

Supplementary information

Accumulation kinetics and equilibrium partitioning coefficients for semivolatile organic pollutants in forest litter

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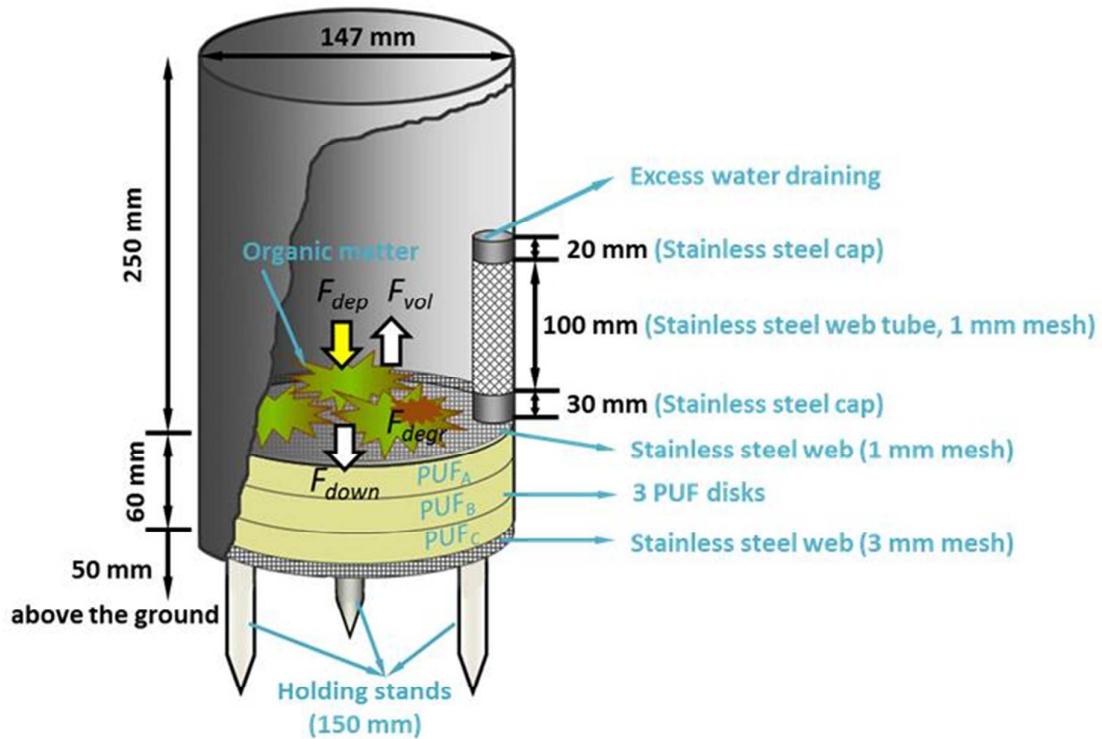


Figure S1. Schematic representation of the Passive Exchange Meter (PEM).

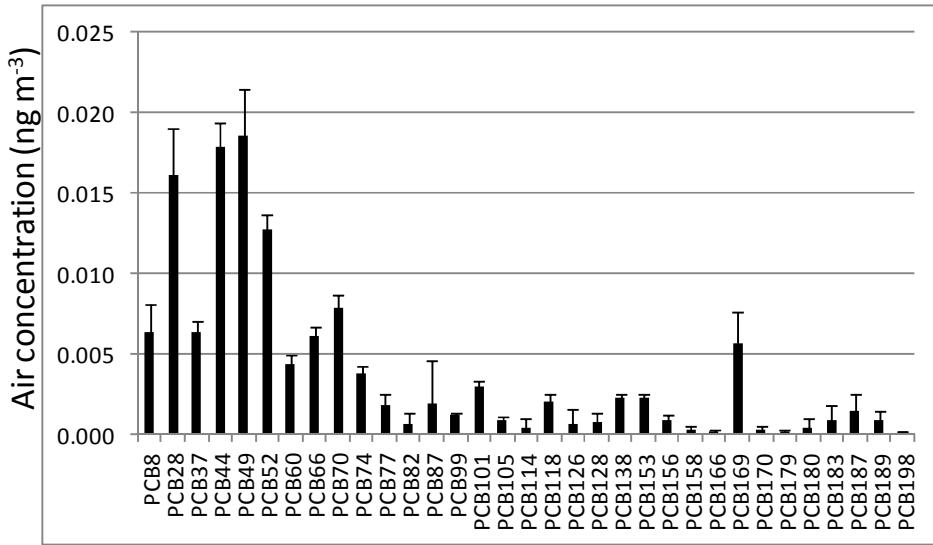


Figure S2. PCBs air concentrations. Error bars represent standard errors from triplicate measurements.

