Supplementary Information

Optimization and Validation of the Miniaturized Solid-Liquid Extraction with Low Temperature Purification (SLE-LTP) Method for Determining Fluopyram in Sandy, Clayey and Medium-Textured Soil

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Table S1. Physicochemical characterization of soils

	Sandy soil	Clayey soil	Medium-texture soil
pH in water	6.30	6.93	6.69
Phosphorus Mehlich / (mg kg^{-1})	1.68	42.00	291.67
Potassium / (mg kg^{-1})	10.00	1721.00	201.57
Calcium / (g kg^{-1})	0.08	2.29	1.82
Magnesium / (mg kg^{-1})	17.60	694.00	150.33
Aluminum / (g kg^{-1})	0.05	8.18	6.03
Sum of bases (cmol dm^{-3})	0.81	0.43	0.22
Effective CEC / (cmol dm^{-3})	1.62	2.25	1.56
Aluminum saturation / %	50.00	80.72	85.94
Organic matter / (g kg^{-1})	9.60	118.74	92.23
Sand / %	64.00	10.00	38.00
Silt / %	8.00	48.00	30.00
Clay / %	28.00	42.00	32.00

CEC: cation-ion exchange capacity.

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Table S2. Geographic coordinates of the sample collection locations

Sample	Geographic coordinates
1	21°49'54.9"S, 45°27'32.0"W
2	21°49'53.5"S, 45°53'19.7"W
3	21°50'04.2"S, 45°53'30.7"W
4	21°50'06.7"S, 45°53'40.6"W
5	21°49'11.6"S, 45°53'35.5"W
6	21°48'55.6"S 45°54'46.9"W
7	21°48'44.6"S 45°55'03.2"W
8	21°48'27.8"S 45°55'07.1"W
9	21°48'14.9"S 45°55'23.3"W
10	21°48'11.5"S 45°55'33.1"W
11	21°48'10.9"S 45°55'42.3"W
12	21°48'03.8"S 45°55'49.1"W
13	21°48'02.6"S 45°55'59.7"W
14	21°48'04.5"S 45°56'15.1"W
15	21°47'24.2"S 45°56'33.3"W
16	21°47'29.6"S 45°56'27.4"W
17	21°47'23.0"S 45°56'27.0"W
18	21°47'17.8"S 45°56'11.5"W
19	21°47'12.3"S 45°56'04.5"W
20	21°47'14.8"S 45°56'17.7"W
21	21°45'06.5"S 45°56'58.0"W
22	21°45'20.0"S 45°57'15.8"W
23	21°47'43.3"S 45°59'13.5"W
24	21°47'36.9"S 45°59'04.1"W
25	21°47'42.3"S 45°59'03.9"W
26	21°47'48.6"S 45°59'11.8"W
27	21°48'04.5"S 45°59'22.2"W
28	21°48'06.5"S 45°59'26.3"W
29	21°47'34.2"S 45°58'51.5"W
30	21°47'26.0"S 45°58'40.5"W

