetic solid phase extraction-high-performance liquid chromatography-ultraviolet detection.^h Quick, easy, cheap, effective, rugged, and safe-ultra-high performance liquid chromatography quadrupole time of flight mass spectrometry.ⁱ Dispersive solid phase extraction-liquid chromatography-tandem mass spectrometry.

References

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