

Results of 1998 Research on Effects of Endocrine disrupting Chemicals on Wildlife (Frogs-1)

(Concentration per wet weight)

No.	Name of species	Specimen collection site	Gender (M: Male, F: Female)	Age (A:Adult)	Specimen	Lipid	Polychlorinated biphenyls (PCBs)										PCB total*		
							SPEED'98 No.		1										
							Unit	%	Chlorinated biphenyl	Dichloro biphenyl	Trichloro biphenyl	Tetrachloro biphenyl	Pentachloro biphenyl	Hexachloro biphenyl	Heptachloro biphenyl	Octachloro biphenyl		Nonachloro biphenyl	Decichloro biphenyl
1	N	Yamada Ryokuchi	M	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
2	N	Yamada Ryokuchi	M	A	whole body	0.98	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
3	N	Yamada Ryokuchi	M	A	whole body	1.3	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
4	N	Yamada Ryokuchi	M	A	whole body	1.6	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
5	N	Yamada Ryokuchi	M	A	whole body	1.7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
6	N	Yamada Ryokuchi	M	A	whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
7	N	Yamada Ryokuchi	M	A	whole body	1.3	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
8	N	Yamada Ryokuchi	M	A	whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
9	N	Yamada Ryokuchi	M	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
10	N	Yamada Ryokuchi	M	A	whole body	0.94	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0		
11	Y	Yamada Ryokuchi	M	A	whole body	0.98	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
12	Y	Yamada Ryokuchi	M	A	whole body	1.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
13	Y	Yamada Ryokuchi	M	A	whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
14	Y	Yamada Ryokuchi	M	A	whole body	1.4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
15	Y	Yamada Ryokuchi	M	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
16	Y	Yamada Ryokuchi	M	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
17	Y	Yamada Ryokuchi	M	A	whole body	0.99	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
18	Y	Yamada Ryokuchi	M	A	whole body	0.87	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
19	Y	Yamada Ryokuchi	M	A	whole body	0.98	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
20	Y	Yamada Ryokuchi	M	A	whole body	0.84	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
21	N	Yamada Ryokuchi	F	A	whole body	0.77	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
22	N	Yamada Ryokuchi	F	A	whole body	0.65	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
23	N	Yamada Ryokuchi	F	A	whole body	0.50	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
24	N	Yamada Ryokuchi	F	A	whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
25	N	Yamada Ryokuchi	F	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
26	N	Yamada Ryokuchi	F	A	whole body	0.64	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
27	N	Yamada Ryokuchi	F	A	whole body	0.85	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
28	N	Yamada Ryokuchi	F	A	whole body	0.93	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
29	N	Yamada Ryokuchi	F	A	whole body	0.81	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
30	N	Yamada Ryokuchi	F	A	whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
31	N	Yamada Ryokuchi	F	A	whole body	2.9	-	-	-	-	-	-	-	-	-	-	-		
32	N	Yamada Ryokuchi	F	A	whole body	2.1	-	-	-	-	-	-	-	-	-	-	-		
33	N	Yamada Ryokuchi	F	A	whole body	2.6	-	-	-	-	-	-	-	-	-	-	-		
34	N	Yamada Ryokuchi	F	A	whole body	3.2	-	-	-	-	-	-	-	-	-	-	-		
35	N	Yamada Ryokuchi	F	A	whole body	2.2	-	-	-	-	-	-	-	-	-	-	-		
36	N	Yamada Ryokuchi	F	A	whole body	2.0	-	-	-	-	-	-	-	-	-	-	-		
37	N	Yamada Ryokuchi	F	A	whole body	3.2	-	-	-	-	-	-	-	-	-	-	-		
38	N	Yamada Ryokuchi	F	A	whole body	2.6	-	-	-	-	-	-	-	-	-	-	-		
39	Y	Yamada Ryokuchi	F	A	whole body	1.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0		
40	Y	Yamada Ryokuchi	F	A	whole body	0.94	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
41	Y	Yamada Ryokuchi	F	A	whole body	1.2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
42	Y	Yamada Ryokuchi	F	A	whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
43	Y	Yamada Ryokuchi	F	A	whole body	0.88	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
44	Y	Yamada Ryokuchi	F	A	whole body	1.7	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
45	Y	Yamada Ryokuchi	F	A	whole body	1.3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
46	Y	Yamada Ryokuchi	F	A	whole body	0.72	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
47	Y	Yamada Ryokuchi	F	A	whole body	0.84	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0		
48	Y	Yamada Ryokuchi	F	A	whole body	0.90	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0		
49	Y	Yamada Ryokuchi	F	A	whole body	0.64	-	-	-	-	-	-	-	-	-	-	-		