Table S1. Comparison of measured PCB air concentrations (pg m⁻³) with previous studies.

	Zhang et al. (2008)	Jaward et al. (2005)	This study
PCB 31/28	19.32	25.38	16
PCB 52	13.31	6.28	12.7
PCB 60/56	1.29	1.61	4.3
PCB 70	0.55	2.83	7.8
PCB 74	5.97	1.62	3.8
PCB 87	0.49	1.24	1.7
PCB 99	2.16	1.81	1.2
PCB 105	1.26	0.72	0.9
PCB 118	0.86	1.96	2
PCB 153	0.2	2.06	2.3
PCB 180	0.04	0.61	0.4

Table S2a. Parameters used in the calculation of k_{in} , k_{out} and temperature corrected K_{LA} for the understorey

	LogK _{OA}	ΔU_{OA} (kJ mol ⁻¹)	T (K)	Ca (pg m ⁻³)	Ca Standard deviation (pg m ⁻³)	F _{vol} (pg m ⁻² d ⁻¹)	F _{vol} standard deviation (pg m ⁻² d ⁻¹)	U _{to} (pg/PEM)	F _{dep} (pg m ⁻² d ⁻¹)	F _{dep} standard deviation (pg m ⁻² d ⁻¹)	Dry mass of litter (g/PEM)	k_{out} (d ⁻¹)	k_{out} standard deviation (d ⁻¹)	k_{in} (d ⁻¹)	LogK _{LA}	LogK _{LA} 95% confidence intervals	v (m d ⁻¹)
PCB8	7.3	-72.5	299.15	6.3	1.7	260	86	856	44	213	13.1	0.0047	0.0015	-	-	-	7
PCB28	7.8	-78.5	299.15	16.0	2.9	1729	441	3885	1916	575	13.1	0.0069	0.0018	63443	7.0	6.2 - 7.3	120
PCB37		-78.7	299.15	6.3	0.6	1726	440	4029	863	731	13.1	0.0066	0.0017	-	-		136
PCB44	7.7	-81.4	299.15	17.8	1.6	899	305	2793	1448	336	13.1	0.0050	0.0017	29716	6.8	6.3 - 7.0	81
PCB49		-81.4	299.15	18.5	2.9	955	324	2820	2859	450	13.1	0.0052	0.0018	-	-		155
PCB52	8.2	-81.4	299.15	12.7	0.9	1083	367	3455	946	467	13.1	0.0048	0.0016	50035	7.0	6.4 - 7.3	74
PCB60		-89.2	299.15	4.3	0.7	1144	388	3653	955	575	13.1	0.0048	0.0016	155657	7.5	5.6 - 7.9	221
PCB66		-89.2	299.15	6.0	0.6	1162	394	3688	1184	478	13.1	0.0049	0.0016	113349	7.4	6.8 - 7.6	196
PCB70		-89.2	299.15	7.8	0.8	1438	488	4580	1317	608	13.1	0.0048	0.0016	107918	7.3	6.8 - 7.6	168
PCB74		-89.2	299.15	3.8	0.5	639	217	2030	646	266	13.1	0.0049	0.0017	99565	7.3	6.7 - 7.6	171
PCB77		-83.5	299.15	1.8	0.6	1055	358	3388	722	549	13.1	0.0048	0.0016	-	-		402
PCB82		-83.5	299.15	0.6	0.6	30	91	1165	168	130	13.1	0.0004	0.0012	-	-		275
PCB87		-83.5	299.15	1.7	2.7	86	263	3368	365	380	13.1	0.0004	0.0012	-	-		217
PCB99		-83.5	299.15	1.2	0.1	58	178	2274	275	238	13.1	0.0004	0.0012	-	-		229
PCB101	8.7	-83.5	299.15	3.0	0.3	121	369	4728	576	499	13.1	0.0004	0.0012	-	-		193
PCB105	9.5	-88.7	299.15	0.9	0.2	123	375	4799	679	541	13.1	0.0004	0.0012	-	-		795
PCB114		-89	299.15	0.4	0.5	21	65	827	160	88	13.1	0.0004	0.0012	-	-		370
PCB118	9.4	-89	299.15	2.0	0.5	211	642	8243	540	1009	13.1	0.0004	0.0012	-	-		277
PCB126		-89	299.15	0.6	0.9	77	235	3018	216	424	13.1	0.0004	0.0012	-	-		335
PCB128		-89	299.15	0.7	0.6	65	161	1215	116	132	13.1	0.0008	0.0020	51381	7.8	6.8 - 8.5	158
PCB138	9.7	-86.3	299.15	2.2	0.2	422	1052	7952	700	1019	13.1	0.0008	0.0020	110947	8.1	7.2 - 8.4	313
PCB153	9.4	-93.9	299.15	2.3	0.2	297	740	5590	562	692	13.1	0.0008	0.0020	76852	8.0	7.2 - 8.3	248
PCB156	9.1	-93.9	299.15	0.9	0.3	155	386	2907	484	345	13.1	0.0008	0.0020	-	-		542
PCB158		-93.9	299.15	0.3	0.2	74	186	1402	127	181	13.1	0.0008	0.0020	135970	8.2	NaN - 9.0	394
PCB166		-93.9	299.15	0.1	0.1	13	31	238	17	34	13.1	0.0008	0.0020	52934	7.8	NaN - 8.6	118
PCB169		-93.9	299.15	5.7	1.9	146	364	2669	2593	477	13.1	0.0008	0.0021	-	-		457
PCB170		-93.9	299.15	0.2	0.3	213	716	4817	882	661	13.1	0.0007	0.0023	-	-		3692
PCB179		-92.8	299.15	0.1	0.2	16	52	355	20	49	13.1	0.0007	0.0023	68718	8.0	NaN - 8.7	146
PCB180	10.2	-92.8	299.15	0.4	0.5	216	725	4889	616	677	13.1	0.0007	0.0023	-	-		1437
PCB183		-92.8	299.15	0.9	0.9	46	153	1029	176	142	13.1	0.0007	0.0023	-	-		198
PCB187	9.1	-92.8	299.15	1.4	1.1	71	238	1603	175	225	13.1	0.0007	0.0023	-	-		122
PCB189		-93.9	299.15	0.8	0.7	84	281	1860	1279	285	13.1	0.0007	0.0023	-	-		1609
PCB198		-93.9	299.15	0.1	0.1	19	42	323	12	46	13.1	0.0009	0.0020	155858	8.2	NaN 9.0	172

