2－フェノキシエタノールのラットを用いた経口投与
による 13 週間毒性試験（混水試験）報告書

試験番号：　０４５９

TABLES

TABLES

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TABLE 1 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Wt.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.
	<10>		<10>			<10>			<10>			<10>			<10>		
0	126 (10)	10 / 10	126 (10)	100	10 / 10	126 (10)	100	10 / 10	125 (10)	99	10 / 10	126 (10)	100	10 / 10	126 (10)	100	10 / 10
1	154 (10)	10 / 10	155 (10)	101	10 / 10	153 (10)	99	10 / 10	153 (10)	99	10 / 10	149 (10)	97	10 / 10	136 (10)	88	10 / 10
2	182 (10)	10 / 10	182 (10)	100	10 / 10	177 (10)	97	10 / 10	177 (10)	97	10 / 10	174 (10)	96	10 / 10	161 (10)	88	10 / 10
3	204 (10)	10 / 10	204 (10)	100	10 / 10	197 (10)	97	10 / 10	198 (10)	97	10 / 10	195 (10)	96	10 / 10	181 (10)	89	10 / 10
4	224 (10)	10 / 10	223 (10)	100	10 / 10	216 (10)	96	10 / 10	216 (10)	96	10 / 10	215 (10)	96	10 / 10	199 (10)	89	10 / 10
5	240 (10)	10 / 10	240 (10)	100	10 / 10	232 (10)	97	10 / 10	234 (10)	98	10 / 10	233 (10)	97	10 / 10	213 (10)	89	10 / 10
6	253 (10)	10 / 10	252 (10)	100	10 / 10	246 (10)	97	10 / 10	246 (10)	97	10 / 10	245 (10)	97	10 / 10	223 (10)	88	10 / 10
7	265 (10)	10 / 10	263 (10)	99	10 / 10	258 (10)	97	10 / 10	259 (10)	98	10 / 10	257 (10)	97	10 / 10	235 (10)	89	10 / 10
8	279 (10)	10 / 10	276 (10)	99	10 / 10	270 (10)	97	10 / 10	271 (10)	97	10 / 10	270 (10)	97	10 / 10	245 (10)	88	10 / 10
9	287 (10)	10 / 10	284 (10)	99	10 / 10	279 (10)	97	10 / 10	280 (10)	98	10 / 10	281 (10)	98	10 / 10	248 (10)	86	10 / 10
10	295 (10)	10 / 10	292 (10)	99	10 / 10	285 (10)	97	10 / 10	290 (10)	98	10 / 10	287 (10)	97	10 / 10	251 (10)	85	10 / 10
11	300 (10)	10 / 10	298 (10)	99	10 / 10	290 (10)	97	10 / 10	295 (10)	98	10 / 10	292 (10)	97	10 / 10	247 (10)	82	10 / 10
12	308 (10)	10 / 10	306 (10)	99	10 / 10	297 (10)	96	10 / 10	300 (10)	97	10 / 10	299 (10)	97	10 / 10	242 (10)	79	10 / 10
13	312 (10)	10 / 10	311 (10)	100	10 / 10	302 (10)	97	10 / 10	307 (10)	98	10 / 10	306 (10)	98	10 / 10	251 (9)	80	9 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Wt. : Averaged body weight (Unit : g)

