Supporting Information

1. Information of standard materials

Supplier: Wellington Laboratory (Ontario, Canada)

PFAAs mixed standard solution：Perfluoro-n-butanoic acid (PFBA), perfluoro-n-pentanoic acid (PFPeA), perfluoro-n-hexanoic acid (PFHxA), perfluoro-n-heptanoic acid (PFHpA), perfluoro-n-octanoic acid (PFOA), perfluoro-1-octanesulfonate (PFOS), perfluoro-n-nonanoic acid (PFNA), perfluoro-n-decanoic acid (PFDA), perfluoro-n-undecanoic acid (PFUdA), perfluoro-n-dodecanoic acid (PFDoA), perfluoro-n-tridecanoic acid (PFTrDA), perfluoro-n-tetradecanoic acid (PFTeDA), perfluoro-n-hexadecanoic acid (PFHxDA) and perfluoro-n-octadecanoic acid (PFODA) were dissolved in methanol with the same concentration of 2 μg mL^{-1}.

Isotopically labelled internal standard solution: $^{13}C_4$-PFBA, $^{13}C_5$-PFPeA, $^{13}C_5$-PFHxA, $^{13}C_4$-PFHpA, $^{13}C_8$-PFOA, $^{13}C_9$-PFNA, $^{13}C_6$-PFDA, $^{13}C_7$-PFUdA, $^{13}C_2$-PFDoA , $^{13}C_2$-PFTeDA and $^{13}C_8$-PFOS were also dissolved in methanol with the same concentration of 2 μg mL^{-1}.

Proper volume of two mixed solutions above were diluted to 100 ng mL^{-1} and 10 ng mL^{-1} by methanol, respectively, as stock solutions. They were stored at 4 °C with period of validity as two months.

2. Reagents, consumables and instruments

HPLC grade acetonitrile (MeCN) and methanol (MeOH) were obtained from Fisher Scientific (Fairlawn, NJ, USA). Ammonium acetate (CH_3COONH_4), ammonia (NH_3H_2O), hydrochloric acid (HCl), sodium chloride (NaCl), anhydrous magnesium sulfate ($MgSO_4$) were all analytically pure and gained from Sinopharm Chemical Reagent Co., Ltd (Shanghai, China). Weak anion exchange solid phase extraction catridges were purchased from Waters Corporation (Milford, MA, USA). Two kinds of Sin-QuEChERS catridges with different matching of C_{18}, primary secondary amine (PSA) and multi-wall carbon nanotubes (MWCNTs) were provided by Lumiere Technologies (Beijing, China). Centrifuge tube with different types were provided by Corning Corporation.

Instruments were employed for sample pretreatment, containing an analytical balance with precision of 0.1 mg (Sartorius GmbH, Germany), a set of oven (Xianke, Longkou, China), a set of ultrasonic cleaner (Hechuang, Kunshan, China), a set of nitrogen blowing instrument (Hengaokang, Tianjin, China) with gas generater (Jinlang scientific, Hangzhou, China), a crusher (Jiuyang, Jiangsu, China), a set of rotary evaporators and a MS3 vortex mixer (IKA GmbH, Germany), a set of TGL-16M centrifuge (Cence, Changsha, China) and a HNY-100B instrument shaker (Honour, Tianjin, China). Deionized water was produced by a set of 1815 Molecular water purification apparatus (Mo-le technology Co., Ltd, Shanghai, China), N_2 gas was made by a nitrogen generator (Peak Scientific, UK), and high purity Ar gas purchased from local manufacturer (Xieli, Jining, China) was employed as collision gas. A set of

air sample collecting assemble (Deersi, Jiangsu, China) was employed, which has maximum suction of 0.07 Mpa.

A Waters Acquity UPLC system coupled to a Micromass Quattro Premier XE triple quadrupole mass spectrometer (Waters, Milford, MA, USA) was used to analyze the sample extracts. Separation was achieved using a Waters Acquity UPLC BEH C18 column (50 mm long, 2.1 mm i.d., 1.7 μm particles).

3. Pretreatment methods of analysis in detail

PFAAs in vegetable sample[39]: The samples were washed successively using tap water and deionized water, cut into small pieces, and crushed using a grinder. 15 g aliquots of the homogenized samples were then weighed into a 50 mL centrifuge tube. Simultaneously, precisely 0.1 mL of an internal standard solution with a concentration of 10 ng mL^{-1} (and the required amount of external standard solution for QC if needed) was added. 15 mL of acetonitrile containing 1% (v:v) formic acid was then added, and the resulting solution was subjected to vortex mixing for about 60 s. 1.5 g of sodium acetate and 6 g of anhydrous magnesium sulfate were then added, and the mixture was vortexed for an additional 60 s. Subsequently, a Sin-QuEChERS cartridge was inserted into the centrifuge tube and pressed down with a stable pressure and a constant speed of about 1 mm s^{-1} using an automated apparatus. Soon after, 5 mL of the obtained filtered liquid was removed and concentrated to dryness using a soft flow of nitrogen gas, and then redissolved in 1 mL of methanol. After being sonicated for 3 min and vortexed for 30 s, the solution was pushed through a 0.22 μm nylon filter and then injected into the UPLC-MS-MS.

PFAAs in soil sample[40]: 1 g soil samples was weighted into a 50 mL centrifuge tube, with 0.1 mL of an internal standard solution with a concentration of 10 ng/mL (and the required amount of external standard solution for QC if needed) was added. 5 mL of methanol was then added, following vortex mixing for about 60 s and centrifuged at 7000 rpm for 5 min. The extraction procedure was repeated in triplicate, and all the supernatant was transferred out and dried by softly nitrogen blow,

following redissolved with 2 mL of water. The solution was purified by WAX-SPE. Program: Cartridge was activated with 4 mL of 0.1% ammonia-methanol solution, methanol and deionized water. The extraction solvent was loaded into the column at a rate of 2-3 drops/s. The column was then leached with 4 mL of 25 mmol/L acetate buffer solution (pH=4) to remove impurities, and removed water by suction filtration. The analytes were eluted with 4 mL of methanol and 4 mL of 0.1% ammonia-methanol solution. At last, approximately 8 mL of the collected eluent was dried by nitrogen gas and redissolved by 1 mL of methanol. After being sonicated for 3 min and vortexed for 30 s, the solution was pushed through a 0.22 μm nylon filter and then injected into the UPLC-MS-MS.

Conversion of PFAAs concentration of vegetable and soil sample: A 50 g of each homogeneous vegetable and soil sample was placed in a glass dish and dried at 120 °C for 2 h. The moisture content was calculated by the difference value, then the acquired concentration of PFAAs in fresh weight (f.w.) in the sample was converted to the dry weight (d.w.) form.

PFAAs in plastic film sample[41]: The film were cut into small pieces, which were about 1 cm × 1 cm. 10 g of the sample were weighted to a glass dish (with glass cover), then 20 mL of methanol was added for extraction and let it stand still for 6 h. After ultrasonicated and mixed, all supernatant were transferred to another centrifuge tube, following dried, redissolved and filtered as introduced above.

PFAAs in water sample[40]: 50 mL of water was enriched and purified by

WAX-SPE method (mentioned in the above section for soil pretreatment). 1 mL solution was acquired for instrument analysis.

PFAAs in air sample[42]: A set of air sample collecting assemble was employed. 10 mL of methanol was filled in collector before collection. Each air sample was collected for 0.05 m^3 with speed of 1 L min^{-1} for 50 min. Then, all of the added methanol was transferred to a 15 mL centrifuge tube, and the collector was washed by 2 mL methanol twice and transferred together, following dried by nitrogen gas and redissolved by 1 mL of methanol. After being sonicated for 3 min and vortexed for 30 s, the solution was pushed through a 0.22 μm nylon filter and then injected into the UPLC-MS-MS. Based on the detection of limits of instrument, and enrichment factor of the pretreatment, method quantitation limits (MQLs) for PFBA、PFPeA, PFHxA, PFHpA, PFOA of this method were set as 0.10, 0.09, 0.10, 0.15, 0.15, ng m^{-3}, respectively.

4. Parameters and requirements of instrument analysis

Water and methanol were adopted as the mobile phase A and B respectively, both containing 5 mM of CH_3COONH_4.The chromatographic separation was achieved in 7.5 min with a constant flow rate of 0.3 mL min^{-1}. The mobile phase composition was varied according to a linear gradient; the proportion of A was decreased from 90% to 30% over 3 min, then further decreased to 0 % over 3 min, then finally increased to the initial proportion (9 % A) within 0.1 min and held at this concentration until the end of the analysis.