TableS2b. Parameters used in the calculation of k_{in} , k_{out} and temperature corrected K_{LA} for the canopy gap

	LogK _{OA}	ΔU_{OA} (kJ mol ⁻¹)	T (K)	Ca (pg m ⁻³)	Ca Standard deviation (pg m ⁻³)	F _{vol} (pg m ⁻² d ⁻¹)	F _{vol} standard deviation (pg m ⁻² d ⁻¹)	U _{t0} (pg/PEM)	F _{dep} (pg m ⁻² d ⁻¹)	F _{dep} standard deviation (pg m ⁻² d ⁻¹)	Dry mass of litter (g/PEM)	k_{out} (d ⁻¹)	k_{out} standard deviation (d ⁻¹)	k_{in} (d ⁻¹)	LogK _{LA}	LogK _{LA} 95% confidence intervals	v (m d ⁻¹)
PCB8	7.3	-72.5	299.15	6.3	1.7	384	194	614	346	54	12	0.0096	0.0049	38907	6.6	6.1 - 6.9	55
PCB28	7.8	-78.5	299.15	16.0	2.9	2338	472	2874	690	291	12	0.0125	0.0025	-	-	-	43
PCB37		-78.7	299.15	6.3	0.6	3199	645	3946	888	790	12	0.0125	0.0025	-	-	-	141
PCB44	7.7	-81.4	299.15	17.8	1.6	1652	117	1958	536	385	12	0.0130	0.0009	-	-	-	30
PCB49		-81.4	299.15	18.5	2.9	1113	79	1307	415	174	12	0.0131	0.0009	-	-	-	22
PCB52	8.2	-81.4	299.15	12.7	0.9	2116	149	2500	720	362	12	0.0130	0.0009	-	-	-	57
PCB60		-89.2	299.15	4.3	0.7	2671	189	3070	1301	371	12	0.0134	0.0009	-	-	-	301
PCB66		-89.2	299.15	6.0	0.6	2306	163	2643	1160	640	12	0.0134	0.0010	-	-	-	192
PCB70		-89.2	299.15	7.8	0.8	3033	214	3522	1315	765	12	0.0133	0.0009	-	-	-	168
PCB74		-89.2	299.15	3.8	0.5	1281	90	1491	538	224	12	0.0132	0.0009	-	-	-	143
PCB77		-83.5	299.15	1.8	0.6	2531	179	2908	1235	697	12	0.0134	0.0009	-	-	-	689
PCB82		-83.5	299.15	0.6	0.6	313	78	1049	115	46	12	0.0046	0.0011	-	-	-	189
PCB87		-83.5	299.15	1.7	2.7	822	206	2752	317	145	12	0.0046	0.0012	-	-	-	189
PCB99		-83.5	299.15	1.2	0.1	513	128	1718	184	131	12	0.0046	0.0011	-	-	-	153
PCB101	8.7	-83.5	299.15	3.0	0.3	1159	290	3885	365	350	12	0.0046	0.0012	-	-	-	122
PCB105	9.5	-88.7	299.15	0.9	0.2	1319	330	4421	420	319	12	0.0046	0.0012	-	-	-	492
PCB114		-89	299.15	0.4	0.5	205	51	688	57	18	12	0.0046	0.0011	-	-	-	132
PCB118	9.4	-89	299.15	2.0	0.5	2079	521	6973	625	601	12	0.0046	0.0012	-	-	-	320
PCB126		-89	299.15	0.6	0.9	777	195	2610	184	251	12	0.0046	0.0012	-	-	-	286
PCB128		-89	299.15	0.7	0.6	106	142	904	70	23	12	0.0018	0.0024	-	-	-	95
PCB138	9.7	-86.3	299.15	2.2	0.2	736	989	6280	497	306	12	0.0018	0.0024	211128	8.1	8.0 - 8.2	222
PCB153	9.4	-93.9	299.15	2.3	0.2	489	657	4167	422	91	12	0.0018	0.0024	-	-	-	186
PCB156	9.1	-93.9	299.15	0.9	0.3	282	378	2400	235	141	12	0.0018	0.0024	202282	8.0	7.8 - 8.4	263
PCB158		-93.9	299.15	0.3	0.2	136	182	1158	115	54	12	0.0018	0.0024	270710	8.2	NaN - 8.9	357
PCB166		-93.9	299.15	0.1	0.1	25	33	210	25	7	12	0.0018	0.0024	112664	7.8	NaN - 8.5	179
PCB169		-93.9	299.15	5.7	1.9	164	220	1398	39	95	12	0.0018	0.0024	-	-	-	7
PCB170		-93.9	299.15	0.2	0.3	349	144	4122	245	165	12	0.0013	0.0005	937043	8.9	NaN - 9.5	1025
PCB179		-92.8	299.15	0.1	0.2	21	9	250	2	7	12	0.0013	0.0006	-	-	-	16
PCB180	10.2	-92.8	299.15	0.4	0.5	344	142	4061	458	103	12	0.0013	0.0005	515023	8.6	NaN - 9.3	1068
PCB183		-92.8	299.15	0.9	0.9	66	27	782	58	15	12	0.0013	0.0005	47584	7.6	NaN - 8.5	65
PCB187	9.1	-92.8	299.15	1.4	1.1	105	43	1235	124	30	12	0.0013	0.0005	46818	7.6	NaN - 9.3	86
PCB189		-93.9	299.15	0.8	0.7	108	45	1282	25	81	12	0.0013	0.0005	-	-	-	32
PCB198		-93.9	299.15	0.1	0.1	18	9	267	3	8	12	0.0010	0.0005	-	-	-	39

Table S3. Congener distribution within Group 1 (deposition dominant) Group 2 (equilibrium) and Group 3 (volatilization dominant).