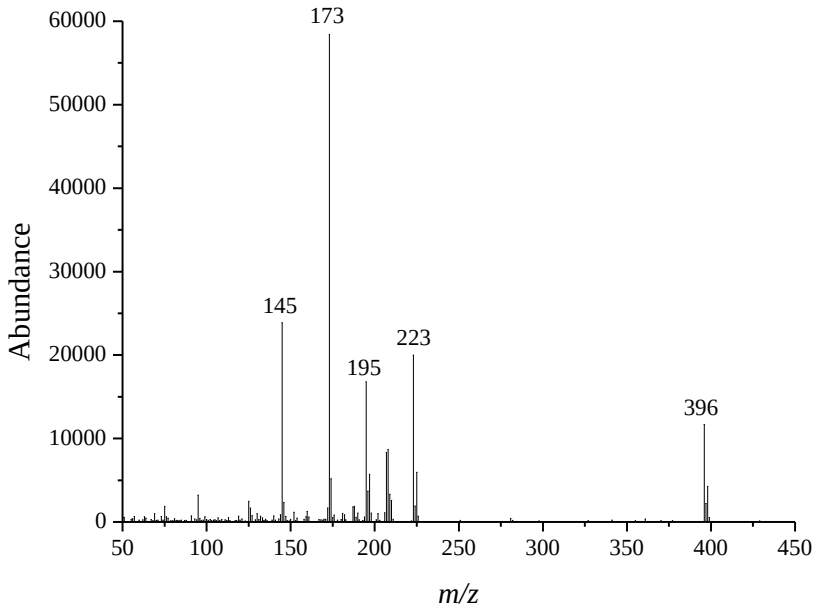

Figure S1. Fluopyram mass spectrum.