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Wt.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.
	<10>		<10>			<10>			<10>			<10>			<10>		
0	99 (10)	10 / 10	99 (10)	100	10 / 10	99 (10)	100	10 / 10	99 (10)	100	10 / 10	99 (10)	100	10 / 10	99 (10)	100	10 / 10
1	112 (10)	10 / 10	112 (10)	100	10 / 10	112 (10)	100	10 / 10	113 (10)	101	10 / 10	107 (10)	96	10 / 10	95 (10)	85	10 / 10
2	124 (10)	10 / 10	124 (10)	100	10 / 10	122 (10)	98	10 / 10	122 (10)	98	10 / 10	116 (10)	94	10 / 10	110 (10)	89	10 / 10
3	131 (10)	10 / 10	130 (10)	99	10 / 10	129 (10)	98	10 / 10	128 (10)	98	10 / 10	123 (10)	94	10 / 10	118 (10)	90	10 / 10
4	140 (10)	10 / 10	138 (10)	99	10 / 10	133 (10)	95	10 / 10	135 (10)	96	10 / 10	129 (10)	92	10 / 10	123 (10)	88	10 / 10
5	149 (10)	10 / 10	147 (10)	99	10 / 10	142 (10)	95	10 / 10	143 (10)	96	10 / 10	137 (10)	92	10 / 10	129 (10)	87	10 / 10
6	154 (10)	10 / 10	151 (10)	98	10 / 10	146 (10)	95	10 / 10	148 (10)	96	10 / 10	141 (10)	92	10 / 10	131 (10)	85	10 / 10
7	157 (10)	10 / 10	154 (10)	98	10 / 10	148 (10)	94	10 / 10	150 (10)	96	10 / 10	145 (10)	92	10 / 10	134 (10)	85	10 / 10
8	162 (10)	10 / 10	158 (10)	98	10 / 10	150 (10)	93	10 / 10	153 (10)	94	10 / 10	148 (10)	91	10 / 10	138 (10)	85	10 / 10
9	165 (10)	10 / 10	160 (10)	97	10 / 10	155 (10)	94	10 / 10	157 (10)	95	10 / 10	152 (10)	92	10 / 10	141 (10)	85	10 / 10
10	169 (10)	10 / 10	165 (10)	98	10 / 10	157 (10)	93	10 / 10	159 (10)	94	10 / 10	154 (10)	91	10 / 10	141 (10)	83	10 / 10
11	171 (10)	10 / 10	166 (10)	97	10 / 10	161 (10)	94	10 / 10	163 (10)	95	10 / 10	159 (10)	93	10 / 10	144 (10)	84	10 / 10
12	175 (10)	10 / 10	169 (10)	97	10 / 10	165 (10)	94	10 / 10	164 (10)	94	10 / 10	160 (10)	91	10 / 10	143 (10)	82	10 / 10
13	176 (10)	10 / 10	170 (10)	97	10 / 10	165 (10)	94	10 / 10	167 (10)	95	10 / 10	161 (10)	91	10 / 10	144 (10)	82	10 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Wt. : Averaged body weight (Unit : g)

TABLE 3 WATER CONSUMPTION CHANGES OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Wc. <10>	No. of Surviv.	Av. Wc. <10>	% of cont. <10>	No. of Surviv.	Av. Wc. <10>	% of cont. <10>	No. of Surviv.	Av. Wc. <10>	% of cont. <10>	No. of Surviv.	Av. Wc. <10>	% of cont. <10>	No. of Surviv.	Av. Wc. <10>	% of cont. <10>	No. of Surviv.
1	18.2 (10)	10 / 10	17.9 (10)	98	10 / 10	16.9 (10)	93	10 / 10	15.8 (10)	87	10 / 10	14.1 (10)	77	10 / 10	16.2 (10)	89	10 / 10
2	19.0 (10)	10 / 10	18.7 (10)	98	10 / 10	17.7 (10)	93	10 / 10	16.8 (10)	88	10 / 10	14.9 (10)	78	10 / 10	14.0 (10)	74	10 / 10
3	19.9 (10)	10 / 10	19.1 (10)	96	10 / 10	17.9 (10)	90	10 / 10	17.7 (10)	89	10 / 10	15.5 (10)	78	10 / 10	14.2 (10)	71	10 / 10
4	21.7 (10)	10 / 10	20.0 (10)	92	10 / 10	18.5 (10)	85	10 / 10	18.2 (10)	84	10 / 10	16.8 (10)	77	10 / 10	15.6 (10)	72	10 / 10
5	19.9 (10)	10 / 10	18.5 (10)	93	10 / 10	17.8 (10)	89	10 / 10	17.9 (10)	90	10 / 10	18.8 (9)	94	10 / 10	15.1 (10)	76	10 / 10
6	19.2 (10)	10 / 10	18.1 (10)	94	10 / 10	17.3 (10)	90	10 / 10	17.7 (10)	92	10 / 10	16.4 (10)	85	10 / 10	15.4 (10)	80	10 / 10
7	18.5 (10)	10 / 10	17.6 (10)	95	10 / 10	16.6 (10)	90	10 / 10	17.2 (10)	93	10 / 10	15.5 (10)	84	10 / 10	15.4 (10)	83	10 / 10
8	19.4 (10)	10 / 10	18.2 (10)	94	10 / 10	17.6 (10)	91	10 / 10	18.4 (10)	95	10 / 10	16.8 (10)	87	10 / 10	17.2 (10)	89	10 / 10
9	18.4 (10)	10 / 10	18.3 (10)	99	10 / 10	17.2 (10)	93	10 / 10	17.7 (10)	96	10 / 10	16.7 (10)	91	10 / 10	15.4 (10)	84	10 / 10
10	18.6 (10)	10 / 10	17.9 (10)	96	10 / 10	17.1 (10)	92	10 / 10	17.9 (10)	96	10 / 10	16.1 (10)	87	10 / 10	16.3 (10)	88	10 / 10
11	19.0 (10)	10 / 10	18.8 (10)	99	10 / 10	17.3 (10)	91	10 / 10	17.8 (10)	94	10 / 10	17.0 (10)	89	10 / 10	17.5 (10)	92	10 / 10
12	18.9 (10)	10 / 10	19.7 (10)	104	10 / 10	17.9 (10)	95	10 / 10	17.6 (10)	93	10 / 10	17.0 (10)	90	10 / 10	17.5 (10)	93	10 / 10
13	20.5 (10)	10 / 10	18.5 (10)	90	10 / 10	17.6 (10)	86	10 / 10	18.3 (10)	89	10 / 10	17.4 (10)	85	10 / 10	18.2 (9)	89	9 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Wc. : Averaged water consumption (Unit : g)