Name of species N:Japanese brown frogs Y: Montane brown frogs

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs-2)

(Concentration per wet weight)

No.	Name of species	Specimen collection site	Gender (M: Male, F: Female)	Age (A: Adult)	Specimen	Lipid	No. 1												
							SPED'98 No. 2												
							Polychlorinated biphenyls (PCBs)												
							Chlorinated biphenyl	Dichloro biphenyl	Trichloro biphenyl	Tetrachloro biphenyl	Pentachloro biphenyl	Hexachloro biphenyl	Heptachloro biphenyl	Octachloro biphenyl	Nonachloro biphenyl	Decachloro biphenyl	PCB total*		
						Unit %	μg/kg-wet												
50	N	Place selected for comparison purposes	M	A	Whole body	1.3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
51	N	Place selected for comparison purposes	M	A	Whole body	0.63	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
52	N	Place selected for comparison purposes	M	A	Whole body	1.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0	
53	N	Place selected for comparison purposes	M	A	Whole body	0.70	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0	
54	N	Place selected for comparison purposes	M	A	Whole body	0.79	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0	
55	N	Place selected for comparison purposes	M	A	Whole body	1.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0	
56	N	Place selected for comparison purposes	M	A	Whole body	0.58	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
57	N	Place selected for comparison purposes	M	A	Whole body	0.84	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
58	N	Place selected for comparison purposes	M	A	Whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
59	N	Place selected for comparison purposes	M	A	Whole body	1.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0	
60	N	Place selected for comparison purposes	M	A	Whole body	2.4	-	-	-	-	-	-	-	-	-	-	-	-	
61	N	Place selected for comparison purposes	M	A	Whole body	0.48	-	-	-	-	-	-	-	-	-	-	-	-	
62	N	Place selected for comparison purposes	M	A	Whole body	1.2	-	-	-	-	-	-	-	-	-	-	-	-	
63	N	Place selected for comparison purposes	M	A	Whole body	0.54	-	-	-	-	-	-	-	-	-	-	-	-	
64	N	Place selected for comparison purposes	M	A	Whole body	0.67	-	-	-	-	-	-	-	-	-	-	-	-	
65	N	Place selected for comparison purposes	M	A	Whole body	0.81	-	-	-	-	-	-	-	-	-	-	-	-	
66	N	Place selected for comparison purposes	M	A	Whole body	0.86	-	-	-	-	-	-	-	-	-	-	-	-	
67	N	Place selected for comparison purposes	M	A	Whole body	0.66	-	-	-	-	-	-	-	-	-	-	-	-	
68	Y	Place selected for comparison purposes	M	A	Whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
69	Y	Place selected for comparison purposes	M	A	Whole body	1.2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
70	Y	Place selected for comparison purposes	M	A	Whole body	1.9	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
71	Y	Place selected for comparison purposes	M	A	Whole body	1.4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
72	Y	Place selected for comparison purposes	M	A	Whole body	1.4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
73	Y	Place selected for comparison purposes	M	A	Whole body	1.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
74	Y	Place selected for comparison purposes	M	A	Whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
75	Y	Place selected for comparison purposes	M	A	Whole body	1.7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
76	Y	Place selected for comparison purposes	M	A	Whole body	2.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
77	Y	Place selected for comparison purposes	M	A	Whole body	1.4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
78	Y	Place selected for comparison purposes	M	A	Whole body	1.3	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
79	N	Place selected for comparison purposes	F	A	Whole body	0.74	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
80	N	Place selected for comparison purposes	F	A	Whole body	0.84	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
81	N	Place selected for comparison purposes	F	A	Whole body	0.85	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
82	N	Place selected for comparison purposes	F	A	Whole body	0.84	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
83	N	Place selected for comparison purposes	F	A	Whole body	0.78	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
84	N	Place selected for comparison purposes	F	A	Whole body	0.86	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
85	N	Place selected for comparison purposes	F	A	Whole body	1.0	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
86	N	Place selected for comparison purposes	F	A	Whole body	0.96	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
87	N	Place selected for comparison purposes	F	A	Whole body	0.83	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	
88	N	Place selected for comparison purposes	F	A	Whole body	0.66	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0	
89	N	Place selected for comparison purposes	F	A	Whole body	2.5	-	-	-	-	-	-	-	-	-	-	-	-	
90	N	Place selected for comparison purposes	F	A	Whole body	0.69	-	-	-	-	-	-	-	-	-	-	-	-	
91	N	Place selected for comparison purposes	F	A	Whole body	2.4	-	-	-	-	-	-	-	-	-	-	-	-	
92	Y	Place selected for comparison purposes	F	A	Whole body	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
93	Y	Place selected for comparison purposes	F	A	Whole body	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
94	Y	Place selected for comparison purposes	F	A	Whole body	2.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
95	Y	Place selected for comparison purposes	F	A	Whole body	0.87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
96	Y	Place selected for comparison purposes	F	A	Whole body	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
97	Y	Place selected for comparison purposes	F	A	Whole body	0.77	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
98	Y	Place selected for comparison purposes	F	A	Whole body	1.1	<2	<2	<2	<2	4	9	<2	<2	<2	<2	<2	13	
99	Y	Place selected for comparison purposes	F	A	Whole body	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	
100	Y	Place selected for comparison purposes	F	A	Whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0	