For mass spectrometry, multiple reaction monitoring (MRM) mode was utilized, and m/z ratio of all the target analytes are displayed in Table S2, along with the cone voltage for ESI and the collision energy of the second quadrupole. The desolvation gas (N_2) flow rate and temperature, source temperature, cone gas flow rate, and capillary voltage were set to 600 L min^{-1}, 350 °C, 120 °C, 50 L min^{-1}, and -2.5 kV, respectively.

5.Details for quality control

Nine isotopic internal standards were used to assist in determining the correction factor (data processed by MassLynx 4.1 software system) in order to reduce the systematic errors caused by pretreatment. Moreover, matrix blank and solvent blank samples were employed for all tests once every 20 samples. A QC sample, which was a duplicate sample spiked with 5 ng of 20 PFASs mixed external standard solution was used once every 15 detections, and duplicate determinations were obtained for each real sample. To avoid contamination by ubiquitous PFASs, the normal solvent lines were substituted by lines made of the material PEEK material, PTFE filters were replaced with nylon ones, and polypropylene tubes were used for centrifuging.

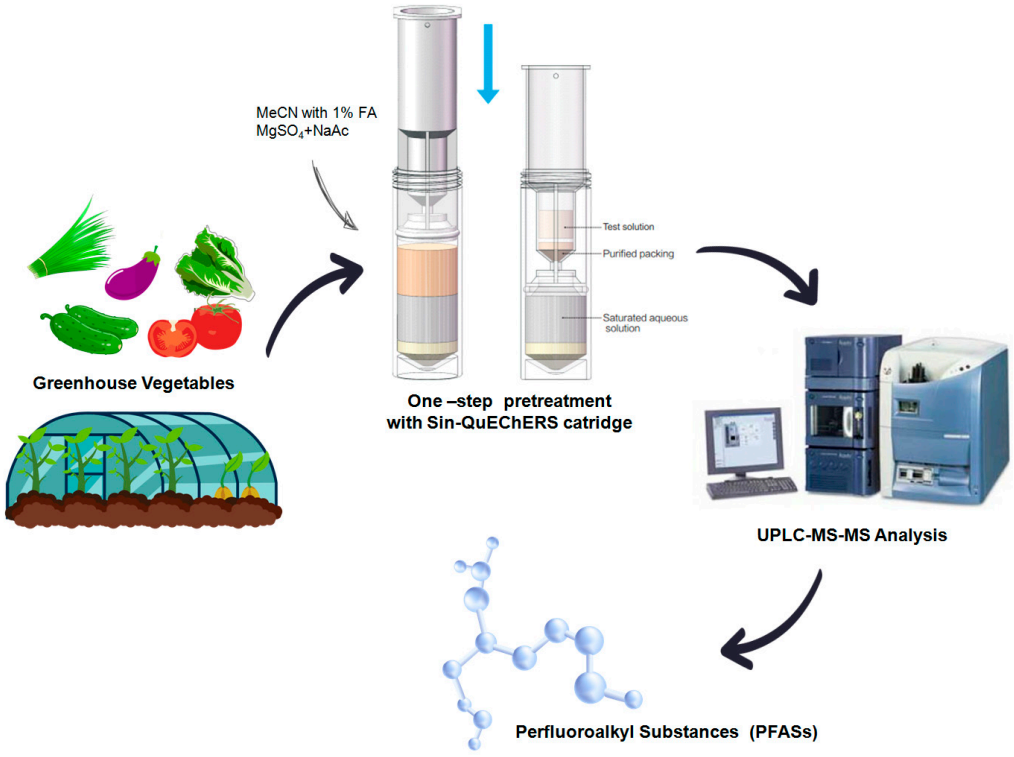


Figure S1 Graphical introduction for determination of PFASs from vegetables[39].

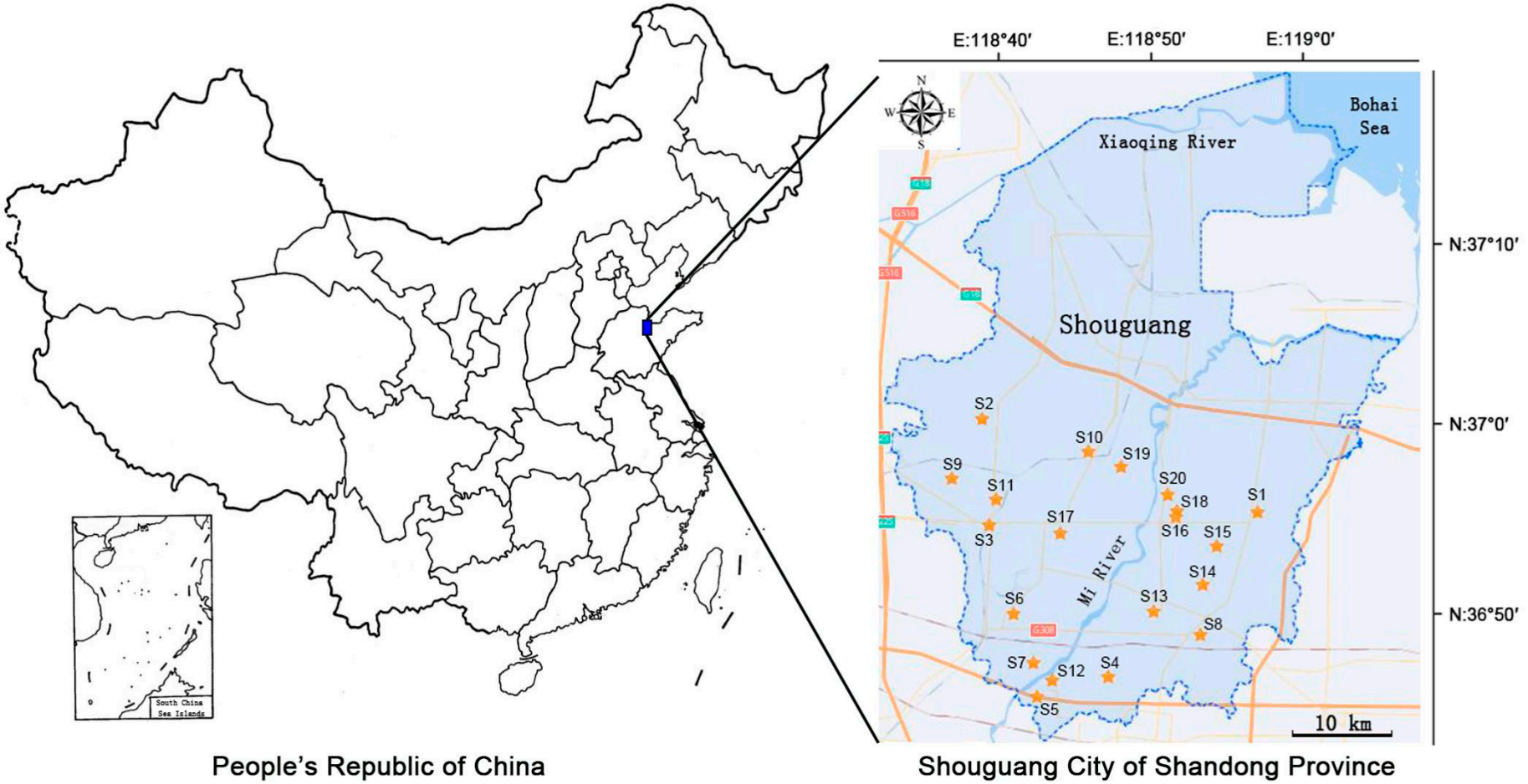


Figure S2 Distribution of sampling sites at Shouguang City, China.