TABLE 4 WATER CONSUMPTION CHANGES OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Wc. <10>	No. of Surviv.	Av. Wc. <10>	% of cont.	No. of Surviv.	Av. Wc. <10>	% of cont.	No. of Surviv.	Av. Wc. <10>	% of cont.	No. of Surviv.	Av. Wc. <10>	% of cont.	No. of Surviv.	Av. Wc. <10>	% of cont.	No. of Surviv.
1	15.4 (10)	10 / 10	15.0 (10)	97	10 / 10	14.1 (10)	92	10 / 10	16.2 (10)	105	10 / 10	12.8 (10)	83	10 / 10	11.5 (10)	75	10 / 10
2	16.3 (10)	10 / 10	18.4 (10)	113	10 / 10	14.2 (10)	87	10 / 10	17.0 (10)	104	10 / 10	12.8 (10)	79	10 / 10	10.9 (10)	67	10 / 10
3	17.7 (9)	10 / 10	19.2 (9)	108	10 / 10	17.0 (9)	96	10 / 10	15.5 (8)	88	10 / 10	11.8 (10)	67	10 / 10	10.2 (10)	58	10 / 10
4	19.6 (10)	10 / 10	19.2 (10)	98	10 / 10	18.8 (9)	96	10 / 10	17.7 (9)	90	10 / 10	12.3 (10)	63	10 / 10	11.0 (10)	56	10 / 10
5	17.5 (10)	10 / 10	21.1 (10)	121	10 / 10	16.8 (10)	96	10 / 10	19.4 (9)	111	10 / 10	13.3 (10)	76	10 / 10	10.3 (10)	59	10 / 10
6	16.8 (9)	10 / 10	20.1 (10)	120	10 / 10	15.2 (9)	90	10 / 10	21.0 (8)	125	10 / 10	13.1 (10)	78	10 / 10	10.5 (10)	63	10 / 10
7	16.8 (10)	10 / 10	21.0 (10)	125	10 / 10	23.5 (10)	140	10 / 10	20.7 (8)	123	10 / 10	13.3 (10)	79	10 / 10	9.3 (10)	55	10 / 10
8	20.1 (10)	10 / 10	20.9 (10)	104	10 / 10	17.6 (8)	88	10 / 10	20.9 (8)	104	10 / 10	13.3 (9)	66	10 / 10	10.7 (10)	53	10 / 10
9	22.7 (8)	10 / 10	18.9 (10)	83	10 / 10	23.3 (10)	103	10 / 10	15.9 (7)	70	10 / 10	14.7 (10)	65	10 / 10	10.7 (10)	47	10 / 10
10	21.2 (9)	10 / 10	20.1 (10)	95	10 / 10	16.5 (6)	78	10 / 10	17.6 (6)	83	10 / 10	14.6 (10)	69	10 / 10	11.0 (10)	52	10 / 10
11	19.1 (9)	10 / 10	17.2 (9)	90	10 / 10	17.4 (9)	91	10 / 10	19.0 (6)	99	10 / 10	16.3 (10)	85	10 / 10	11.7 (10)	61	10 / 10
12	22.9 (10)	10 / 10	18.3 (10)	80	10 / 10	23.0 (10)	100	10 / 10	23.8 (7)	104	10 / 10	18.6 (10)	81	10 / 10	11.6 (10)	51	10 / 10
13	21.1 (9)	10 / 10	21.0 (10)	100	10 / 10	19.9 (7)	94	10 / 10	20.9 (9)	99	10 / 10	15.4 (10)	73	10 / 10	13.0 (10)	62	10 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Wc. : Averaged water consumption (Unit : g)