Name of species N: Japanese brown frogs Y: Montane brown frogs

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frog-3)

(Concentration per wet weight)

No.	Name of species	specimen collection site	Gender (M: Male, F: Female)	Age (A: Adult)	Specimen	Lipid	No.	3					4		5	6						
							SPEED'98 No.						12					14		15	16	
							Hexachlorobenzene(HCB)	Hexachlorocyclohexane				Chlordane		Oxychlordane	trans-Nonachlor	cis-Nonachlor						
	α -HCH	β -HCH	γ -HCH	δ -HCH	HCH total*	cis-Chlordane	trans-Chlordane															
Unit						%	μ g/kg-wet															
1	N	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
2	N	Yamada Ryokuchi	M	A	Whole body	0.98	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
3	N	Yamada Ryokuchi	M	A	Whole body	1.3	<4	<4	<4	<4	<4	0	<4	<4	7	<4	<4					
4	N	Yamada Ryokuchi	M	A	Whole body	1.6	<4	<4	<4	<4	<4	0	<4	<4	4	<4	<4					
5	N	Yamada Ryokuchi	M	A	Whole body	1.7	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
6	N	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	0	<4	<4	4	<4	<4					
7	N	Yamada Ryokuchi	M	A	Whole body	1.3	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4					
8	N	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
9	N	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	4	<4	<4					
10	N	Yamada Ryokuchi	M	A	Whole body	0.94	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5					
11	Y	Yamada Ryokuchi	M	A	Whole body	0.98	<4	<4	<4	<4	<4	0	<4	<4	7	<4	<4					
12	Y	Yamada Ryokuchi	M	A	Whole body	1.1	<4	5	<4	<4	<4	5	<4	<4	6	<4	<4					
13	Y	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
14	Y	Yamada Ryokuchi	M	A	Whole body	1.4	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
15	Y	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	8	<4	<4					
16	Y	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4					
17	Y	Yamada Ryokuchi	M	A	Whole body	0.99	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4					
18	Y	Yamada Ryokuchi	M	A	Whole body	0.87	<4	<4	<4	<4	<4	0	<4	<4	4	<4	<4					
19	Y	Yamada Ryokuchi	M	A	Whole body	0.98	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4					
20	Y	Yamada Ryokuchi	M	A	Whole body	0.84	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4					
21	N	Yamada Ryokuchi	F	A	Whole body	0.77	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
22	N	Yamada Ryokuchi	F	A	Whole body	0.65	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
23	N	Yamada Ryokuchi	F	A	Whole body	0.50	<4	<4	<4	<4	5	5	<4	<4	<4	<4	<4					
24	N	Yamada Ryokuchi	F	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	2	<2	<2					
25	N	Yamada Ryokuchi	F	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
26	N	Yamada Ryokuchi	F	A	Whole body	0.64	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
27	N	Yamada Ryokuchi	F	A	Whole body	0.85	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
28	N	Yamada Ryokuchi	F	A	Whole body	0.93	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
29	N	Yamada Ryokuchi	F	A	Whole body	0.81	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
30	N	Yamada Ryokuchi	F	A	Whole body	1.2	<4	<4	<4	<4	<4	0	<4	<4	4	<4	<4					
31	N	Yamada Ryokuchi	F	A	Whole body	2.9	-	-	-	-	-	-	-	-	-	-	-					
32	N	Yamada Ryokuchi	F	A	Whole body	2.1	-	-	-	-	-	-	-	-	-	-	-					
33	N	Yamada Ryokuchi	F	A	Whole body	2.6	-	-	-	-	-	-	-	-	-	-	-					
34	N	Yamada Ryokuchi	F	A	Whole body	3.2	-	-	-	-	-	-	-	-	-	-	-					
35	N	Yamada Ryokuchi	F	A	Whole body	2.2	-	-	-	-	-	-	-	-	-	-	-					
36	N	Yamada Ryokuchi	F	A	Whole body	2.0	-	-	-	-	-	-	-	-	-	-	-					
37	N	Yamada Ryokuchi	F	A	Whole body	3.2	-	-	-	-	-	-	-	-	-	-	-					
38	N	Yamada Ryokuchi	F	A	Whole body	2.6	-	-	-	-	-	-	-	-	-	-	-					
39	Y	Yamada Ryokuchi	F	A	Whole body	1.6	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
40	Y	Yamada Ryokuchi	F	A	Whole body	0.94	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
41	Y	Yamada Ryokuchi	F	A	Whole body	1.2	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
42	Y	Yamada Ryokuchi	F	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
43	Y	Yamada Ryokuchi	F	A	Whole body	0.88	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
44	Y	Yamada Ryokuchi	F	A	Whole body	1.7	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
45	Y	Yamada Ryokuchi	F	A	Whole body	1.3	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
46	Y	Yamada Ryokuchi	F	A	Whole body	0.72	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
47	Y	Yamada Ryokuchi	F	A	Whole body	0.84	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2					
48	Y	Yamada Ryokuchi	F	A	Whole body	0.90	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4					
49	Y	Yamada Ryokuchi	F	A	Whole body	0.64	-	-	-	-	-	-	-	-	-	-	-					