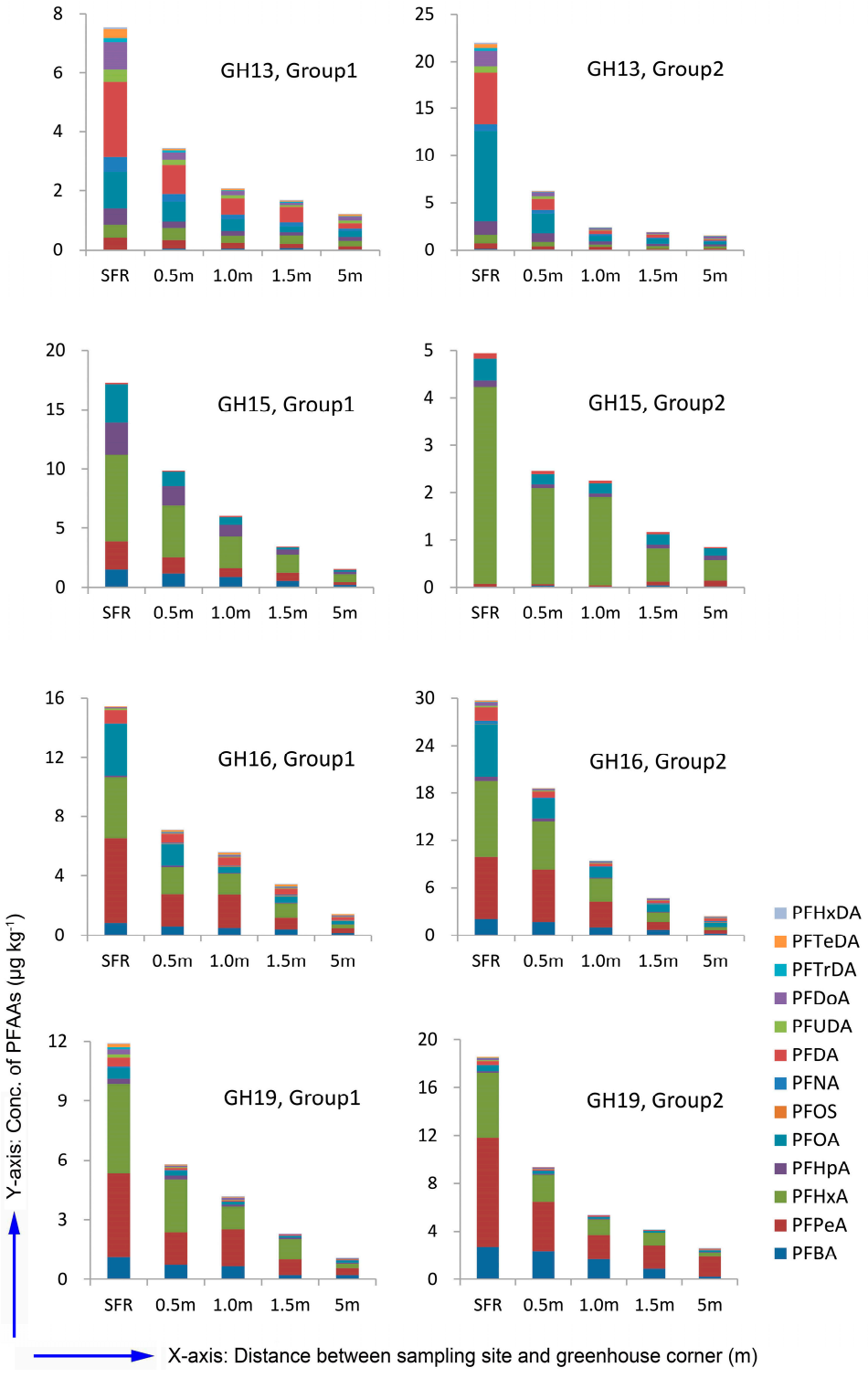


Figure S3 Comparison of PFAAs concentration in ground soil samples with different sampling positions in parallel groups from 4 greenhouses (GH). (μg kg^{-1}, d.w.)

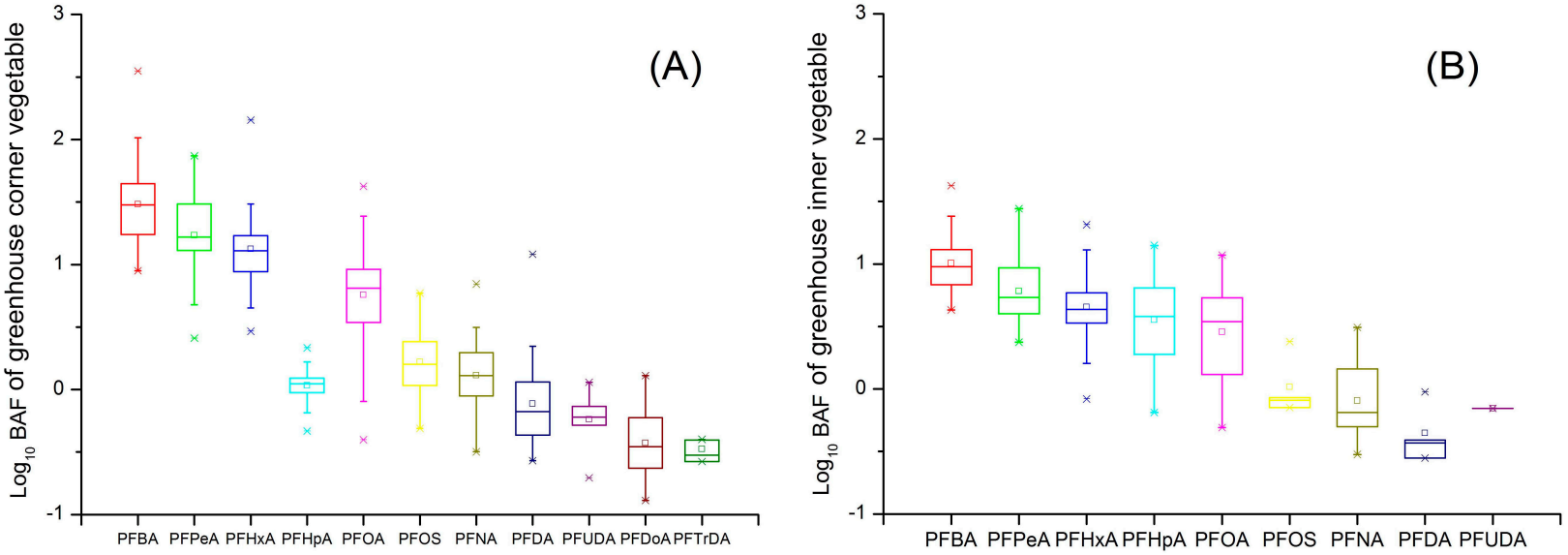


Figure S4 Box chart distribution of bioaccumulation factors (BAFs) of PFAAs in inner vegetables and corner vegetables.

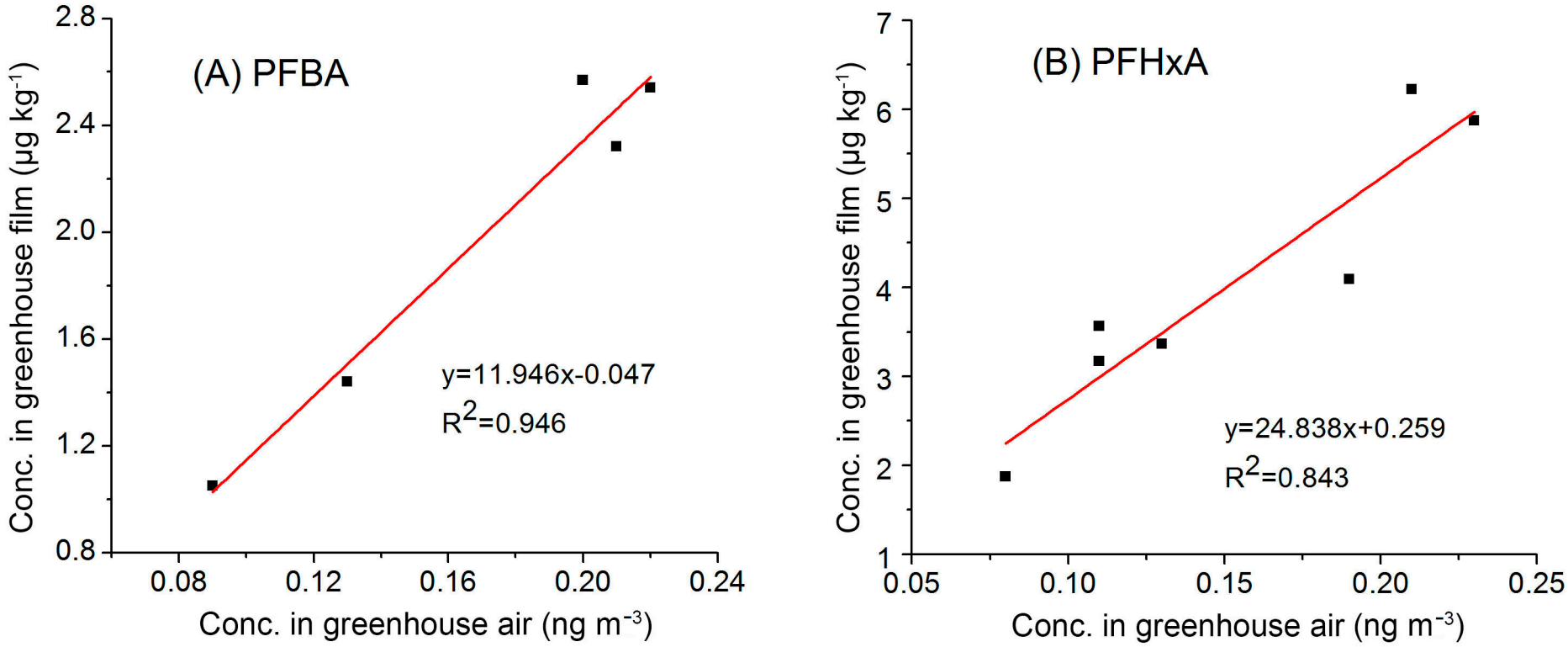


Figure S5 Correlation analysis of PFAAs concentration in air samples and plastic films.