Under Canopy			R_{eq}
Volatilization dominant (Group 3)	PCB37	-1.00	
Equilibrium (Group 2)	PCB44	0.38	
	PCB52	-0.14	
	PCB60	-0.20	
	PCB28	0.10	
	PCB66	0.02	
	PCB70	-0.09	
	PCB74	0.01	
	PCB77	-0.46	
	PCB166	0.24	
	PCB128	0.45	
	PCB138	0.40	
	PCB153	0.47	
	PCB158	0.41	
	PCB82	0.82	
Deposition dominant (Group 1)	PCB87	0.76	
	PCB99	0.79	
	PCB101	0.79	
	PCB105	0.82	
	PCB114	0.87	
	PCB118	0.61	
	PCB126	0.64	
	PCB156	0.68	
	PCB170	0.76	
	PCB180	0.65	
	PCB183	0.74	
	PCB187	0.59	

Canopy gap			R_{eq}
Volatilization dominant (Group 3)	PCB28	-2.39	
Equilibrium (Group 1)	PCB37	-2.60	
	PCB44	-2.08	
	PCB52	-1.94	
	PCB60	-1.05	
	PCB66	-0.99	
	PCB70	-1.31	
	PCB74	-1.38	
	PCB77	-1.05	
	PCB82	-1.72	
	PCB87	-1.59	
	PCB99	-1.79	
	PCB101	-2.18	
	PCB105	-2.14	
	PCB114	-2.61	
	PCB118	-2.33	
	PCB126	-3.21	
	PCB128	-0.51	
	PCB138	-0.48	
	PCB153	-0.16	
	PCB156	-0.20	
	PCB158	-0.18	
	PCB166	0.02	
	PCB170	-0.42	
	PCB180	0.25	
	PCB183	-0.13	
	PCB187	0.15	

Table S4. Detailed information on k_{in} , k_{out} and K_{LA} data retrieved from the literature