Name of species N:Japanese brown frogs Y:Montane brown frogs

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs-4)

(Concentration per wet weight)

No.	Name of species	Specimen collection site	Gender (M:Male, F:Female)	Age (A:Adult)	Specimen	Lipid	No. SPEED'98 No.	No. 2										
								Hexachlorobenzene(HCB)	3					4		5	6	
									12 Hexachlorocyclohexane					14 Chlordane		15	16	
Unit %							μg/kg-wet											
							α-HCH	β-HCH	γ-HCH	δ-HCH	HCH total*	cis-Chlordane	trans-Chlordane	Oxychlordane	trans-Nonachlor	cis-Nonachlor		
50	N	Place selected for comparison	M	A	Whole body	1.3	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
51	N	Place selected for comparison	M	A	Whole body	0.63	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4	
52	N	Place selected for comparison	M	A	Whole body	1.0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	
53	N	Place selected for comparison	M	A	Whole body	0.70	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	
54	N	Place selected for comparison	M	A	Whole body	0.79	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	
55	N	Place selected for comparison	M	A	Whole body	1.2	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	
56	N	Place selected for comparison	M	A	Whole body	0.58	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
57	N	Place selected for comparison	M	A	Whole body	0.84	<4	<4	<4	<4	<4	0	<4	<4	6	<4	<4	
58	N	Place selected for comparison	M	A	Whole body	1.0	<4	<4	<4	<4	<4	0	<4	<4	5	<4	<4	
59	N	Place selected for comparison	M	A	Whole body	1.0	<5	<5	<5	<5	<5	0	<5	<5	<5	<5	<5	
60	N	Place selected for comparison	M	A	Whole body	2.4	-	-	-	-	-	-	-	-	-	-	-	
61	N	Place selected for comparison	M	A	Whole body	0.48	-	-	-	-	-	-	-	-	-	-	-	
62	N	Place selected for comparison	M	A	Whole body	1.2	-	-	-	-	-	-	-	-	-	-	-	
63	N	Place selected for comparison	M	A	Whole body	0.54	-	-	-	-	-	-	-	-	-	-	-	
64	N	Place selected for comparison	M	A	Whole body	0.67	-	-	-	-	-	-	-	-	-	-	-	
65	N	Place selected for comparison	M	A	Whole body	0.81	-	-	-	-	-	-	-	-	-	-	-	
66	N	Place selected for comparison	M	A	Whole body	0.86	-	-	-	-	-	-	-	-	-	-	-	
67	N	Place selected for comparison	M	A	Whole body	0.66	-	-	-	-	-	-	-	-	-	-	-	
68	Y	Place selected for comparison	M	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
69	Y	Place selected for comparison	M	A	Whole body	1.2	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
70	Y	Place selected for comparison	M	A	Whole body	1.9	<2	<2	<2	<2	<2	0	<2	<2	4	<2	<2	
71	Y	Place selected for comparison	M	A	Whole body	1.4	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
72	Y	Place selected for comparison	M	A	Whole body	1.4	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
73	Y	Place selected for comparison	M	A	Whole body	1.5	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
74	Y	Place selected for comparison	M	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	3	<2	<2	
75	Y	Place selected for comparison	M	A	Whole body	1.7	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
76	Y	Place selected for comparison	M	A	Whole body	2.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
77	Y	Place selected for comparison	M	A	Whole body	1.4	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
78	Y	Place selected for comparison	M	A	Whole body	1.3	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
79	N	Place selected for comparison	F	A	Whole body	0.74	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
80	N	Place selected for comparison	F	A	Whole body	0.84	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
81	N	Place selected for comparison	F	A	Whole body	0.85	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
82	N	Place selected for comparison	F	A	Whole body	0.84	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
83	N	Place selected for comparison	F	A	Whole body	0.78	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
84	N	Place selected for comparison	F	A	Whole body	0.86	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
85	N	Place selected for comparison	F	A	Whole body	1.0	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
86	N	Place selected for comparison	F	A	Whole body	0.96	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
87	N	Place selected for comparison	F	A	Whole body	0.83	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
88	N	Place selected for comparison	F	A	Whole body	0.66	<4	<4	<4	<4	<4	0	<4	<4	<4	<4	<4	
89	N	Place selected for comparison	F	A	Whole body	2.5	-	-	-	-	-	-	-	-	-	-	-	
90	N	Place selected for comparison	F	A	Whole body	0.69	-	-	-	-	-	-	-	-	-	-	-	
91	N	Place selected for comparison	F	A	Whole body	2.4	-	-	-	-	-	-	-	-	-	-	-	
92	Y	Place selected for comparison	F	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
93	Y	Place selected for comparison	F	A	Whole body	1.7	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
94	Y	Place selected for comparison	F	A	Whole body	2.8	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
95	Y	Place selected for comparison	F	A	Whole body	0.87	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
96	Y	Place selected for comparison	F	A	Whole body	1.3	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
97	Y	Place selected for comparison	F	A	Whole body	0.77	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
98	Y	Place selected for comparison	F	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
99	Y	Place selected for comparison	F	A	Whole body	1.2	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	
100	Y	Place selected for comparison	F	A	Whole body	1.1	<2	<2	<2	<2	<2	0	<2	<2	<2	<2	<2	

Name of species N:Japanese brown frogs Y:Montane brown frogs

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs-5)

(Concentration per wet weight)