Table S1 Parameters of all substances for MS analysis and MQLs in all matrixes[39].

Compounds	Retention time (min)	Parent ion (m/z)	Daughter ion (m/z)	Cone (V)	Collision (eV)	Internal standard	Method quantitation limits (MQLs, ng g^{-1})			
							Crop	Soil	Film	Water
PFBA	2.1	213	169.0*	20	10	MPFBA	0.015	0.009	0.010	0.009
PFPeA	2.87	263	219.0*	15	10	MPFBA	0.019	0.011	0.011	0.010
PFHxA	3.34	313	269.0*	15	10	MPFHxA	0.016	0.009	0.010	0.012
PFHpA	3.67	363	319.0*	25	10	MPFHxA	0.018	0.010	0.012	0.010
			169.0		20					
PFOA	3.95	413	369.0*	25	11	MPFOA	0.020	0.013	0.009	0.012
			169.0		18					
PFNA	4.22	463	419.0*	25	12	MPFNA	0.020	0.012	0.011	0.011
			219.0		18					
PFOS	4.22	499	80.0*	60	40	MPFOS	0.018	0.010	0.009	0.010
			99.0		40					
PFDA	4.52	513	469.0*	25	12	MPFDA	0.021	0.014	0.011	0.012
			219.0		18					
PFUdA	4.79	563	519.0*	55	15	MPFUdA	0.017	0.010	0.009	0.010
			219.0		20					
PFDoA	5.05	613	569.0*	25	15	MPFDoA	0.022	0.015	0.015	0.013
			169.0		30					

PFTrDA	5.27	663	619.0*	25	15	MPFDoA	0.024	0.015	0.015	0.015
			169.0		25					
PFTeDA	5.46	713	669.0*	25	15	MPFDoA	0.021	0.010	0.012	0.012
			169.0		32					
PFHxDA	5.80	813	769.0*	30	15	MPFDoA	0.020	0.009	0.009	0.012
			169.0		32					
PFODA	6.06	913	869.0*	25	20	MPFDoA	0.022	0.015	0.012	0.012
			169.0		32					
MPFBA	2.10	217	172.0*	20	10					
MPFHxA	3.34	315	270.0*	20	10					
MPFOA	3.95	417	372.0*	25	15					
MPFNA	4.22	468	423.0*	25	15					
MPFOS	4.22	503	80.0*	60	40					
			99.0		40					
MPFDA	4.52	515	470.0*	25	15					
MPFUdA	4.79	565	520.0*	55	15					
MPFDoA	5.05	615	570.0*	25	15					

*Quantitative daughter ion

Table S2 Concentration of PFAAs in all greenhouse plastic film samples. (n=2)

Sample No.	Source	Detected compounds and concentration (μg kg^{-1})
1	Greenhouse 1	PFBA: 0.65; PFPeA: 0.43; PFHxA: 3.56; PFHpA: 0.32; PFOA: 0.88; PFNA: 0.02; PFDA: 0.02; PFDoA:0.06;
2	Greenhouse 2	PFBA: 0.22; PFPeA: 1.02; PFHxA: 0.67; PFHpA: 0.86; PFOA: 1.43; PFDA: 2.14; PFDoA: 0.13;
3	Greenhouse 3	PFPeA: 1.22; PFHxA: 0.32; PFOA: 0.61; PFDA: 0.78;
4	Greenhouse 4	PFBA: 0.32; PFPeA: 0.46; PFHxA: 4.09; PFHpA: 0.62; PFOA: 3.41; PFNA: 0.52; PFDA: 1.56; PFUDA: 0.17; PFDoA: 0.18; PFTeDA: 0.04;
5	Greenhouse 5	PFBA: 0.43; PFHxA: 0.26; PFOA: 1.62;
6	Greenhouse 6	PFBA: 1.44; PFHxA: 0.36; PFHpA: 0.95; PFOA: 2.48; PFNA: 0.32; PFDA: 1.55;
7	Greenhouse 7	/
8	Greenhouse 8	PFPeA: 0.43; PFHxA: 1.87; PFHpA: 0.57; PFNA: 0.33;
9	Greenhouse 9	PFBA: 2.57; PFPeA: 1.35; PFHxA: 3.36; PFOA: 0.65; PFDA: 0.32;
10	Greenhouse 10	PFBA: 2.54; PFHxA: 5.87; PFHpA: 0.65; PFOA: 2.32;
11	Greenhouse 11	PFHxA: 1.23; PFOA: 0.95; PFUDA: 2.34;
12	Greenhouse 12	PFPeA: 1.22; PFHxA: 3.17; PFTrDA: 0.13; PFTeDA: 0.14; PFHxDA: 0.10; PFODA: 0.22.
13	Greenhouse 13	PFPeA: 0.65; PFHxA: 1.21; PFHpA: 0.35; PFOA: 0.96; PFDA: 2.44;
14	Greenhouse 14	PFBA: 1.05; PFPeA: 0.84; PFHpA: 0.97; PFNA: 0.33; PFDA: 1.89; PFDoA: 0.32;
15	Greenhouse 15	PFBA: 2.32; PFPeA: 1.21; PFHxA: 6.22; PFHpA: 0.45; PFOA: 0.59; PFNA: 0.85; PFDA: 0.54;

16	Greenhouse 16	PFPeA: 0.32; PFHxA: 1.51; PFHpA: 0.65; PFOA: 2.23; PFNA: 0.55; PFDoA: 1.40;
17	Greenhouse 17	PFBA: 0.35; PFPeA: 1.26; PFHxA: 0.71; PFHpA: 0.55; PFOA: 1.67; PFDA: 2.32; PFDoA: 0.17;
18	Greenhouse 18	PFPeA: 1.54; PFHxA: 2.79; PFTrDA: 0.25; PFTeDA: 0.16; PFHxDA: 0.11; PFODA: 0.2;
19	Greenhouse 19	/
20	Greenhouse 20	/
21	Purchased	PFBA: 0.46; PFPeA: 1.98; PFHxA: 1.25; PFHpA: 0.27; PFOA: 1.34; PFDA: 2.45; PFDoA: 0.36;
22	Purchased	PFBA: 1.68; PFHxA: 0.42; PFHpA: 1.17; PFOA: 2.85; PFNA: 0.33; PFDA: 1.54;
23	Purchased	PFBA: 0.46; PFHxA: 0.28; PFOA: 1.44;
24	Purchased	PFHxA: 6.51; PFOA: 3.86; PFNA: 0.05; PFDA: 0.21;
25	Purchased	PFPeA: 0.43; PFHxA: 1.95; PFHpA: 0.58; PFNA: 0.32; PFTrDA: 0.31; PFTeDA: 0.27; PFHxDA: 0.25;
26	Purchased	PFBA: 0.47; PFPeA: 2.25; PFHxA: 1.21; PFHpA: 0.33; PFOA: 1.42; PFDA: 2.38; PFDoA: 0.26;
27	Purchased	/
28	Purchased	PFBA: 0.26; PFPeA: 2.24; PFHpA: 0.45; PFOA: 1.46; PFNA: 0.96; PFDA: 0.03;
29	Purchased	PFBA: 0.35; PFPeA: 2.44; PFHxA: 1.47; PFHpA: 0.16; PFOA: 1.45; PFDA: 2.31; PFDoA: 0.38;
30	Purchased	/
31	Purchased	/
32	Purchased	PFPeA: 1.35; PFHxA: 5.98; PFHpA: 0.43; PFOA: 0.59; PFNA: 0.67; PFDA: 0.52;
33	Purchased	PFBA: 0.87; PFHxA: 0.35; PFOA: 1.69; PFUDA: 0.33;