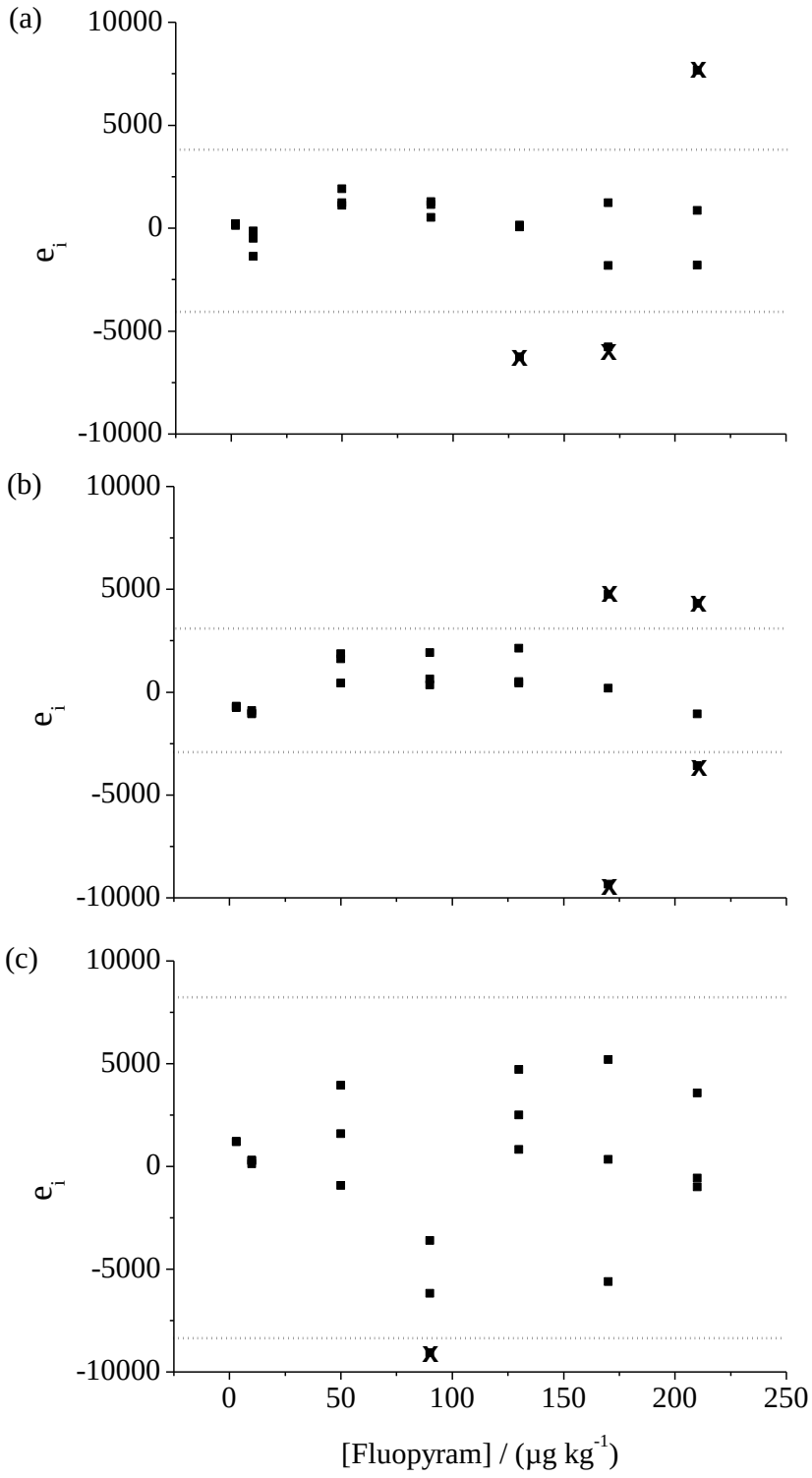

Figure S2. Jackknife test charts for exclusion of critical values. (a) Sandy soil; (b) clay soil; (c) medium-texture soil. e_i = regression residual.

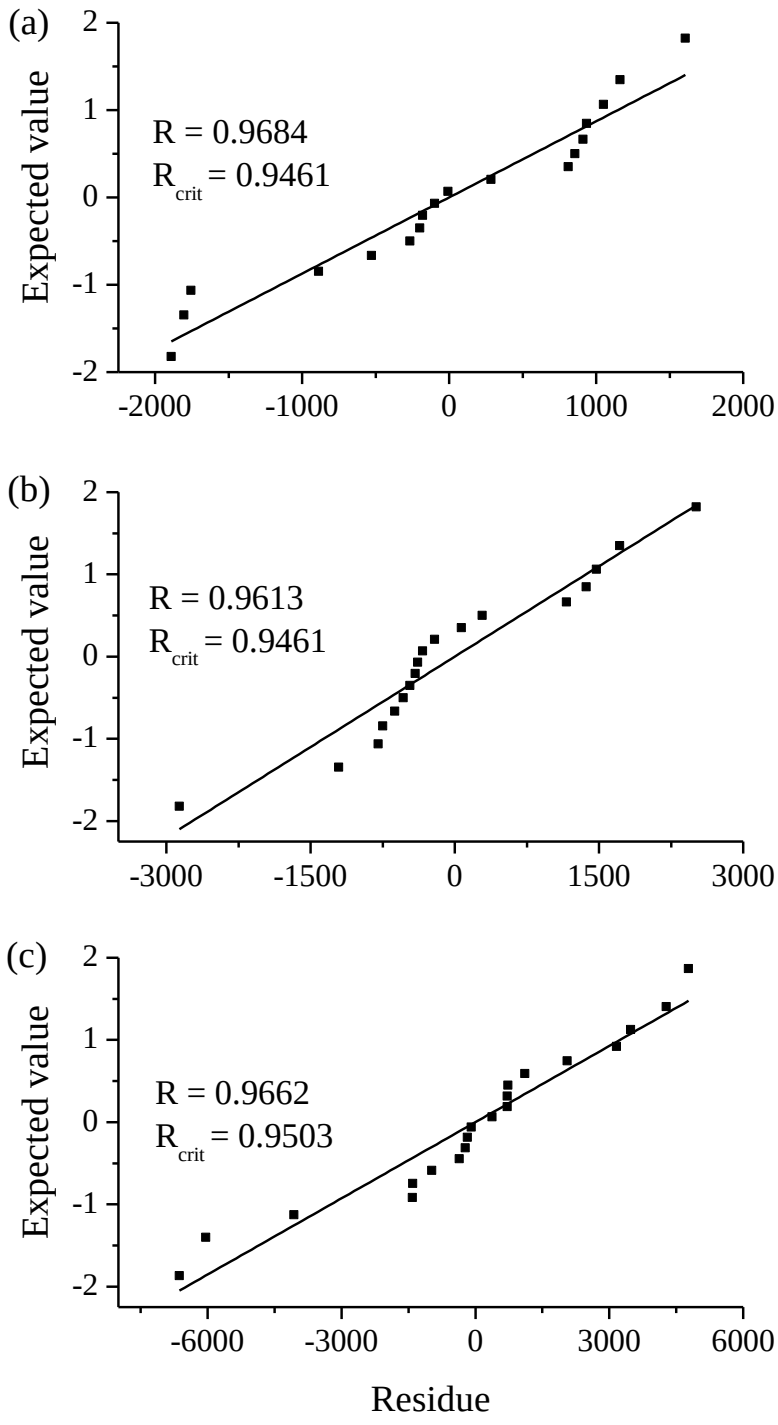

Figure S3. Linear regression residuals normality graph. (a) Sandy soil; (b) clay soil; (c) medium-texture soil.