No.	Name of species	Specimen collection site	Gender (M: Male, F: Female)	Age (A: Adult)	Specimen	Lipid	7		8				9	10	11	12	17	18			
							SPEED'98 No.		18		19				23	25	26	43	9	11	
									DDT		DDE and DDD										
							Unit	%	o,p'-DDT	p,p'-DDT	o,p'-DDE	p,p'-DDE	o,p'-DDD	p,p'-DDD	Dieldrin	Heptachlor	Heptachlor epoxide	Benzo(a)phrene	Atrazine	CAT (Simazine)	
							$\mu\text{g/kg-wet}$														
1	N	Yamada Ryokuchi	M	A	Whole body	1.2	<4	18	<4	166	<4	5	<4	<4	<4	<4	<2				
2	N	Yamada Ryokuchi	M	A	Whole body	0.98	<4	<4	<4	4	<4	<4	<4	<4	<4	<4	<2				
3	N	Yamada Ryokuchi	M	A	Whole body	1.3	<4	<4	<4	5	<4	<4	<4	<4	<4	<4	<2				
4	N	Yamada Ryokuchi	M	A	Whole body	1.6	<4	<4	<4	12	<4	<4	<4	<4	<4	<4	<2				
5	N	Yamada Ryokuchi	M	A	Whole body	1.7	<4	5	<4	6	<4	<4	<4	<4	<4	<4	<2				
6	N	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
7	N	Yamada Ryokuchi	M	A	Whole body	1.3	<4	<4	<4	15	<4	<4	<4	<4	<4	<4	<2				
8	N	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
9	N	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	4	<4	<4	<4	<4	<4	<4	<2				
10	N	Yamada Ryokuchi	M	A	Whole body	0.94	<5	<5	<5	18	<5	<5	<5	<5	<5	<5	<3				
11	Y	Yamada Ryokuchi	M	A	Whole body	0.98	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
12	Y	Yamada Ryokuchi	M	A	Whole body	1.1	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<2				
13	Y	Yamada Ryokuchi	M	A	Whole body	1.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
14	Y	Yamada Ryokuchi	M	A	Whole body	1.4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
15	Y	Yamada Ryokuchi	M	A	Whole body	1.2	<4	33	<4	150	<4	19	<4	<4	<4	<4	<2				
16	Y	Yamada Ryokuchi	M	A	Whole body	1.2	<4	<4	<4	6	<4	<4	<4	<4	<4	<4	<2				
17	Y	Yamada Ryokuchi	M	A	Whole body	0.99	<4	<4	<4	6	<4	<4	12	<4	<4	<4	<2				
18	Y	Yamada Ryokuchi	M	A	Whole body	0.87	<4	<4	<4	7	<4	<4	<4	<4	<4	<4	<2				
19	Y	Yamada Ryokuchi	M	A	Whole body	0.98	<4	10	<4	82	<4	7	<4	<4	<4	<4	<2				
20	Y	Yamada Ryokuchi	M	A	Whole body	0.84	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
21	N	Yamada Ryokuchi	F	A	Whole body	0.77	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
22	N	Yamada Ryokuchi	F	A	Whole body	0.65	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