34	Purchased	PFBA: 2.88; PFPeA: 1.64; PFHxA: 3.55; PFOA: 0.41; PFDA: 0.34;
35	Purchased	PFBA: 0.05; PFPeA: 0.37; PFHxA: 1.51; PFHpA: 0.26; PFOA: 0.85; PFNA: 0.47; PFDA: 0.05;
36	Purchased	PFBA: 1.42; PFHxA: 0.31; PFHpA: 1.05; PFOA: 2.56; PFNA: 0.27; PFDA: 1.85;
37	Purchased	PFPeA: 0.78; PFHxA: 1.29; PFHpA: 0.44; PFOA: 1.32; PFDA: 2.18;
38	Purchased	PFPeA: 0.77; PFHxA: 2.35; PFHpA: 0.86; PFNA: 0.41; PFTrDA: 0.24; PFTeDA: 0.22; PFHxDA: 0.27;
39	Purchased	/
40	Purchased	/
41	Purchased	PFBA: 0.44; PFPeA: 0.38; PFHxA: 2.95; PFHpA: 0.37; PFOA: 0.75; PFNA: 0.04; PFDA: 0.01; PFDoA: 0.06;
42	Purchased	/
43	Purchased	PFBA: 0.37; PFPeA: 0.46; PFHxA: 4.22; PFHpA: 0.55; PFOA: 3.67; PFNA: 0.51; PFDA: 1.44; PFUDA: 0.18; PFDoA: 0.12; PFTeDA: 0.05
44	Purchased	PFBA: 0.44; PFPeA: 2.07; PFHxA: 1.28; PFHpA: 0.35; PFOA: 1.66; PFDA: 2.87; PFDoA: 0.31;
45	Purchased	PFBA: 1.03; PFPeA: 0.86; PFHpA: 0.65; PFNA: 0.31; PFDA: 2.22; PFDoA: 0.37;
46	Purchased	/

Table S3 Concentration of PFAAs in the air samples inside of greenhouse. (n=2)

Sample source	Detected content of individual compounds* (ng m^{-3})		
	PFBA	PFPeA	PFHxA
Greenhouse 1	n.d.	n.d.	0.11
Greenhouse 4	n.d.	n.d.	0.19
Greenhouse 6	0.13	n.d.	n.d.
Greenhouse 8	n.d.	n.d.	0.08
Greenhouse 9	0.20	0.09	0.13
Greenhouse 10	0.22	n.d.	0.23
Greenhouse 12	n.d.	n.d.	0.11
Greenhouse 14	0.09	n.d.	n.d.
Greenhouse 15	0.21	n.d.	0.21
Greenhouse 17	n.d.	0.09	n.d.
Greenhouse 18	n.d.	0.13	n.d.

*n.d.: not detected (below the method quantitation limit)

Table S4 Results of individual contents of PFAAs detected in greenhouse corner soil samples. (n=2)

Sample No.	Detected content of individual compounds* (μg kg^{-1}, d.w.)												
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA	PFDoA	PFTrDA	PFTeDA	PFHxDA
Greenhouse 1-1	1.13	0.68	15.1	0.05	1.31	n.d.	0.06	0.08	0.04	n.d.	0.03	0.02	n.d.
Greenhouse 1-2	0.36	0.43	5.51	1.35	0.65	n.d.	0.09	0.96	0.03	0.06	0.02	0.03	n.d.
Greenhouse 2-1	0.39	2.14	0.35	0.08	5.13	n.d.	0.09	0.06	0.03	0.12	n.d.	n.d.	n.d.
Greenhouse 2-2	0.67	2.85	0.22	0.13	3.69	n.d.	0.10	0.06	0.04	0.16	n.d.	0.04	n.d.
Greenhouse 3-1	0.14	n.d.	0.38	0.02	0.51	0.04	0.04	0.07	0.05	0.03	0.03	n.d.	n.d.
Greenhouse 3-2	0.08	0.04	0.04	0.02	0.30	0.02	0.04	0.07	0.03	n.d.	n.d.	n.d.	n.d.
Greenhouse 4-1	1.21	2.56	2.67	4.36	8.95	0.04	0.58	2.13	0.33	0.14	n.d.	n.d.	n.d.
Greenhouse 4-2	0.66	1.90	5.41	3.24	14.5	0.03	0.65	2.52	0.10	0.16	0.03	0.03	n.d.
Greenhouse 5-1	0.24	2.34	0.10	0.93	5.41	0.04	0.04	0.06	0.04	0.04	0.04	n.d.	n.d.
Greenhouse 5-2	0.28	0.89	0.20	2.24	7.48	0.05	0.06	0.09	0.05	0.04	0.03	n.d.	n.d.
Greenhouse 6-1	0.04	0.03	0.06	0.02	0.66	0.05	0.06	0.12	0.07	0.04	0.03	0.03	n.d.
Greenhouse 6-2	0.13	n.d.	0.06	0.05	0.68	0.04	0.10	0.15	0.08	0.06	0.05	0.03	0.03
Greenhouse 7-1	0.06	0.28	3.23	0.06	1.31	0.02	0.15	2.22	0.04	0.05	0.05	0.03	n.d.
Greenhouse 7-2	1.25	0.14	8.74	0.03	4.27	0.04	0.11	1.54	0.05	0.05	0.04	0.04	n.d.
Greenhouse 8-1	0.09	0.04	0.05	0.04	0.52	0.05	0.14	0.16	0.06	0.04	0.05	0.03	n.d.
Greenhouse 8-2	0.06	0.05	0.06	0.05	0.48	0.06	0.09	0.15	0.05	0.04	0.03	0.03	n.d.
Greenhouse 9-1	0.04	0.07	0.11	0.03	0.10	0.04	0.04	0.05	0.03	n.d.	n.d.	n.d.	n.d.

Greenhouse 9-2	0.04	0.10	0.09	0.02	0.19	0.04	0.04	0.05	n.d.	n.d.	n.d.	n.d.	n.d.
Greenhouse 10-1	0.22	0.04	0.05	0.09	0.43	0.12	0.18	1.15	0.29	0.68	0.17	0.29	0.08
Greenhouse 10-2	0.36	0.07	0.10	0.13	0.95	0.04	0.34	1.81	0.32	0.63	0.18	0.25	0.08
Greenhouse 11-1	0.06	0.04	0.21	0.13	0.57	n.d.	0.66	0.06	0.13	0.08	n.d.	n.d.	n.d.
Greenhouse 11-2	0.21	0.07	0.33	0.08	0.56	n.d.	0.41	0.05	0.11	0.08	n.d.	n.d.	n.d.
Greenhouse 12-1	0.26	0.30	0.94	0.12	0.11	0.14	0.19	1.15	n.d.	0.22	n.d.	0.07	0.04
Greenhouse 12-2	0.44	0.23	1.25	0.06	0.15	0.09	0.15	0.75	n.d.	0.24	n.d.	0.05	0.05
Greenhouse 13-1	0.76	0.41	0.45	0.31	1.24	n.d.	0.52	2.02	0.42	0.94	0.14	0.27	0.05
Greenhouse 13-2	0.16	0.56	0.88	1.45	9.54	n.d.	0.69	5.51	0.76	1.56	0.29	0.50	0.14
Greenhouse 14-1	0.32	0.31	1.51	0.04	0.28	n.d.	0.03	0.16	n.d.	0.05	n.d.	0.03	n.d.
Greenhouse 14-2	0.24	1.48	2.17	0.10	0.17	n.d.	n.d.	0.11	0.04	0.08	0.04	0.04	n.d.
Greenhouse 15-1	1.55	2.35	7.33	2.70	3.25	n.d.	n.d.	0.13	n.d.	n.d.	n.d.	n.d.	n.d.
Greenhouse 15-2	0.09	0.08	4.07	0.13	0.46	n.d.	n.d.	0.11	n.d.	n.d.	n.d.	n.d.	n.d.
Greenhouse 16-1	0.82	5.71	4.12	0.17	3.43	n.d.	0.05	0.85	0.13	0.14	n.d.	0.06	n.d.
Greenhouse 16-2	2.03	7.85	9.60	0.62	6.61	0.04	0.39	1.76	0.17	0.42	0.05	0.17	0.07
Greenhouse 17-1	0.84	0.92	2.31	0.06	0.18	n.d.	0.04	0.37	0.05	0.12	n.d.	0.03	n.d.
Greenhouse 17-2	0.57	0.44	4.08	0.04	0.86	n.d.	0.06	0.41	0.07	0.15	0.03	0.07	n.d.
Greenhouse 18-1	0.85	4.89	10.6	0.19	0.97	0.03	0.05	0.19	0.06	0.16	n.d.	n.d.	n.d.
Greenhouse 18-2	0.54	2.26	3.18	0.08	0.34	0.06	0.05	0.14	n.d.	n.d.	n.d.	n.d.	0.04
Greenhouse 19-1	1.11	4.23	4.51	0.25	0.52	n.d.	0.08	0.44	0.15	0.29	0.11	0.16	0.05

Greenhouse 19-2	2.70	9.12	5.39	0.17	0.46	n.d.	0.04	0.32	0.07	0.15	0.04	0.07	n.d.
Greenhouse 20-1	1.92	4.33	5.95	0.18	0.67	0.04	0.22	0.96	0.30	0.91	0.14	0.24	0.05
Greenhouse 20-2	1.25	4.41	7.30	0.10	0.25	n.d.	0.06	0.61	0.27	1.66	n.d.	0.48	0.11

*n.d.: not detected (below the method quantitation limit)

Table S5 Results of individual contents of PFAAs detected in greenhouse inner soil samples. (n=2)