Type of sample	compound	ΔU_{OA} (kJ mol ⁻¹)	Experimental temperature (K)	Log K_{oa}	k_{in} (d ⁻¹)	k_{out} (d ⁻¹)	log K_{LA}	log K_{AL} temperature corrected	log K_{AL} OC normalized	Source REF
Lolium multiflorum	PCB 8+5	-72.5	290.4	7.1	1.26E+05	7.56E-01	5.2	4.9	5.2	21
Lolium multiflorum	PCB 18	-78.1	290.4	7.2	2.21E+05	5.94E-01	5.6	5.2	5.6	21
Lolium multiflorum	PCB 16+32	-78.5	290.4	7.0	3.42E+05	5.94E-01	5.8	5.4	5.7	21
Lolium multiflorum	PCB 31+28	-78.5	290.4	7.6	4.21E+05	4.62E-01	6.0	5.6	5.9	21
Lolium multiflorum	PCB 52	-81.4	290.4	7.7	6.05E+05	3.33E-01	6.3	5.9	6.2	21
Lolium multiflorum	PCB 44	-81.4	290.4	7.7	1.31E+06	4.06E-01	6.5	6.1	6.5	21
Lolium multiflorum	PCB 64	-89.2	290.4	7.7	1.03E+06	3.33E-01	6.5	6.1	6.4	21
Lolium multiflorum	PCB 95	-83.5	290.4	7.8	1.21E+06	2.64E-01	6.7	6.3	6.6	21
Lolium multiflorum	PCB 84+101	-83.5	290.4	8.2	1.87E+06	1.91E-01	7.0	6.6	6.9	21
Lolium multiflorum	PCB 110	-88.7	290.4	8.3	5.15E+06	1.91E-01	7.4	7.0	7.4	21
Lolium multiflorum	PCB 149	-86.3	290.4	8.7	5.44E+06	1.68E-01	7.5	7.1	7.5	21
Lolium multiflorum	PCB 153	-93.9	290.4	9.0	9.28E+06	1.34E-01	7.8	7.4	7.7	21
Lolium multiflorum	PCB 163+138	-83.4	290.4	8.9	1.97E+07	1.36E-01	8.2	7.8	8.1	21
Lolium multiflorum	PCB 187	-92.8	290.4	9.1	1.51E+07	1.34E-01	8.0	7.6	8.0	21
Lolium multiflorum	PCB 180	-92.8	290.4	9.8	6.13E+07	1.22E-01	8.7	8.3	8.6	21
Lolium multiflorum	PCB 202	-93.9	290.4	9.3	1.21E+07	1.18E-01	8.0	7.6	7.9	21
Lolium multiflorum	PCB 203+196	-93.9	290.4	9.6	1.05E+08	1.16E-01	9.0	8.5	8.9	21
Azalea indica	p,p'-DDT	-93.9	293	10.4	6.53E+05	1.34E-02	7.7	7.4	7.7	22
Azalea indica	p,p'-DDE	-93.9	293	9.3	3.52E+05	9.60E-03	7.5	7.2	7.6	22
Azalea indica	α -HCH	-78.1	293	7.1	2.51E+04	2.16E-02	6.1	5.8	6.2	22
Azalea indica	γ -HCH	-78.1	293	7.4	2.08E+04	2.40E-02	5.9	5.7	6.0	22
Azalea indica	trifluralin	-72.5	293	7.7	1.76E+04	1.50E-01	5.1	4.8	5.2	23
Azalea indica	HCB	-78.1	293	6.9	5.75E+04	1.22E-01	5.7	5.4	5.8	23
Azalea indica	mirex	-78.1	293	8.4	1.30E+06	9.84E-02	7.1	6.9	7.2	23
Azalea indica	thionazin	-81.4	293	8.0	5.63E+03	1.85E-01	4.5	4.2	4.6	23
Azalea indica	sulfotep	-81.4	293	8.0	5.45E+03	2.16E-01	4.4	4.2	4.5	23
Azalea indica	1,2,3,4-TCDD	-83.5	293	9.4	4.59E+05	5.04E-03	8.0	7.7	8.0	24