23	N	Yamada Ryokuchi	F	A	Whole body	0.50	<4	8	<4	11	<4	<4	<4	<4	<4	<4	<2				
24	N	Yamada Ryokuchi	F	A	Whole body	1.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
25	N	Yamada Ryokuchi	F	A	Whole body	1.2	<4	19	<4	55	<4	<4	<4	<4	<4	<4	<2				
26	N	Yamada Ryokuchi	F	A	Whole body	0.64	<4	<4	<4	5	<4	<4	<4	<4	<4	<4	<2				
27	N	Yamada Ryokuchi	F	A	Whole body	0.85	<4	6	<4	5	<4	<4	<4	<4	<4	<4	<2				
28	N	Yamada Ryokuchi	F	A	Whole body	0.93	<2	17	<2	76	<2	4	<2	<2	<2	<2	<1				
29	N	Yamada Ryokuchi	F	A	Whole body	0.81	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
30	N	Yamada Ryokuchi	F	A	Whole body	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
31	N	Yamada Ryokuchi	F	A	Whole body	2.9	<2	3	<2	10	<2	<2	-	-	-	-	-				
32	N	Yamada Ryokuchi	F	A	Whole body	2.1	<1	<1	<1	2	<1	<1	-	-	-	-	-				
33	N	Yamada Ryokuchi	F	A	Whole body	2.6	<1	28	<1	185	<1	3	-	-	-	-	-				
34	N	Yamada Ryokuchi	F	A	Whole body	3.2	<1	<1	<1	1	<1	<1	-	-	-	-	-				
35	N	Yamada Ryokuchi	F	A	Whole body	2.2	<1	<1	<1	1	<1	<1	-	-	-	-	-				
36	N	Yamada Ryokuchi	F	A	Whole body	2.0	<1	<1	<1	<1	<1	<1	-	-	-	-	-				
37	N	Yamada Ryokuchi	F	A	Whole body	3.2	<1	<1	<1	1	<1	<1	-	-	-	-	-				
38	N	Yamada Ryokuchi	F	A	Whole body	2.6	<1	<1	<1	6	<1	<1	-	-	-	-	-				
39	Y	Yamada Ryokuchi	F	A	Whole body	1.6	<2	4	<2	4	<2	<2	<2	<2	<2	<2	<0.5				
40	Y	Yamada Ryokuchi	F	A	Whole body	0.94	<2	<2	<2	5	<2	<2	<2	<2	<2	<2	<1				
41	Y	Yamada Ryokuchi	F	A	Whole body	1.2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
42	Y	Yamada Ryokuchi	F	A	Whole body	1.1	3	11	<2	7	<2	3	<2	<2	<2	<2	<1				
43	Y	Yamada Ryokuchi	F	A	Whole body	0.88	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
44	Y	Yamada Ryokuchi	F	A	Whole body	1.7	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
45	Y	Yamada Ryokuchi	F	A	Whole body	1.3	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	<1				
46	Y	Yamada Ryokuchi	F	A	Whole body	0.72	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
47	Y	Yamada Ryokuchi	F	A	Whole body	0.84	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1				
48	Y	Yamada Ryokuchi	F	A	Whole body	0.90	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<2				
49	Y	Yamada Ryokuchi	F	A	Whole body	0.64	<1	<1	<1	<1	<1	<1	-	-	-	-	-				