TABLE 5 FOOD CONSUMPTION CHANGES OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Fc.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>
1	14.0 (10)	10 / 10	13.6 (10)	97	10 / 10	13.7 (10)	98	10 / 10	13.5 (10)	96	10 / 10	12.3 (10)	88	10 / 10	10.3 (10)	74	10 / 10
2	14.9 (10)	10 / 10	14.7 (10)	99	10 / 10	14.4 (10)	97	10 / 10	14.4 (10)	97	10 / 10	13.7 (10)	92	10 / 10	12.9 (10)	87	10 / 10
3	15.6 (10)	10 / 10	15.4 (10)	99	10 / 10	15.1 (10)	97	10 / 10	15.0 (10)	96	10 / 10	14.4 (10)	92	10 / 10	13.4 (10)	86	10 / 10
4	15.6 (10)	10 / 10	15.2 (10)	97	10 / 10	14.9 (10)	96	10 / 10	15.0 (10)	96	10 / 10	15.0 (10)	96	10 / 10	13.7 (10)	88	10 / 10
5	16.2 (10)	10 / 10	15.8 (10)	98	10 / 10	15.4 (10)	95	10 / 10	15.8 (10)	98	10 / 10	15.4 (10)	95	10 / 10	13.6 (10)	84	10 / 10
6	14.9 (10)	10 / 10	14.6 (10)	98	10 / 10	14.5 (10)	97	10 / 10	14.6 (10)	98	10 / 10	14.4 (10)	97	10 / 10	12.8 (10)	86	10 / 10
7	14.5 (10)	10 / 10	14.0 (10)	97	10 / 10	13.9 (10)	96	10 / 10	14.6 (10)	101	10 / 10	14.2 (10)	98	10 / 10	13.2 (10)	91	10 / 10
8	15.0 (10)	10 / 10	14.5 (10)	97	10 / 10	14.2 (10)	95	10 / 10	14.7 (10)	98	10 / 10	14.1 (10)	94	10 / 10	13.2 (10)	88	10 / 10
9	15.0 (10)	10 / 10	14.4 (10)	96	10 / 10	14.3 (10)	95	10 / 10	14.7 (10)	98	10 / 10	14.6 (10)	97	10 / 10	12.6 (10)	84	10 / 10
10	14.6 (10)	10 / 10	14.1 (10)	97	10 / 10	13.9 (10)	95	10 / 10	14.6 (10)	100	10 / 10	14.1 (10)	97	10 / 10	12.4 (10)	85	10 / 10
11	14.6 (10)	10 / 10	14.5 (10)	99	10 / 10	13.6 (10)	93	10 / 10	14.5 (10)	99	10 / 10	14.0 (10)	96	10 / 10	11.7 (10)	80	10 / 10
12	14.4 (10)	10 / 10	14.4 (10)	100	10 / 10	13.7 (10)	95	10 / 10	14.2 (10)	99	10 / 10	14.1 (10)	98	10 / 10	10.7 (10)	74	10 / 10
13	14.3 (10)	10 / 10	14.3 (10)	100	10 / 10	13.9 (10)	97	10 / 10	14.4 (10)	101	10 / 10	14.1 (10)	99	10 / 10	11.4 (9)	80	9 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Fc. : Averaged food consumption (Unit : g)