Azalea indica	alachlor	-78.1	293	8.4	7.18E+04	2.54E-01	5.5	5.2	5.6	25
Azalea indica	dieldrin	-78.1	293	7.0	8.54E+04	7.92E-02	6.0	5.8	6.1	25
Azalea indica	PCB 77	-83.5	293	9.1	6.24E+05	7.44E-03	7.9	7.7	8.0	25
Quercus robur	p,p'-DDT	-93.9	293.3	10.4	8.86E+05	5.28E-02	7.2	7.0	7.3	27
Quercus robur	p,p'-DDE	-93.9	293.3	9.3	6.81E+05	2.64E-02	7.4	7.1	7.5	27
Quercus robur	p,o'-DDT	-93.9	293.3	10.0	1.71E+06	4.56E-02	7.6	7.3	7.6	27
Skimmia japonica	PCB 90+101	-83.5	293	8.4	1.27E+06				0.3	30
Skimmia japonica	PCB 110	-89	293	8.3	2.33E+06				0.3	30
Skimmia japonica	PCB 153	-93.9	293	9.0	4.11E+06				0.3	30
Skimmia japonica	PCB 138	-86.3	293	9.0	7.06E+06				0.3	30
Skimmia japonica	PCB 187	-92.8	293	9.1	4.82E+06				0.3	30
Skimmia japonica	PCB 180	-92.8	293	9.8	1.87E+07				0.3	30
Skimmia japonica	PCB 203	-93.9	293	9.7	2.01E+07				0.3	30
Picea omorika	p,p'-DDT	-93.9	293	10.4	7.67E+05	4.68E-03	8.2	7.9	8.3	26
Picea omorika	γ -HCH	-78.1	293	7.4	4.60E+04	5.50E-03	6.9	6.7	7.0	26
Picea omorika	1,2,4,5-tetrachlorobenzene	-72.5	293	6.0	1.01E+04	2.10E-02	5.7	5.5	5.8	26
Picea omorika	HCB	-78.1	293	6.9	6.62E+04	2.31E-02	6.5	6.2	6.6	26
Picea omorika	pentachlorobenzene	-72.5	293	6.7	1.59E+05	2.57E-02	6.8	6.6	6.9	26
Picea omorika	PCB 204	-93.9	293	9.3	3.80E+05	8.77E-03	7.6	7.3	7.7	26
Picea omorika	PCB 187	-92.8	293	9.0	2.80E+05	1.44E-02	7.3	7.0	7.3	26
Picea omorika	PCB 18	-78.5	293	7.7	1.31E+05	2.77E-02	6.7	6.4	6.8	26
Picea omorika	PCB 15	-72.5	293	7.3	3.74E+05	2.39E-02	7.2	7.0	7.3	26
Muck soil (42% OC)	PCB8	-72.5	294.15	7.3			7.0	6.8	7.2	20
Muck soil (42% OC)	PCB28	-78.5	294.15	7.8			7.3	7.1	7.4	20
Muck soil (42% OC)	PCB44	-81.4	294.15	7.7			7.5	7.3	7.7	20
Muck soil (42% OC)	PCB52	-81.4	294.15	8.2			7.2	7.0	7.4	20
Muck soil (42% OC)	PCB101	-83.5	294.15	8.7			7.8	7.6	8.0	20
Muck soil (42% OC)	PCB105	-88.7	294.15	9.5			8.7	8.4	8.8	20
Muck soil (42% OC)	PCB118	-89.0	294.15	9.4			8.4	8.1	8.5	20
Muck soil (42% OC)	PCB138	-86.3	294.15	9.7			8.7	8.5	8.9	20
Muck soil (42% OC)	PCB153	-93.9	294.15	9.4			8.4	8.2	8.6	20
Muck soil (42% OC)	PCB180	-92.8	294.15	10.2			9.2	9.0	9.4	20
Muck soil (42% OC)	PCB187	-92.8	294.15	9.1			8.6	8.4	8.8	20