Sample No.	Detected content of individual compounds* (μg kg^{-1}, d.w.)								
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA
Greenhouse 1-1	0.11	0.07	0.10	0.10	0.19	n.d.	n.d.	n.d.	n.d.
Greenhouse 1-2	0.12	0.02	0.04	0.08	0.12	n.d.	0.04	n.d.	n.d.
Greenhouse 2-1	0.14	0.10	0.09	0.11	0.18	n.d.	n.d.	n.d.	n.d.
Greenhouse 2-2	0.26	0.18	0.13	0.06	0.05	n.d.	0.16	0.04	n.d.
Greenhouse 3-1	0.47	0.07	0.13	n.d.	0.15	n.d.	n.d.	n.d.	0.04
Greenhouse 3-2	0.23	0.11	0.08	n.d.	0.10	n.d.	0.05	0.03	n.d.
Greenhouse 4-1	0.88	0.08	0.14	n.d.	0.26	n.d.	0.21	0.07	n.d.
Greenhouse 4-2	0.69	0.21	0.17	0.05	0.14	n.d.	0.04	0.03	n.d.
Greenhouse 5-1	0.68	0.32	1.14	0.07	0.29	0.03	0.68	0.32	n.d.
Greenhouse 5-2	0.97	0.32	0.88	0.11	0.38	n.d.	0.04	n.d	n.d
Greenhouse 6-1	0.35	0.02	0.14	0.41	0.14	n.d.	0.05	n.d	n.d
Greenhouse 6-2	0.38	0.04	0.10	0.31	0.06	n.d.	0.06	n.d	n.d
Greenhouse 7-1	0.55	0.05	1.26	0.34	0.08	n.d.	0.09	n.d	n.d
Greenhouse 7-2	0.34	0.04	1.33	0.23	0.12	n.d.	0.19	n.d	n.d
Greenhouse 8-1	0.11	0.16	0.56	0.05	0.37	n.d	n.d	n.d	n.d
Greenhouse 8-2	0.07	0.06	0.24	0.09	0.12	n.d	n.d	n.d	n.d
Greenhouse 9-1	0.05	0.15	0.11	0.08	0.04	n.d	n.d	n.d	n.d

Greenhouse 9-2	0.04	0.08	0.11	0.05	0.06	n.d	n.d	n.d	n.d
Greenhouse 10-1	0.22	0.19	0.33	0.07	0.23	0.11	n.d	n.d	n.d
Greenhouse 10-2	0.25	0.25	0.29	0.05	0.35	0.23	n.d.	0.04	n.d
Greenhouse 11-1	0.23	0.13	0.08	0.11	0.44	n.d.	n.d.	n.d.	n.d.
Greenhouse 11-2	0.14	0.03	0.04	0.06	0.29	n.d.	n.d.	n.d.	n.d.
Greenhouse 12-1	1.25	0.44	0.96	0.13	0.52	n.d.	n.d.	0.23	n.d.
Greenhouse 12-2	1.31	0.29	0.75	0.11	0.27	n.d.	n.d.	0.12	n.d.
Greenhouse 13-1	0.24	0.25	0.58	0.06	0.08	n.d.	n.d.	n.d.	n.d.
Greenhouse 13-2	0.29	0.21	0.69	0.05	0.11	n.d.	0.08	0.10	n.d.
Greenhouse 14-1	0.21	0.07	0.35	0.12	0.06	n.d.	0.04	n.d.	n.d.
Greenhouse 14-2	0.25	0.12	0.65	0.27	0.06	n.d.	0.06	n.d.	n.d.
Greenhouse 15-1	0.53	0.42	0.11	0.10	0.13	0.08	0.21	n.d.	n.d.
Greenhouse 15-2	0.34	0.22	0.08	0.06	0.08	0.04	0.04	n.d.	n.d.
Greenhouse 16-1	0.41	0.23	0.39	0.28	0.08	n.d.	n.d.	n.d.	n.d.
Greenhouse 16-2	0.85	0.33	0.54	0.46	0.19	n.d.	n.d.	n.d.	n.d.
Greenhouse 17-1	0.13	0.19	0.35	0.21	0.11	n.d.	n.d.	n.d.	n.d.
Greenhouse 17-2	0.07	0.11	0.28	0.14	0.08	n.d.	n.d.	n.d.	n.d.
Greenhouse 18-1	0.94	0.55	0.47	0.06	0.28	n.d.	0.05	n.d.	n.d.
Greenhouse 18-2	0.87	0.34	0.27	0.05	0.21	n.d.	0.09	n.d.	n.d.
Greenhouse 19-1	0.21	0.12	0.42	0.14	0.12	n.d.	0.06	n.d.	n.d.

Greenhouse 19-2	0.53	0.31	1.02	0.25	0.44	n.d.	0.06	n.d.	n.d.
Greenhouse 20-1	1.25	n.d.	0.53	0.21	0.24	n.d.	0.09	n.d.	n.d.
Greenhouse 20-2	1.23	n.d.	0.95	0.29	0.42	n.d.	0.11	n.d.	n.d.

*n.d.: not detected (below the method quantitation limit)

Table S6 Detection and additive results of PFAAs in profile soils (ground, 0.25 and 0.5 m depth) of different sampling places in two greenhouses. (n=2)

Sampling position*	Detected content of individual compounds and total amount** (μg kg^{-1}, d.w.)													
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA	PFDoA	PFTrDA	PFTeDA	PFHxDA	sum PFAAs
G13-0 m-ground	0.16	0.56	0.88	1.45	9.54	n.d.	0.69	5.51	0.76	1.56	0.29	0.49	0.14	22.0
G13-0 m-0.25 m	0.09	0.64	0.57	1.74	34.17	n.d.	0.57	7.25	0.55	2.86	0.43	0.23	0.05	49.1
G13-0 m-0.5 m	0.04	0.45	0.65	2.44	12.31	n.d.	0.91	7.35	0.20	0.94	0.55	0.31	0.04	26.2
G13-1 m-ground	0.09	0.28	0.24	0.32	0.53	n.d.	0.21	0.36	0.08	0.26	0.04	0.03	0.04	2.46
G13-1 m-0.25 m	0.09	0.15	0.33	0.32	0.44	n.d.	0.09	0.14	0.06	0.23	0.05	n.d.	0.05	1.95
G13-1 m-0.5 m	0.03	0.13	0.16	0.24	0.65	n.d.	0.08	0.12	0.07	0.12	n.d.	0.02	n.d.	1.61
G13-5 m-ground	0.05	0.15	0.21	0.22	0.28	n.d.	0.10	0.12	0.09	0.21	0.06	0.05	n.d.	1.52
G13-5 m-0.25 m	0.03	0.13	0.12	0.13	0.25	n.d.	0.12	0.06	0.12	0.17	0.02	0.04	0.02	1.21
G13-5 m-0.5 m	0.04	0.12	0.09	0.10	0.13	n.d.	0.06	0.10	0.05	0.21	n.d.	n.d.	n.d.	0.90
G16-0 m-ground	2.03	7.85	9.60	0.62	6.61	0.03	0.39	1.76	0.17	0.42	0.05	0.17	0.06	29.8
G16-0 m-0.25 m	1.53	13.2	8.44	1.13	4.25	0.05	1.25	3.00	0.26	0.55	0.04	0.05	0.10	33.8
G16-0 m-0.5 m	1.65	10.3	13.3	0.92	5.40	0.02	0.90	1.74	0.40	0.78	0.02	0.02	0.06	35.6
G16-1 m-ground	1.00	3.22	2.92	0.11	1.34	0.03	0.13	0.31	0.10	0.16	0.04	0.04	0.03	9.42
G16-1 m-0.25 m	1.13	1.89	2.58	0.09	1.43	n.d.	0.09	0.26	0.12	0.22	0.07	0.07	n.d.	7.94
G16-1 m-0.5 m	0.66	2.10	1.44	0.05	0.66	0.02	0.04	0.22	0.05	0.21	n.d.	n.d.	n.d.	5.44
G16-5 m-ground	0.24	0.42	0.35	0.06	0.51	0.04	0.14	0.31	0.06	0.12	0.03	0.06	0.02	2.37

G16-5 m-0.25 m	0.10	0.33	0.26	0.06	0.49	0.05	0.17	0.16	0.05	0.07	0.04	0.03	n.d.	1.82
G16-5 m-0.5 m	0.04	0.30	0.21	0.03	0.24	0.03	0.07	0.24	0.03	0.03	0.06	0.02	n.d.	1.30

*G13/16:Greenhouse 13/16; 0 m/1 m/5 m: distance from corner soil; ground/0.25 m/0.5 m: depth

**n.d.: not detected (below the method quantitation limit)

Table S7 Concentration of PFAAs in irrigation water from the wells for each greenhouse. (n=2)

