

Table. S1 Effects of BPS on the movement behavior of *C. elegans* by acute exposures (mean±SEM)

Concentration(μM)	Head thrashes(min)	Body bends(20sec)
0	140.86±2.85	14.00±0.55
0.001	139.86±2.49	12.70±0.66
0.01	119.43±4.12	11.90±0.84
0.1	123.14±1.18	12.70±0.60
1	117.43±2.46	11.50±0.63
10	117.86±3.43	11.80±0.66
100	116.29±2.56	11.20±0.37

Table. S2 Effect of BPS on body length, brood size and lifespan of *C. elegans* by acute exposures (mean±SEM)

Concentration(μM)	Body length(μm)	Brood size	Average lifespan(d)
0	1157.30±27.56	263.67±11.78	19.30±0.82
0.001	1118.82±13.05	241.67±9.94	19.00±0.81
0.01	983.71±9.55	170.67±7.22	16.75±0.66
0.1	1007.20±12.79	143.67±7.62	16.80±0.66
1	1026.63±4.79	149.33±2.85	15.70±0.67
10	982.61±6.55	152.67±8.74	15.00±0.64
100	980.55±10.97	144.00±4.73	14.50±0.55

Table. S3 Effects of BPS on the locomotion behavior of *C. elegans* by multi-generations acute exposures (mean±SEM)

Concentrations (μM)	Generations	Head thrashes	Body bends (20sec)
0	G1	140.86±2.85	14.00±0.55
	G2	146.00±1.81	13.90±0.37
	G3	144.43±2.42	13.60±0.70
	G4	147.14±2.56	14.50±0.48
0.001	G1	139.86±2.49	12.70±0.66
	G2	136.71±3.46	13.80±0.37
	G3	138.57±3.23	12.30±0.49
	G4	143.00±2.42	12.92±0.78

0.01	G1	119.43±4.12	11.90±0.84
	G2	132.00±0.90	11.80±0.80
	G3	123.00±3.34	11.70±0.37
	G4	111.00±1.88	14.50±0.91
0.1	G1	123.14±1.18	12.70±0.60
	G2	126.29±4.38	12.00±0.82
	G3	111.43±2.15	13.10±0.29
	G4	111.43±2.84	14.17±0.83
1	G1	117.43±2.46	11.50±0.63
	G2	118.29±4.53	12.50±0.76
	G3	117.57±3.74	13.20±0.12
	G4	109.43±2.38	14.42±0.37
10	G1	117.86±3.43	11.80±0.66
	G2	114.14±4.58	11.60±0.51
	G3	112.29±3.29	11.00±0.42
	G4	114.29±2.33	15.00±0.97
100	G1	116.29±2.56	11.20±0.37
	G2	124.29±2.72	11.50±0.50
	G3	124.00±1.69	13.50±0.55
	G4	114.14±1.81	14.75±0.66

Table. S4 Effects of BPS on the body length and brood size of *C. elegans* by multi-generations acute exposures (mean±SEM)

Concentrations (μM)	Generations	Body length (μm)	Brood size
0	G1	1157.30±27.56	263.67±11.78
	G2	1054.41±24.24	254.67±13.22
	G3	1165.46±19.90	256.00±7.77
	G4	1107.42±18.69	265.33±8.76
0.001	G1	1118.82±13.05	241.67±9.94
	G2	1044.56±15.60	228.67±7.51
	G3	1100.46±10.87	238.00±6.66
	G4	1080.77±21.20	247.00±2.89

0.01	G1	983.71±9.55	170.67±7.22
	G2	959.80±8.06	155.00±12.66
	G3	983.99±18.05	213.67±5.04
	G4	1071.31±18.37	161.00±9.29
0.1	G1	1007.20±12.79	143.67±7.62
	G2	955.31±6.90	198.67±7.80
	G3	1033.99±18.05	129.00±5.29
	G4	930.49±11.80	175.00±11.02
1	G1	1026.63±4.79	149.33±2.85
	G2	876.82±16.55	177.33±5.36
	G3	960.38±15.54	126.00±6.08
	G4	944.77±24.75	187.00±7.57
10	G1	982.61±6.55	152.67±8.74
	G2	898.96±11.12	166.67±9.02
	G3	935.28±20.12	126.67±7.22
	G4	1011.82±24.63	172.67±1.86
100	G1	980.55±10.97	144.00±4.73
	G2	864.32±12.84	115.33±7.75
	G3	1008.11±21.99	129.00±4.51
	G4	1021.84±13.90	129.67±5.21