Table S4 - continuing

Type of sample	compound	ΔU_{OA} (kJ mol ⁻¹)	Experimental temperature (K)	LogK _{oa}	k_{in} (d ⁻¹)	k_{out} (d ⁻¹)	logK _{LA}	logK _{AL} temperature corrected	logK _{AL} OC normalized	Source REF
Soil (1%OC)	HCB	-78.1	294.15	6.9			5.0	4.8	6.8	19
Soil (1%OC)	PCB8	-72.5	294.15	7.3			5.5	5.4	7.4	19
Soil (1%OC)	PCB28	-78.5	294.15	7.8			5.9	5.7	7.7	19
Soil (1%OC)	PCB44	-81.4	294.15	7.7			6.2	6.0	8.0	19
Soil (1%OC)	PCB52	-81.4	294.15	8.2			6.0	5.8	7.8	19
Soil (1%OC)	PCB101	-83.5	294.15	8.7			6.7	6.5	8.5	19
Soil (1%OC)	PCB138	-86.3	294.15	9.7			7.6	7.4	9.4	19
Soil (1%OC)	PCB153	-93.9	294.15	9.4			7.4	7.1	9.1	19
Soil (1%OC)	PCB180	-92.8	294.15	10.2			8.0	7.8	9.8	19
Soil (1%OC)	PCB187	-92.8	294.15	9.1			7.8	7.6	9.6	19
Mixed pasture sward	PCB18	-72.5	293.15	7.9	1.08E+01	1.39E-01	3.3	3.1	3.4	38
Mixed pasture sward	PCB28	-78.5	293.15	8.4	6.48E+01	1.51E-01	3.6	3.3	3.7	38
Mixed pasture sward	PCB52	-81.4	293.15	8.6	6.96E+01	1.10E-01	3.6	3.3	3.7	38
Mixed pasture sward	PCB101	-83.5	293.15	9.3	2.88E+02	5.04E-02	4.2	3.9	4.3	38
Mixed pasture sward	PCB110	-89	293.15	9.5	4.80E+02	3.60E-02	4.4	4.2	4.5	38
Mixed pasture sward	PCB118	-89	293.15	10.2	7.92E+02	1.44E-02	5.0	4.7	5.1	38
Mixed pasture sward	PCB138	-86.3	293.15	10.1	9.36E+02	2.64E-02	4.7	4.5	4.8	38
Mixed pasture sward	PCB153	-93.9	293.15	10.0	7.20E+02	2.64E-02	4.6	4.3	4.7	38
Mixed pasture sward	PCB180	-92.8	293.15	10.4	1.34E+03	1.92E-02	4.9	4.7	5.0	38
Mixed pasture sward	PCB187	-92.8	293.15	10.3	7.44E+02	3.12E-02	4.6	4.3	4.7	38
Mixed pasture sward (fanned)	PCB18	-72.5	293.15	7.9	2.64E+02					38
Mixed pasture sward (fanned)	PCB28	-78.5	293.15	8.4	5.52E+02					38
Mixed pasture sward (fanned)	PCB52	-81.4	293.15	8.6	4.08E+02					38
Mixed pasture sward (fanned)	PCB101	-83.5	293.15	9.3	7.20E+02					38
Mixed pasture sward (fanned)	PCB110	-89	293.15	9.5	1.01E+03					38
Mixed pasture sward (fanned)	PCB118	-89	293.15	10.2	1.46E+03					38
Mixed pasture sward (fanned)	PCB138	-86.3	293.15	10.1	1.44E+03					38
Mixed pasture sward (fanned)	PCB153	-93.9	293.15	10.0	1.08E+03					38