Sample No.	Concentration of PFAAs in irrigation water from well* (ng L^{-1})								
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	sum PFAAs
Greenhouse 1	0.41	0.21	0.24	0.34	0.36	n.d.	n.d.	n.d.	1.56
Greenhouse 2	0.63	0.58	0.45	0.17	0.22	n.d.	n.d.	n.d.	2.05
Greenhouse 3	1.04	0.36	0.26	n.d.	0.31	n.d.	n.d.	n.d.	1.97
Greenhouse 4	4.83	0.46	0.58	n.d.	0.76	n.d.	0.43	0.19	7.25
Greenhouse 5	10.5	2.84	11.2	n.d.	1.26	n.d.	n.d.	n.d.	25.8
Greenhouse 6	2.16	n.d.	0.47	1.12	0.13	n.d.	n.d.	n.d.	3.88
Greenhouse 7	5.36	n.d.	9.43	1.28	0.38	n.d.	0.25	n.d.	16.7
Greenhouse 8	0.25	0.23	1.42	0.29	0.79	n.d.	n.d.	n.d.	2.98
Greenhouse 9	0.17	0.38	0.35	0.19	0.12	n.d.	n.d.	n.d.	1.21
Greenhouse 10	0.58	0.50	2.74	n.d.	1.65	0.84	n.d.	n.d.	6.31
Greenhouse 11	0.49	0.29	0.24	0.21	1.53	n.d.	n.d.	n.d.	2.76
Greenhouse 12	14.6	4.64	8.14	0.45	3.45	n.d.	n.d.	0.32	31.6
Greenhouse 13	1.87	1.04	4.54	n.d.	1.28	n.d.	n.d.	n.d.	8.73
Greenhouse 14	0.85	0.38	2.53	1.26	0.22	n.d.	n.d.	n.d.	5.24
Greenhouse 15	2.11	1.47	0.23	0.23	0.36	0.19	0.36	n.d.	4.95
Greenhouse 16	3.58	0.87	2.27	2.41	0.97	n.d.	n.d.	n.d.	10.1
Greenhouse 17	0.36	0.81	1.11	0.65	0.42	n.d.	n.d.	n.d.	3.35

Greenhouse 18	5.57	2.91	2.25	n.d.	1.67	n.d.	n.d.	n.d.	12.4
Greenhouse 19	1.25	0.63	5.31	0.93	1.07	n.d.	0.27	n.d.	9.46
Greenhouse 20	13.3	n.d.	6.27	1.87	2.78	n.d.	0.18	n.d.	24.4

*n.d.: not detected (below the method quantitation limit)

Table S8 Results of individual contents of PFAAs detected in greenhouse inner vegetable samples. (n=2)

Sample No.	Detected content of individual compounds* (μg kg^{-1}, d.w.)								
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA
Greenhouse 1-1	0.89	0.27	0.31	0.17	0.28	n.d.	n.d.	n.d.	n.d.
Greenhouse 1-2	1.86	0.61	0.48	0.21	1.41	n.d.	0.14	n.d.	n.d.
Greenhouse 2-1	2.26	0.39	0.29	1.55	1.03	n.d.	n.d.	n.d.	n.d.
Greenhouse 2-2	3.25	1.32	0.26	0.77	0.22	n.d.	0.31	n.d.	n.d.
Greenhouse 3-1	5.33	0.96	2.68	n.d.	0.97	n.d.	n.d.	n.d.	0.03
Greenhouse 3-2	3.51	1.14	0.57	n.d.	0.87	n.d.	0.10	n.d.	n.d.
Greenhouse 4-1	6.02	0.36	1.95	n.d.	0.98	n.d.	0.54	n.d.	n.d.
Greenhouse 4-2	5.14	0.57	0.35	0.68	0.83	n.d.	0.06	n.d.	n.d.
Greenhouse 5-1	3.51	0.97	5.05	0.11	1.55	n.d.	n.d.	n.d.	n.d.
Greenhouse 5-2	4.15	1.44	5.68	0.89	1.14	n.d.	n.d.	n.d.	n.d
Greenhouse 6-1	3.14	0.26	0.38	1.37	0.25	n.d.	0.02	n.d	n.d
Greenhouse 6-2	5.33	0.17	0.56	2.35	0.03	n.d.	0.03	n.d	n.d
Greenhouse 7-1	6.18	0.67	6.43	0.93	0.24	n.d.	0.04	n.d	n.d
Greenhouse 7-2	8.13	0.69	5.51	1.44	0.97	n.d.	0.06	n.d	n.d
Greenhouse 8-1	2.66	0.51	3.28	0.09	2.19	n.d	n.d	n.d	n.d
Greenhouse 8-2	1.58	0.32	3.04	0.06	1.27	n.d.	n.d.	n.d.	n.d
Greenhouse 9-1	2.15	2.51	1.43	0.34	0.21	n.d.	n.d.	n.d.	n.d

Greenhouse 9-2	0.27	0.41	0.54	0.26	0.08	n.d	n.d	n.d	n.d
Greenhouse 10-1	2.01	1.34	2.53	0.11	1.15	0.09	n.d	n.d	n.d
Greenhouse 10-2	2.45	1.26	1.03	0.34	1.88	0.55	n.d.	0.04	n.d
Greenhouse 11-1	1.24	0.98	0.06	0.42	1.61	n.d.	n.d.	n.d.	n.d.
Greenhouse 11-2	2.02	0.26	0.08	0.05	1.45	n.d.	n.d.	n.d.	n.d.
Greenhouse 12-1	8.66	1.75	3.98	0.54	0.31	n.d.	n.d.	0.06	n.d.
Greenhouse 12-2	10.1	2.06	3.58	0.69	1.21	n.d.	n.d.	0.04	n.d.
Greenhouse 13-1	2.83	1.12	2.21	n.d.	0.07	n.d.	n.d.	n.d.	n.d.
Greenhouse 13-2	4.51	1.88	3.25	0.31	0.36	n.d.	0.05	0.04	n.d.
Greenhouse 14-1	1.23	0.46	1.74	0.78	0.10	n.d.	0.05	n.d.	n.d.
Greenhouse 14-2	3.14	0.95	4.13	1.23	0.05	n.d.	0.04	n.d.	n.d.
Greenhouse 15-1	3.43	1.34	0.44	0.11	0.17	0.06	0.07	n.d.	n.d.
Greenhouse 15-2	1.76	0.88	0.12	0.13	0.06	0.03	0.03	n.d.	n.d.
Greenhouse 16-1	2.43	0.65	1.61	1.07	0.06	n.d.	n.d.	n.d.	n.d.
Greenhouse 16-2	8.12	0.94	2.34	1.67	0.33	n.d.	n.d.	n.d.	n.d.
Greenhouse 17-1	1.42	0.45	0.93	0.41	0.13	n.d.	n.d.	n.d.	n.d.
Greenhouse 17-2	0.87	1.13	1.61	0.44	0.06	n.d.	n.d.	n.d.	n.d.
Greenhouse 18-1	7.41	2.55	1.63	0.10	0.87	n.d.	0.04	n.d.	n.d.
Greenhouse 18-2	8.28	1.95	1.57	0.04	0.85	n.d.	n.d.	n.d.	n.d.
Greenhouse 19-1	2.74	1.14	2.67	1.28	0.85	n.d.	n.d.	n.d.	n.d.

Greenhouse 19-2	3.33	1.42	2.87	0.95	0.97	n.d.	0.05	n.d.	n.d.
Greenhouse 20-1	9.67	n.d.	1.88	1.35	1.51	n.d.	0.04	n.d.	n.d.
Greenhouse 20-2	11.4	n.d.	3.23	1.15	1.45	n.d.	0.06	n.d.	n.d.