TABLE 6 FOOD CONSUMPTION CHANGES OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Week on Study	Control		1250 ppm			2500 ppm			5000 ppm			10000 ppm			20000 ppm		
	Av. Fc.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>	Av. Fc.	% of cont.	No. of Surviv. <10>
1	10.7 (10)	10 / 10	10.4 (10)	97	10 / 10	10.7 (10)	100	10 / 10	10.4 (10)	97	10 / 10	9.4 (10)	88	10 / 10	7.1 (10)	66	10 / 10
2	10.7 (10)	10 / 10	10.5 (10)	98	10 / 10	10.2 (10)	95	10 / 10	10.3 (10)	96	10 / 10	9.3 (10)	87	10 / 10	9.6 (10)	90	10 / 10
3	10.7 (10)	10 / 10	10.5 (10)	98	10 / 10	10.5 (10)	98	10 / 10	10.4 (10)	97	10 / 10	9.3 (10)	87	10 / 10	9.3 (10)	87	10 / 10
4	10.6 (10)	10 / 10	10.1 (10)	95	10 / 10	10.1 (10)	95	10 / 10	10.3 (10)	97	10 / 10	9.3 (10)	88	10 / 10	8.8 (10)	83	10 / 10
5	10.9 (10)	10 / 10	10.7 (10)	98	10 / 10	10.4 (10)	95	10 / 10	10.6 (10)	97	10 / 10	9.8 (10)	90	10 / 10	8.8 (10)	81	10 / 10
6	10.0 (10)	10 / 10	10.1 (10)	101	10 / 10	9.7 (10)	97	10 / 10	10.2 (10)	102	10 / 10	9.3 (10)	93	10 / 10	8.3 (10)	83	10 / 10
7	10.0 (10)	10 / 10	9.8 (10)	98	10 / 10	9.5 (10)	95	10 / 10	9.5 (10)	95	10 / 10	9.2 (10)	92	10 / 10	8.2 (10)	82	10 / 10
8	9.7 (10)	10 / 10	9.8 (10)	101	10 / 10	9.4 (10)	97	10 / 10	9.4 (10)	97	10 / 10	9.0 (10)	93	10 / 10	8.2 (10)	85	10 / 10
9	9.9 (10)	10 / 10	9.7 (10)	98	10 / 10	9.6 (10)	97	10 / 10	9.8 (10)	99	10 / 10	8.9 (10)	90	10 / 10	8.4 (10)	85	10 / 10
10	10.0 (10)	10 / 10	9.7 (10)	97	10 / 10	9.6 (10)	96	10 / 10	9.6 (10)	96	10 / 10	8.8 (10)	88	10 / 10	7.7 (10)	77	10 / 10
11	9.8 (10)	10 / 10	9.5 (10)	97	10 / 10	9.5 (10)	97	10 / 10	9.7 (10)	99	10 / 10	9.0 (10)	92	10 / 10	8.0 (10)	82	10 / 10
12	10.0 (10)	10 / 10	9.5 (10)	95	10 / 10	9.5 (10)	95	10 / 10	9.4 (10)	94	10 / 10	9.0 (10)	90	10 / 10	7.7 (10)	77	10 / 10
13	10.0 (10)	10 / 10	9.6 (8)	96	10 / 10	9.7 (8)	97	10 / 10	9.4 (10)	94	10 / 10	9.0 (10)	90	10 / 10	7.9 (10)	79	10 / 10

< > : No.of effective animals, ( ) : No.of measured animals, Av.Fc. : Averaged food consumption (Unit : g)

TABLE 7 HEMATOLOGY OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	9
Red blood cell ($10^6/\mu$L)	9.27 ± 0.21	9.22 ± 0.22	9.22 ± 0.17	9.21 ± 0.20	8.85 ± 0.15 **	8.44 ± 0.23 **
Hemoglobin (g/dL)	15.8 ± 0.2	16.0 ± 0.3	16.1 ± 0.3	15.9 ± 0.2	15.5 ± 0.3	15.4 ± 0.4 *
MCV (fL)	48.3 ± 0.7	48.4 ± 0.4	48.5 ± 0.4	48.8 ± 0.5	49.4 ± 0.7 **	52.6 ± 1.7 **
MCH (pg)	17.1 ± 0.3	17.3 ± 0.4	17.5 ± 0.3	17.4 ± 0.3	17.6 ± 0.4 *	18.2 ± 0.5 **
Platelet ($10^3/\mu$L)	802 ± 49	777 ± 63	790 ± 59	727 ± 69 *	666 ± 74 **	653 ± 58 **

