

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs, Water - 1 )

No.		1										2	3					4	5	6			
SPEED '98 No.		2										4	12					14		15	16		
No.	Specimen collection site	Polychlorinated biphenyls ( PCBs)										Hexachlorobenzene (HCB)	Hexachlorocyclohexane					Chlordane		Oxychlordane	trans-Nonachlor	cis-Nonachlor	
		Chlorinated biphenyl	Dichloro biphenyl	Trichloro biphenyl	Tetrachloro biphenyl	Pentachloro biphenyl	Hexachloro biphenyl	Heptachloro biphenyl	Octachloro biphenyl	Nonachloro biphenyl	Decichloro biphenyl		PCB total*	-HCH	-HCH	-HCH	-HCH	HCH total*	cis-Chlordane				trans-Chlordane
Unit		µg/L																					
1	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
2	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
3	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
4	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
5	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
6	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
7	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
8	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
9	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
10	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
11	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
12	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
13	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
14	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
15	Yamada Ryokuchi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
16	Place selected for comparison purposes	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
17	Place selected for comparison purposes	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
18	Place selected for comparison purposes	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03
19	Place selected for comparison purposes	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.03	<0.03	<0.03	<0.03	<0.03	0	<0.03	<0.03	<0.03	<0.03	<0.03

\* Calculated on the assumption that a value below the limit of detection is counted as 0.

Results of 1998 Research on Effects of Endocrine Disruptin Chemicals on Wildlife (Frogs, Water-2 )

No.	Specimen collection site	7		8				9	10	11	12	13	14	15	16	17	18	19	20		
		18		19				23	25	26	43	33	34			9	11	35	36		
		DDT		DDE and DDD																Alkyl Phenol	
		o,p'-DDT	p,p'-DDT	o,p'-DDE	p,p'-DDE	o,p'-DDD	p,p'-DDD	Diieldrin	Heptachlor	Heptachlor epoxide	Benzo(a)epoxide	Tributyltin	Triphenyltin	Dibutyltin	Monobutyltin	Atrazine	CAT ( Simazine )	Trifluralin	Nonyl phenol	4 - t-Octyle phenol	4 - n-Octyl phenol
Unit		µg/L																			
1	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
2	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.2	<0.01	<0.01
3	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.1	<0.01	<0.01
4	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
5	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
6	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.2	<0.01	<0.01
7	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.1	<0.01	<0.01
8	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
9	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.2	<0.01	<0.01
10	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
11	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
12	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
13	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.2	<0.01	<0.01
14	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.2	<0.01	<0.01
15	Yamada Ryokuchi	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
16	Place selected for comparison purposes	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	0.1	<0.01	<0.01
17	Place selected for comparison purposes	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
18	Place selected for comparison purposes	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01
19	Place selected for comparison purposes	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.001	<0.002	<0.004	<0.02	<0.02	<0.02	<0.01	<0.1	<0.01	<0.01

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs, Water - 3)

No.	Specimen collection site	No. 21	22	23	24	25	26	27	28										30	32				
		SPEED '98 No. 37	38	39	40	42	45		66															
Unit		µg/L																						
		Bisphenol A	Di-(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di-n-butyl-phthalate	Diethyl phthalate	Di-2-ethylhexyl adipate	Styrene monomer	Styrene dimers*	1,3-Diphenylpropane	cis-1,2-Diphenylcyclobutane	trans-1,2-Diphenylcyclobutane	2,4-Diphenyl-1-butene	Styrene trimers*	2,4,6-Triphenyl-1-hexane	1a-7I-II-4a-(1-phenylethyl) tetralin	1a-7I-II-4a-(2-phenylethyl) tetralin	1a-7I-II-4a-(3-phenylethyl) tetralin	1a-7I-II-4a-(4-phenylethyl) tetralin	1e,3e,5a-Triphenylcyclohexane	1e,3e,6a-Triphenylcyclohexane	17-estradiol	Ethinyl estradiol	
1	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003	<0.002
2	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.007	<0.002
3	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005	<0.002
4	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.004	<0.002
5	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005	<0.002
6	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.008	<0.002
7	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.009	<0.002
8	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
9	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	0.33	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
10	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003	<0.002
11	Yamada ryokuchi	0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.007	<0.002
12	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
13	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
14	Yamada ryokuchi	0.02	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.007	<0.002
15	Yamada ryokuchi	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
16	Place selected for comparison purposes	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002
17	Place selected for comparison purposes	0.03	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005	<0.002
18	Place selected for comparison purposes	0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003	<0.002
19	Place selected for comparison purposes	<0.01	<0.5	<0.2	<0.5	<0.2	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003	<0.002

\* Calculated on the assumption that values below the limit of detection are counted as 0.