Mixed pasture sward (fanned)	PCB180	-92.8	293.15	10.4	1.70E+03					38
Mixed pasture sward (fanned)	PCB187	-92.8	293.15	10.3	1.27E+03					38
Mixed broadleaved foliage	PCB 28/31	-78.5	298.15	7.8			6.6	6.6	7.0	28
Mixed broadleaved foliage	PCB 52	-81.4	298.15	8.2			6.7	6.7	7.1	28
Mixed broadleaved foliage	PCB 101	-83.5	298.15	8.7			7.1	7.1	7.4	28
Mixed broadleaved foliage	PCB 138	-86.3	298.15	9.7			7.2	7.2	7.6	28
Mixed broadleaved foliage	PCB 153	-93.9	298.15	9.4			7.5	7.5	7.8	28
Mixed broadleaved foliage	PCB 180	-92.8	298.15	10.2			7.6	7.6	8.0	28
Boreal forest litter	PCB 52	-81.4	288.15	8.2			6.6	6.2	6.6	31
Boreal forest litter	PCB 90 + 101	-83.5	288.15	8.7			7.5	7.1	7.4	31
Boreal forest litter	PCB 118	-89	288.15	10.2			7.7	7.3	7.6	31
Boreal forest litter	PCB 138	-86.3	288.15	10.1			7.8	7.4	7.7	31
Boreal forest litter	PCB 153 + 132	-93.9	288.15	10.0			7.7	7.3	7.6	31
Boreal forest litter	PCB 180	-92.8	288.15	10.4			7.9	7.5	7.9	31
Superficial organic soil (26%OC)	PCB 52	-81.4	288.15	8.2			7.2	6.8	7.4	31
Superficial organic soil (26%OC)	PCB 90 + 101	-83.5	288.15	8.7			8.1	7.7	8.3	31
Superficial organic soil (26%OC)	PCB 118	-89	288.15	10.2			8.7	8.3	8.9	31
Superficial organic soil (26%OC)	PCB 138	-86.3	288.15	10.1			8.6	8.2	8.8	31
Superficial organic soil (26%OC)	PCB 153 + 132	-93.9	288.15	10.0			8.5	8.1	8.7	31
Superficial organic soil (26%OC)	PCB 180	-92.8	288.15	10.4			8.8	8.4	9.0	31
Superficial organic soil (12%OC)	PCB18	-72.5	286.15	7.9			4.5	3.9	4.9	29
Superficial organic soil (12%OC)	PCB33	-78.5	286.15	7.8			5.8	5.3	6.2	29
Superficial organic soil (12%OC)	PCB52	-81.4	286.15	8.2			6.0	5.4	6.3	29
Superficial organic soil (12%OC)	PCB70	-89.2	286.15	8.4			6.0	5.3	6.2	29
Superficial organic soil (12%OC)	PCB101	-83.5	286.15	8.7			6.8	6.2	7.1	29
Superficial organic soil (12%OC)	PCB138	-86.3	286.15	9.7			7.8	7.1	8.0	29
Superficial organic soil (12%OC)	PCB153	-93.9	286.15	9.4			7.0	6.3	7.2	29
Superficial organic soil (12%OC)	PCB187	-92.8	286.15	9.1			6.2	5.5	6.4	29