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 8 HEMATOLOGY OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	10
Red blood cell ($10^6/\mu$L)	8.58 ± 0.26	8.51 ± 0.27	8.47 ± 0.26	8.40 ± 0.17	8.19 ± 0.27 **	7.86 ± 0.31 **
Hemoglobin (g/dL)	15.9 ± 0.4	15.6 ± 0.4	15.6 ± 0.4	15.6 ± 0.5	15.2 ± 0.5 *	14.9 ± 0.5 **
MCV (fL)	50.6 ± 0.4	50.6 ± 0.6	50.7 ± 0.8	50.9 ± 0.8	51.4 ± 0.7	53.3 ± 1.2 **
MCH (pg)	18.5 ± 0.3	18.4 ± 0.3	18.5 ± 0.2	18.6 ± 0.6	18.6 ± 0.2	19.0 ± 0.4 *
Platelet ($10^3/\mu$L)	828 ± 53	820 ± 36	778 ± 41	791 ± 64	760 ± 55 *	711 ± 54 **
Reticulocyte (%)	1.8 ± 0.1	1.7 ± 0.3	1.7 ± 0.3	1.9 ± 0.4	2.0 ± 0.2	2.3 ± 0.6 *

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 9 BIOCHEMISTRY OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	9
Total protein (g/dL)	6.3 ± 0.1	6.3 ± 0.1	6.3 ± 0.2	6.2 ± 0.1	6.1 ± 0.1 *	6.0 ± 0.2 **
A/G ratio	1.3 ± 0.1	1.3 ± 0.0	1.2 ± 0.1	1.2 ± 0.1	1.3 ± 0.1	1.4 ± 0.1 **
Glucose (mg/dL)	188 ± 6	187 ± 11	185 ± 10	184 ± 9	190 ± 17	172 ± 10 *
T-cholesterol (mg/dL)	58 ± 6	60 ± 4	59 ± 5	58 ± 4	65 ± 5 **	65 ± 6 **
Phospholipid (mg/dL)	110 ± 9	113 ± 6	111 ± 6	112 ± 7	122 ± 9 **	122 ± 8 **
Urea nitrogen (mg/dL)	19.3 ± 1.6	19.2 ± 1.1	18.3 ± 1.2	18.9 ± 1.2	20.6 ± 1.9	25.8 ± 4.2 *
Sodium (mEq/L)	142 ± 1	142 ± 1	142 ± 1	141 ± 1	141 ± 1 *	140 ± 1 **
Potassium (mEq/L)	3.5 ± 0.3	3.4 ± 0.2	3.5 ± 0.4	3.6 ± 0.3	3.8 ± 0.4 *	3.9 ± 0.4 *
Calcium (mg/dL)	10.2 ± 0.2	10.2 ± 0.2	10.2 ± 0.1	10.1 ± 0.1	10.1 ± 0.2	9.9 ± 0.3 **

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 10 BIOCHEMISTRY OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	10
Total protein (g/dL)	6.1 ± 0.2	6.2 ± 0.2	6.1 ± 0.2	6.0 ± 0.1	5.9 ± 0.2 *	5.9 ± 0.2
A/G ratio	1.2 ± 0.1	1.2 ± 0.0	1.2 ± 0.1	1.3 ± 0.1	1.3 ± 0.1	1.4 ± 0.1 **
ALP (IU/L)	189 ± 19	196 ± 17	206 ± 20	210 ± 16	207 ± 24	250 ± 23 **
Urea nitrogen (mg/dL)	18.7 ± 2.0	19.5 ± 1.6	19.6 ± 2.7	20.0 ± 3.6	22.8 ± 3.3 **	28.4 ± 2.6 **

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 11 URINALYSIS OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name		Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
Number of examined animals		10	10	10	10	10	9
	Grade						
pH	6.0	0	0	0	0	0	1
	6.5	0	1	0	0	0	3
	7.0	0	0	0	0	1	2
	7.5	1	0	0	0	3	2
	8.0	5	3	3	3	2	0
	8.5	4	6	7	7	4	1
Statistical Significance							*

Significant difference : * : p<0.05 ** : p<0.01 Chi square test

TABLE 12 URINALYSIS OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group		Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
Number of examined animals		10	10	10	10	10	10
	Grade						
pH	6.0	0	0	0	0	0	0
	6.5	0	0	0	0	0	6
	7.0	0	0	0	0	0	2
	7.5	0	1	0	0	1	0
	8.0	8	8	6	6	6	2
	8.5	2	1	4	4	3	0
Statistical Significance							**

