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SUPPLEMENTARY MATERIAL TO

Beech sawdust based adsorbents for solid-phase extraction of pesticides and pharmaceuticals

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LC–MS/MS ANALYSIS

Separation of the analytes was performed on a reverse-phase column, Zorbax Eclipse XDB-C18 75 mm long, 4.6 mm *i.d.* and 3.5 μm particle size (Agilent Technologies, USA) of Surveyor HPLC system (Thermo Fisher Scientific, USA). The gradient of the mobile phase consisted of methanol (A), water (B), and 10 % acetic acid (C) are shown in Table S-I. Quadrupole ion trap mass spectrometer, LCQ Advantage (Thermo Fisher Scientific, USA), was used for the detection and quantification of selected pesticides and pharmaceuticals. The electrospray ionization technique was used, and all analytes were analyzed in the positive ionization mode. Selected reaction monitoring (SRM) chromatograms of selected pesticides and pharmaceuticals are given in Figure S-1, and LC/MS-MS quantification parameters are presented in Table S-II.

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TABLE S-I. Gradient and flow rate of the mobile phase

Time, min	Flow rate, $cm^3\ min^{-1}$	Content, %		
		A	B	C
0	0.5	33	66	1
20.00	0.5	100	0	0
20.01	1	100	0	0
30.00	1	100	0	0
30.01	0.5	33	66	1
40.00	0.5	33	66	1

TABLE S-II. LC–MS/MS quantification parameters for selected pesticides and pharmaceuticals

Analyte	Retention time, min	*m* / z Precursor ion	Collision energy, a.u.*	*m* / *z* Product ion
4-AAA	3.27	246	28	228
4-FAA	3.10	232	30	204
Imidacloprid	5.11	256	28	210
Acetamiprid	6.76	223	36	126
Dimethoate	6.95	230	26	199
Carbamazepine	12.96	237	34	194
Atrazine	14.28	216	38	174
Lorazepam	14.61	321	32	303
Propazine	16.29	230	36	188
Diazepam	16.61	285	40	257
Malathion	17.21	331	28	285
Tebufenozide	18.85	375	34	225
Clopidogrel	20.25	322	28	212

*arbitrary units defined by LCQ system

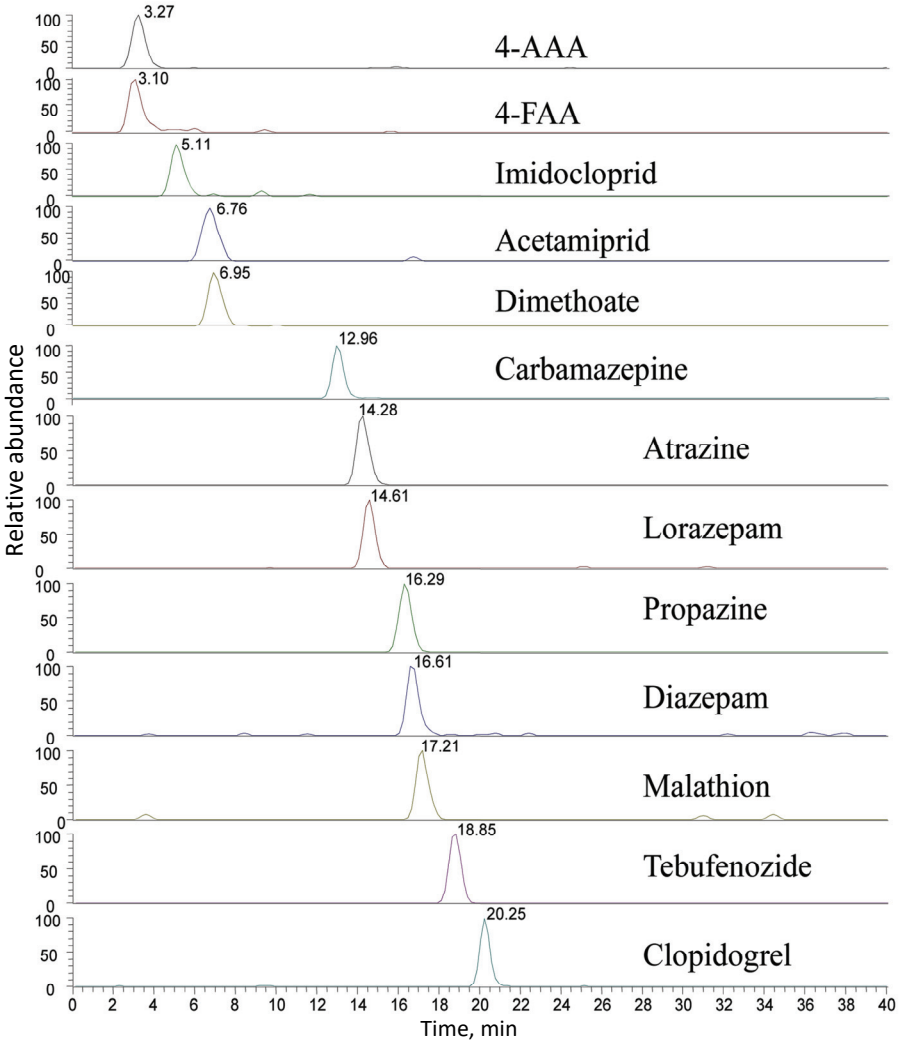

Fig. S-1. SRM chromatograms of selected pesticides and pharmaceuticals.