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs, Soil/Sediment – 1)

(Concentration per dry weight)

No.		1											2	3					4		5	6									
SPEED'98 No.		2											4	12					14		15	16									
Specimen	No.	Specimen collection site	Polychlorinated biphenyls (PCBs)											Hexachlorobenzene (HCB)	Hexachlorocyclohexane					Chlordane		Oxychlordane	trans-Nonachlor	cis-Nonachlor							
			Chlorinated biphenyl	Dichloro biphenyl	Trichloro biphenyl	Tetrachloro biphenyl	Pentachloro biphenyl	Hexachloro biphenyl	Heptachloro biphenyl	Octachloro biphenyl	Nonachloro biphenyl	Decichloro biphenyl	PCB total*		α-HCH	β-HCH	γ-HCH	δ-HCH	HCH total*	cis-Chlordane	trans-Chlordane										
Unit		μg/kg-dry																													
Soil	1	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	2	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	3	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	4	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	5	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	6	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	7	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Sediment	1	Yamada Ryokuchi	<1	<1	<1	5	42	14	<1	<1	<1	<1	<1	61	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	2	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	3	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	4	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	5	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	6	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	7	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	8	Yamada Ryokuchi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	9	Place selected for comparison purposes	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	10	Place selected for comparison purposes	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	11	Place selected for comparison purposes	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	12	Place selected for comparison purposes	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	

\* Calculated on the assumption that values below the limit of detection are counted as 0.

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs, Soil/Sediment-2)

(Concentration per dry weight)

No.		7	8				9	10	11	12	13	14	15	16	17	18	19	20				
SPEED'98 No.		18		19				23	25	26	43	33	34			9	11	35	36			
Specimen	No.	Specimen collection site	DDT		DDE and DDD				Dieldrin	Heptachlor	Heptachlor epoxide	Benzo(a)pyrene	Tributyltin	Triphenyltin	Dibutyltin	Monobutyltin	Atrazine	CAT (Simazine)	Trifluralin	Alkyl phenol		
			o,p'-DDT	p,p'-DDT	o,p'-DDE	p,p'-DDE	o,p'-DDD	p,p'-DDD												Nonyl phenol	4-t-Octyl phenol	4-n-Octyl phenol
Unit		$\mu\text{g/kg-dry}$																				
Soil	1	Yamada Ryokuchi	<5	<5	<5	13	<5	<5	<5	<5	<5	187	<20	<20	<100	<200	<1.2	<1.2	<1.2	<36	<3.6	<3.6
	2	Yamada Ryokuchi	9	67	<5	84	14	36	<5	<5	<5	215	<20	<20	<100	<200	<0.8	<0.8	<0.8	<23	<2.3	<2.3
	3	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	<5	81	<20	<20	<100	<200	<0.8	<0.8	<0.8	<25	<2.5	<2.5
	4	Yamada Ryokuchi	<5	26	<5	19	<5	<5	<5	<5	<5	70	<20	<20	<100	<200	<0.7	<0.7	<0.7	<23	<2.3	<2.3
	5	Yamada Ryokuchi	<5	9	<5	7	<5	9	<5	<5	<5	185	<20	<20	<100	<200	<1.0	<1.0	<1.0	<30	<3.0	<3.0
	6	Yamada Ryokuchi	9	37	<5	11	<5	7	<5	<5	<5	258	<20	<20	<100	<200	<0.7	<0.7	<0.7	<22	<2.2	<2.2
	7	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	<5	108	<20	<20	<100	<200	<0.8	<0.8	<0.8	<24	<2.4	<2.4
Sediment	1	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	119	<20	<20	<100	<200	<2.9	<2.9	<2.9	<87	<8.7	<8.7	
	2	Yamada Ryokuchi	<5	93	24	154	122	425	<5	<5	<5	341	<20	<20	<100	<200	<3.5	<3.5	<3.5	692	<10.5	<10.5
	3	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	75	<20	<20	<100	<200	<1.0	<1.0	<1.0	<23	<2.3	<2.3	
	4	Yamada Ryokuchi	<5	27	<5	32	<5	15	<5	<5	75	<20	<20	<100	<200	<1.1	<1.1	<1.1	<34	<3.4	<3.4	
	5	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	25	<20	<20	<100	<200	<1.0	<1.0	<1.0	<29	<2.9	<2.9	
	6	Yamada Ryokuchi	<5	<5	<5	12	<5	9	<5	<5	<5	52	<20	<20	<100	<200	<1.2	<1.2	<1.2	<35	<3.5	<3.5
	7	Yamada Ryokuchi	<5	<5	<5	<5	<5	<5	<5	<5	<5	45	<20	<20	<100	<200	<0.9	<0.9	<0.9	<27	<2.7	<2.7
	8	Yamada Ryokuchi	<5	<5	<5	8	<5	<5	<5	<5	<5	97	<20	<20	<100	<200	<1.5	<1.5	<1.5	674	<4.5	<4.5
	9	Place selected for comparison purposes	<5	<5	<5	<5	<5	<5	<5	<5	<5	15	<20	<20	<100	<200	<0.9	<0.9	<0.9	<26	<2.6	<2.6
	10	Place selected for comparison purposes	<5	<5	<5	<5	<5	<5	<5	<5	<5	56	<20	<20	<100	<200	<1.3	<1.3	<1.3	<38	<3.8	<3.8
	11	Place selected for comparison purposes	<5	<5	<5	<5	<5	<5	<5	<5	<5	21	<20	<20	<100	<200	<0.8	<0.8	<0.8	<25	<2.5	<2.5
	12	Place selected for comparison purposes	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<20	<20	<100	<200	<0.7	<0.7	<0.7	<19	<1.9	<1.9