Significant difference : * : p<0.05 ** : p<0.01 Chi square test

TABLE 13 ORGAN WEIGHTS OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	9
Body weight (g)	292 ± 17	293 ± 19	284 ± 15	290 ± 18	288 ± 24	239 ± 29 **
Thymus (g)	0.224 ± 0.031	0.228 ± 0.036	0.227 ± 0.035	0.234 ± 0.044	0.240 ± 0.061	0.158 ± 0.047 **
Thymus (%)	0.076 ± 0.008	0.078 ± 0.011	0.080 ± 0.011	0.080 ± 0.012	0.083 ± 0.016	0.065 ± 0.016
Testes (g)	3.062 ± 0.135	3.032 ± 0.086	2.982 ± 0.124	3.006 ± 0.135	2.967 ± 0.194	2.810 ± 0.125 **
Testes (%)	1.050 ± 0.029	1.038 ± 0.045	1.052 ± 0.042	1.039 ± 0.049	1.035 ± 0.070	1.187 ± 0.119 *
Heart (g)	0.932 ± 0.056	0.935 ± 0.053	0.885 ± 0.048	0.936 ± 0.061	0.929 ± 0.087	0.790 ± 0.089 **
Heart (%)	0.320 ± 0.006	0.320 ± 0.013	0.312 ± 0.012	0.323 ± 0.010	0.323 ± 0.016	0.331 ± 0.017
Lungs (g)	0.970 ± 0.054	0.975 ± 0.050	0.956 ± 0.050	0.964 ± 0.053	0.980 ± 0.076	0.888 ± 0.066 *
Lungs (%)	0.333 ± 0.015	0.334 ± 0.015	0.337 ± 0.019	0.333 ± 0.014	0.342 ± 0.029	0.374 ± 0.031 *
Kidneys (g)	1.788 ± 0.112	1.785 ± 0.097	1.773 ± 0.073	1.836 ± 0.084	1.838 ± 0.149	1.849 ± 0.155
Kidneys (%)	0.613 ± 0.019	0.611 ± 0.018	0.626 ± 0.028	0.634 ± 0.017	0.640 ± 0.024	0.779 ± 0.077 **
Spleen (g)	0.540 ± 0.037	0.544 ± 0.037	0.523 ± 0.027	0.537 ± 0.030	0.533 ± 0.037	0.448 ± 0.063 **
Spleen (%)	0.185 ± 0.009	0.186 ± 0.006	0.184 ± 0.007	0.185 ± 0.008	0.186 ± 0.009	0.187 ± 0.008
Liver (g)	7.046 ± 0.546	7.080 ± 0.463	6.901 ± 0.376	7.159 ± 0.525	7.382 ± 0.700	6.616 ± 0.904
Liver (%)	2.412 ± 0.064	2.419 ± 0.064	2.432 ± 0.064	2.468 ± 0.056	2.564 ± 0.052 **	2.763 ± 0.127 **
Brain (g)	1.926 ± 0.061	1.954 ± 0.053	1.900 ± 0.056	1.900 ± 0.058	1.900 ± 0.079	1.871 ± 0.034
Brain (%)	0.661 ± 0.036	0.670 ± 0.043	0.671 ± 0.035	0.657 ± 0.038	0.663 ± 0.042	0.794 ± 0.112 **
Thyroid (g)	0.027 ± 0.004	0.028 ± 0.005	0.029 ± 0.007	0.026 ± 0.003	0.027 ± 0.003	0.029 ± 0.007
Thyroid (%)	0.009 ± 0.002	0.009 ± 0.002	0.010 ± 0.002	0.009 ± 0.001	0.009 ± 0.001	0.012 ± 0.003 *