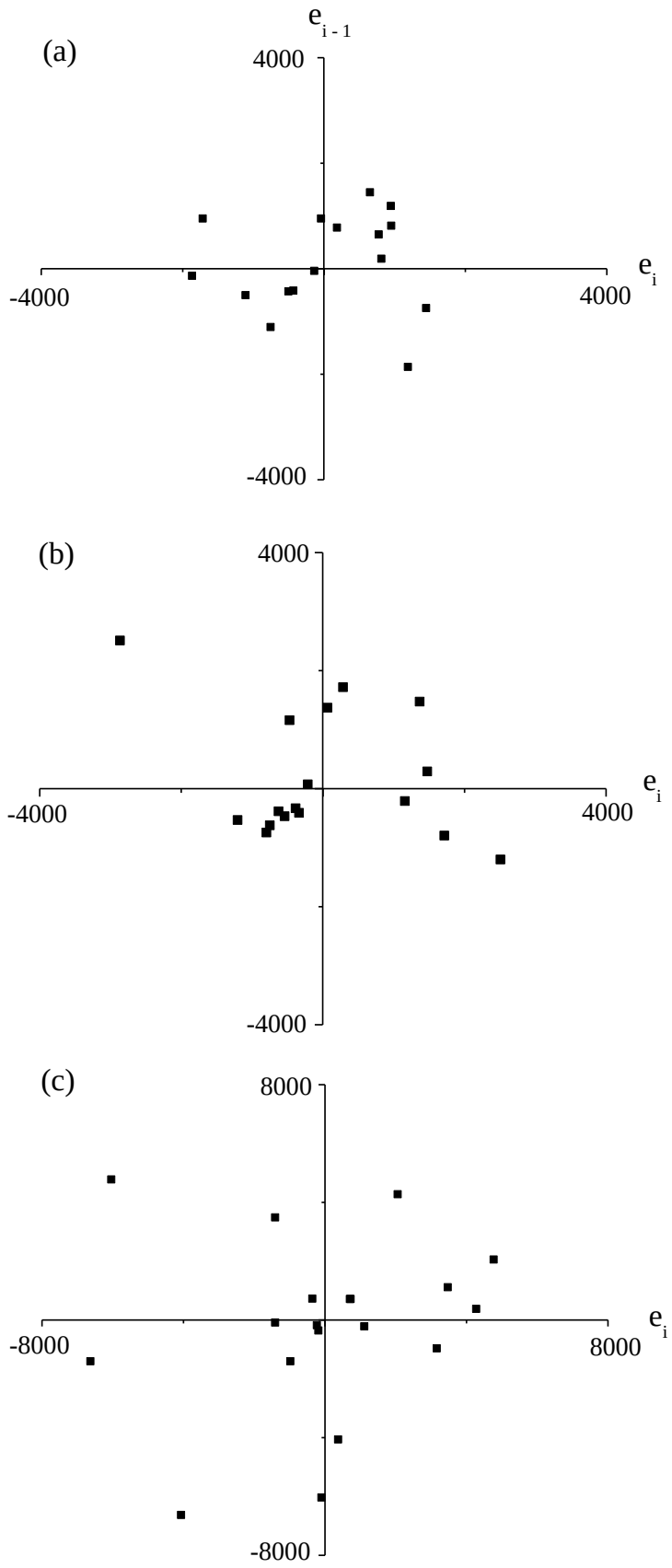

Figure S4. Graphs of independence of regression residuals by the Durbin and Watson test. (a) Sandy soil; (b) clay soil; (c) medium-texture soil.