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs, Soil/Sediment-3)

(Concentration per dry weight)

			No. 21	22	23	24	25	26	27	28											30	32			
SPEED'98 No.			37	38	39	40	42	45	66																
Specimen	No.	Specimen collection site	Bisphenol A	Di-(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di-n-butyl- phthalate	Diethyl phthalate	Di-2-ethylhexyl adipate	Styrene monomer	Styrene dimers and trimers											17 $\beta$ -estradiol	Ethynyl estradiol			
										Styrene dimers*	1,3-Diphenylpropane	cis-1,2-Diphenylcyclobutane	trans-1,2-Diphenylcyclobutane	2,4-Diphenyl-1-butene	Styrene trimers*	2,4,6-Triphenyl-1-hexane	1a-phenyl-4a-(1-phenylethyl) tetralin	1a-phenyl-4e-(1-phenylethyl) tetralin	1e-phenyl-4a-(1-phenylethyl) tetralin	1e-phenyl-4e-(1-phenylethyl) tetralin			1e,3e,5a-Triphenylcyclohexane	1e,3e,5e-Triphenylcyclohexane	
Unit			$\mu$ g/kg-dry																						
Soil	1	Yamada Ryokuchi	<15	<60	<24	<60	<24	<24	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	2.5	<0.5
	2	Yamada Ryokuchi	<10	<39	<15	<39	<15	<15	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.9	<0.5
	3	Yamada Ryokuchi	<10	<42	<17	<42	<17	<17	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.7	<0.5
	4	Yamada Ryokuchi	<10	<37	<15	<37	<15	<15	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.4	<0.5
	5	Yamada Ryokuchi	<10	929	<20	<50	<20	<20	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	2.1	<0.5
	6	Yamada Ryokuchi	<10	108	<15	99	<15	<15	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.5	<0.5
	7	Yamada Ryokuchi	<10	<39	<16	<39	<16	<16	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.5	<0.5
Sediment	1	Yamada Ryokuchi	<30	<145	<58	<145	<58	<58	<3	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	2.3	<0.5
	2	Yamada Ryokuchi	<35	259	<70	<175	<70	<70	<3	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	9.0	<0.5
	3	Yamada Ryokuchi	<15	<51	<20	<51	<20	<20	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	1.7	<0.5
	4	Yamada Ryokuchi	152	1,586	<23	<56	<23	<23	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	1.2	<0.5
	5	Yamada Ryokuchi	<10	210	<19	<48	<19	<19	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	1.7	<0.5
	6	Yamada Ryokuchi	54	630	<24	<59	<24	<24	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	3.1	<0.5
	7	Yamada Ryokuchi	<10	<45	<18	<45	<18	<18	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.6	<0.5
	8	Yamada Ryokuchi	<20	450	<30	<76	<30	<30	<2	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	4.1	<0.5
	9	Place selected for comparison purposes	32	837	<18	<44	<18	<18	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	0.9	<0.5
	10	Place selected for comparison purposes	128	1,766	<25	<63	<25	<25	<2	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	4.2	<0.5
	11	Place selected for comparison purposes	<10	1,344	<16	<41	<16	<16	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	1.6	<0.5
	12	Place selected for comparison purposes	<10	226	<13	<33	<13	<13	<1	0	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	<5	<5	<5	<0.2	<0.5

\* Calculated on the assumption that values below the limit of detection are counted as 0.