*n.d.: not detected (below the method quantitation limit)

Table S9 Results of individual contents of PFAAs detected in greenhouse corner vegetable samples. (n=2)

Sample No.	Detected content of individual compounds* (μg kg^{-1}, d.w.)											
	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA	PFDoA	PFTrDA	PFTeDA
Greenhouse 1-1	46.3	22.9	248	0.43	2.25	n.d.	0.05	0.03	n.d.	n.d.	n.d.	n.d.
Greenhouse 1-2	21.2	17.7	53.9	6.12	2.33	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Greenhouse 2-1	5.11	35.1	10.7	0.38	15.8	n.d.	0.07	n.d.	n.d.	n.d.	n.d.	n.d.
Greenhouse 2-2	7.13	78.5	5.62	0.98	62.6	n.d.	0.11	0.03	n.d.	0.05	n.d.	n.d.
Greenhouse 3-1	2.13	0.89	1.11	0.06	0.41	n.d.	0.05	n.d.	0.03	n.d.	n.d.	n.d.
Greenhouse 3-2	1.27	0.78	0.43	0.08	0.61	n.d.	0.04	0.02	n.d.	n.d.	n.d.	n.d.
Greenhouse 4-1	36.4	43.5	22.4	31.9	61.6	n.d.	1.31	0.67	0.06	0.03	n.d.	n.d.
Greenhouse 4-2	32.2	25.4	75.2	43.8	133	n.d.	1.21	2.11	0.07	0.10	n.d.	n.d.
Greenhouse 5-1	4.17	33.9	2.27	5.61	42.4	0.09	n.d.	0.03	n.d.	n.d.	n.d.	n.d.
Greenhouse 5-2	3.03	21.5	3.41	47.9	129	0.08	0.05	0.04	n.d	n.d	n.d	n.d
Greenhouse 6-1	15.9	0.91	1.59	2.33	1.55	0.04	0.03	0.03	n.d	n.d	n.d	n.d
Greenhouse 6-2	8.25	n.d.	0.49	1.53	0.27	0.02	0.05	0.05	n.d	n.d	n.d	n.d
Greenhouse 7-1	0.57	2.65	17.1	0.22	4.52	n.d.	0.34	1.97	n.d	n.d	n.d	n.d
Greenhouse 7-2	25.3	4.26	54.8	0.31	33.7	0.04	0.16	1.43	0.05	n.d	n.d	n.d
Greenhouse 8-1	5.08	0.69	4.65	0.42	3.03	0.04	0.44	0.25	n.d	n.d	n.d	n.d
Greenhouse 8-2	2.23	0.22	1.71	0.35	1.59	n.d.	0.04	0.07	n.d	n.d	n.d	n.d
Greenhouse 9-1	1.67	2.05	1.89	0.35	0.45	0.06	0.05	0.06	n.d	n.d	n.d	n.d

Greenhouse 9-2	0.85	0.79	0.97	0.41	0.29	0.06	n.d.	0.03	n.d	n.d	n.d	n.d
Greenhouse 10-1	22.7	1.39	7.58	0.95	10.5	0.71	0.43	1.01	0.07	0.09	n.d	n.d
Greenhouse 10-2	9.31	2.35	1.57	26.5	40.2	n.d.	0.67	21.9	0.19	0.22	0.07	0.06
Greenhouse 11-1	4.22	1.68	1.25	1.77	5.65	n.d.	0.21	n.d.	0.08	0.03	n.d.	n.d.
Greenhouse 11-2	4.01	1.16	5.08	3.24	5.37	n.d.	1.22	0.03	0.07	n.d.	n.d.	n.d.
Greenhouse 12-1	7.55	4.29	10.5	1.21	0.75	0.39	0.24	1.03	n.d.	0.14	n.d.	0.04
Greenhouse 12-2	9.12	3.81	11.9	0.55	0.97	0.09	0.12	1.66	n.d.	0.31	n.d.	0.05
Greenhouse 13-1	24.3	30.4	20.8	12.3	26.5	n.d.	3.63	3.21	0.48	0.24	0.06	0.08
Greenhouse 13-2	6.28	22.1	11.4	9.23	117	n.d.	1.36	8.43	0.45	0.64	0.08	0.05
Greenhouse 14-1	12.3	2.19	7.54	1.72	1.93	n.d.	n.d.	0.07	n.d.	0.06	n.d.	n.d.
Greenhouse 14-2	10.7	8.61	9.77	0.68	0.75	n.d.	n.d.	0.09	n.d.	0.03	n.d.	n.d.
Greenhouse 15-1	68.9	54.4	94.5	25.8	30.3	n.d.	n.d.	0.06	n.d.	n.d.	n.d.	n.d.
Greenhouse 15-2	4.77	2.98	74.8	1.58	2.06	n.d.	n.d.	0.08	n.d.	n.d.	n.d.	n.d.
Greenhouse 16-1	15.5	48.1	38.6	2.45	12.9	n.d.	0.07	0.23	0.08	0.04	n.d.	n.d.
Greenhouse 16-2	76.5	145	142	5.77	39.8	0.06	0.45	1.11	0.09	0.09	n.d.	0.04
Greenhouse 17-1	25.6	13.1	30.9	0.88	0.97	n.d.	n.d.	0.23	n.d.	n.d.	n.d.	n.d.
Greenhouse 17-2	6.74	3.13	19.3	0.39	4.57	n.d.	0.07	0.45	n.d.	0.03	n.d.	n.d.
Greenhouse 18-1	11.8	43.3	122	0.85	6.90	n.d.	0.07	0.11	n.d.	n.d.	n.d.	n.d.
Greenhouse 18-2	18.6	33.1	49.5	0.77	2.45	0.33	0.09	0.23	n.d.	n.d.	n.d.	n.d.
Greenhouse 19-1	61.6	102	59.7	3.32	4.33	n.d.	0.07	0.75	0.11	0.07	n.d.	0.04

Greenhouse 19-2	76.3	143	54.4	2.21	6.52	n.d.	0.06	0.38	0.06	0.05	n.d.	n.d.
Greenhouse 20-1	32.6	56.1	68.3	2.13	1.92	0.08	0.58	1.33	0.32	0.55	0.04	0.08
Greenhouse 20-2	28.9	11.4	64.2	0.54	1.98	n.d.	0.07	0.22	0.08	0.65	n.d.	0.05

*n.d.: not detected (below the method quantitation limit)

Table S10 All the data of BAFs in this study.

Sample type	Sample No.	Bioaccumulation Factors (BAFs) of each substance*										
		PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFOS	PFNA	PFDA	PFUDA	PFDoA	PFTeDA
Corner vegetable	Greenhouse 1	8.33	5.52	3.22	3.20	1.51			0.26			
Corner vegetable	Greenhouse 4	2.88	0.95	1.44	0.68	0.63		0.32	0.45	0.11	0.22	
Corner vegetable	Greenhouse 7		1.32	0.89	1.84	1.16			0.13		2.04	
Corner vegetable	Greenhouse 9		5.27	3.24	4.04	1.31						
Corner vegetable	Greenhouse 12	7.81	6.22	0.80	0.43	0.49	0.85	0.42	0.23		0.25	
Corner vegetable	Greenhouse 15	9.30	3.09	6.81	0.92	0.25			0.35			
Corner vegetable	Greenhouse 16	2.38	0.97	3.70	0.23	0.21		0.39	0.08			
Corner vegetable	Greenhouse 17	5.50	2.48	3.12	2.31	0.43			0.11			
Corner vegetable	Greenhouse 18	7.12	3.32	1.27	0.55	0.89			0.15			
Corner vegetable	Greenhouse 19	14.8	6.25	7.97	2.54	1.62			0.32		0.12	
Corner vegetable	Greenhouse 20	1.66	0.95	0.77	1.13	0.66		0.10	0.08	0.08	0.09	
Inner vegetable	Greenhouse 4-1	0.20		1.53		0.46						
Inner vegetable	Greenhouse 4-2	0.67	1.26	1.67	0.80	0.05			0.12			
Inner vegetable	Greenhouse 9-1	2.03	0.98			0.43			0.09			
Inner vegetable	Greenhouse 9-2			0.95	0.69	0.25	0.55					
Inner vegetable	Greenhouse 10-1	1.24				0.55	0.36		0.25			

Inner vegetable	Greenhouse 10-2		1.23	1.14	0.57	1.12		0.24	0.11		0.18	
Inner vegetable	Greenhouse 11-1	0.74	1.59	0.58	0.34	0.23	0.32	0.09	0.11			
Inner vegetable	Greenhouse 11-2		0.48	1.39	0.47	0.87		0.09				
Inner vegetable	Greenhouse 13-1	0.95	0.88	0.63		0.36						
Inner vegetable	Greenhouse 13-2	4.42	1.05	0.51		0.38			0.44	0.26		
Inner vegetable	Greenhouse 15-1	0.75	0.63	0.32		0.21						
Inner vegetable	Greenhouse 15-2	1.68	1.47	0.36	0.55	0.47						
Inner vegetable	Greenhouse 16-1	0.66		0.56		0.15						
Inner vegetable	Greenhouse 16-2	1.95	1.21	0.90		0.17			0.15			0.40
Inner vegetable	Greenhouse 19-1	0.87	1.14	0.85	0.22	0.09	0.21	0.11	0.05			
Inner vegetable	Greenhouse 19-2	1.95	0.53	0.53	0.45	0.56						
Inner vegetable	Greenhouse 20-1	1.21	0.77	0.34	0.65	0.08	0.35	0.09	0.12			
Inner vegetable	Greenhouse 20-2	2.44	1.33	0.47		0.22		0.20	0.10		0.21	

*blank: the corresponding substance was not detected in the sample.

Reference (numbers are consistent with the text):

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