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 14 ORGAN WEIGHTS OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group Name	Control	1250 ppm	2500 ppm	5000 ppm	10000 ppm	20000 ppm
No. of examined animals	10	10	10	10	10	10
Body weight (g)	162 ± 7	157 ± 13	152 ± 8	154 ± 9	150 ± 11	135 ± 13 **
Thymus (g)	0.174 ± 0.019	0.179 ± 0.026	0.178 ± 0.021	0.178 ± 0.020	0.182 ± 0.018	0.145 ± 0.017 *
Thymus (%)	0.107 ± 0.010	0.114 ± 0.015	0.118 ± 0.015	0.116 ± 0.013	0.122 ± 0.011	0.107 ± 0.012
Adrenals (g)	0.057 ± 0.005	0.054 ± 0.006	0.055 ± 0.005	0.054 ± 0.005	0.051 ± 0.005 *	0.046 ± 0.004 **
Adrenals (%)	0.035 ± 0.003	0.035 ± 0.004	0.036 ± 0.004	0.035 ± 0.003	0.034 ± 0.003	0.034 ± 0.002
Ovaries (g)	0.095 ± 0.014	0.092 ± 0.012	0.090 ± 0.007	0.089 ± 0.013	0.085 ± 0.010	0.075 ± 0.013 **
Ovaries (%)	0.058 ± 0.008	0.059 ± 0.006	0.059 ± 0.005	0.058 ± 0.009	0.057 ± 0.008	0.055 ± 0.006
Heart (g)	0.606 ± 0.047	0.572 ± 0.051	0.569 ± 0.036	0.580 ± 0.034	0.576 ± 0.039	0.511 ± 0.055 **
Heart (%)	0.374 ± 0.020	0.365 ± 0.021	0.375 ± 0.022	0.377 ± 0.016	0.385 ± 0.013	0.378 ± 0.022
Lungs (g)	0.732 ± 0.040	0.716 ± 0.033	0.722 ± 0.020	0.733 ± 0.053	0.712 ± 0.026	0.653 ± 0.041 **
Lungs (%)	0.453 ± 0.023	0.458 ± 0.031	0.476 ± 0.027	0.477 ± 0.039	0.476 ± 0.035	0.485 ± 0.040
Kidneys (g)	1.097 ± 0.069	1.094 ± 0.065	1.080 ± 0.040	1.119 ± 0.047	1.119 ± 0.053	1.149 ± 0.093
Kidneys (%)	0.678 ± 0.027	0.699 ± 0.044	0.712 ± 0.042	0.728 ± 0.030	0.747 ± 0.024 **	0.853 ± 0.078 **
Spleen (g)	0.368 ± 0.024	0.359 ± 0.035	0.356 ± 0.020	0.355 ± 0.026	0.353 ± 0.020	0.317 ± 0.027 **
Spleen (%)	0.227 ± 0.013	0.229 ± 0.016	0.234 ± 0.010	0.231 ± 0.015	0.236 ± 0.011	0.235 ± 0.013
Liver (g)	3.860 ± 0.211	3.748 ± 0.315	3.626 ± 0.195	3.719 ± 0.133	3.718 ± 0.274	3.704 ± 0.396
Liver (%)	2.383 ± 0.053	2.388 ± 0.051	2.385 ± 0.058	2.419 ± 0.070	2.479 ± 0.074 *	2.735 ± 0.119 **
Brain (g)	1.759 ± 0.044	1.775 ± 0.052	1.753 ± 0.031	1.758 ± 0.040	1.768 ± 0.057	1.723 ± 0.062
Brain (%)	1.089 ± 0.064	1.137 ± 0.088	1.156 ± 0.062	1.145 ± 0.065	1.183 ± 0.077 *	1.279 ± 0.088 **

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 15 INCIDENCES OF SELECTED HISTOLOGYCAL FINDINGS OF MALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group		Control	1250 ppm	2500 ppm	5000 ppm	10000 ppn	20000 ppm
Number of examined animals		10	10	10	10	10	10
Organ Findings	Grade						
Kidney							
Urothelial hyperplasia : pelvis	1+	0	0	0	0	2	4 *
	2+	0	0	0	0	0	2
Urinary bladder							
Simple hyperplasia : transitional epithelium	1+	0	0	0	0	0	1

Grade 1+: Slight 2+: Moderate 3+: Marked 4+: Severe

Significant difference * : p<0.05 ** : p<0.01 Chi square test for non-neoplastic lesion

TABLE 16 INCIDENCES OF SELECTED HISTOLOGYCAL FINDINGS OF FEMALE RATS IN THE 13-WEEK DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Group		Control	1250 ppm	2500 ppm	5000 ppm	10000 ppn	20000 ppm
Number of examined animals		10	10	10	10	10	10
Organ Findings	Grade						
Kidney							
Urothelial hyperplasia : pelvis	1+	0	0	0	0	1	0
Urinary bladder							
Simple hyperplasia : transitional epithelium	1+	0	0	0	0	1	2 **
	2+	0	0	0	0	1	5

Grade 1+: Slight 2+: Moderate 3+: Marked 4+: Severe

Significant difference * : p<0.05 ** : p<0.01 Chi square test for non-neoplastic lesion