Name of species N: Japanese brown frogs Y: Montane brown frogs

Results of 1998 Research on Effects of Endocrine Disrupting Chemicals on Wildlife (Frogs—7)
(Blood test)

					No.	29	30
					SPEED'98 No.		
No.	Name of species	Specimen collection site	Gender (M: Male, F: Female)	Number of specimens		Testosterone	17 - estradiol
						ng/ml	pg/ml
1	N	Yamada Ryokuchi	M	2		0.93	27
2	N	Yamada Ryokuchi	M	3		37	29
3	N	Yamada Ryokuchi	M	4		25	16
4	Y	Yamada Ryokuchi	M	1		12	<13
5	Y	Yamada Ryokuchi	M	1		7.2	38
6	Y	Yamada Ryokuchi	M	1		9.4	18
7	Y	Yamada Ryokuchi	M	1		0.56	23
8	Y	Yamada Ryokuchi	M	1		58	23
9	Y	Yamada Ryokuchi	M	1		14	56
10	Y	Yamada Ryokuchi	M	2		28	35
11	N	Yamada Ryokuchi	F	1		0.31	34
12	N	Yamada Ryokuchi	F	2		0.38	143
13	N	Yamada Ryokuchi	F	3		0.26	49
14	Y	Yamada Ryokuchi	F	2		0.40	254
15	Y	Yamada Ryokuchi	F	1		2.0	<13
16	Y	Yamada Ryokuchi	F*	1		0.50	30
17	Y	Yamada Ryokuchi	F*	1		0.35	51
18	Y	Yamada Ryokuchi	F*	1		0.36	26

					No.	29	30
					SPEED'98 No.		
No.	Name of species	Specimen collection site	Gender (M: Male, F: Female)	Number of specimens		Testosterone	17 - estradiol
						ng/ml	pg/ml
19	N	Place selected for comparison purposes	M	1		0.50	17
20	N	Place selected for comparison purposes	M	1		2.9	34
21	N	Place selected for comparison purposes	M	1		0.65	21
22	N	Place selected for comparison purposes	M	2		8.2	19
23	N	Place selected for comparison purposes	M	1		0.54	36
24	N	Place selected for comparison purposes	M	2		0.62	24
25	N	Place selected for comparison purposes	M	2		2.0	29
26	Y	Place selected for comparison purposes	M	1		4.8	<13
27	Y	Place selected for comparison purposes	M	1		1.4	<13
28	Y	Place selected for comparison purposes	M	2		5.9	<13
29	N	Place selected for comparison purposes	F*	1		0.29	36
30	N	Place selected for comparison purposes	F*	1		0.50	25
31	N	Place selected for comparison purposes	F*	2		0.48	23
32	N	Place selected for comparison purposes	F*	3		0.43	47
33	Y	Place selected for comparison purposes	F*	1		0.53	24
34	Y	Place selected for comparison purposes	F	1		0.35	43
35	Y	Place selected for comparison purposes	F	1		0.70	39
36	Y	Place selected for comparison purposes	F	1		0.68	54
37	Y	Place selected for comparison purposes	F	1		0.73	60

Name of species N: Japanese brown frogs Y: Montane brown frogs
* Egg-laying completed