

TABLE OF p-VALUES

1. *In vitro* inhibition of lipid peroxidation

a. Tukey Pairwise Comparisons (The aqueous stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	0.366	(-0.433, 1.165)	1.47	0.498
150 - 50	0.993	(0.194, 1.793)	3.98	0.017
200 - 50	4.007	(3.207, 4.806)	16.05	0.000
150 - 100	0.627	(-0.172, 1.427)	2.51	0.132
200 - 100	3.641	(2.841, 4.440)	14.59	0.000
200 - 150	3.013	(2.214, 3.813)	12.07	0.000

Individual confidence level = 98.74%

b. Tukey Pairwise Comparisons (The methanolic stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	18.22	(7.41, 29.02)	5.40	0.003
150 - 50	18.64	(7.84, 29.45)	5.53	0.002
200 - 50	40.18	(29.37, 50.98)	11.91	0.000
150 - 100	0.42	(-10.38, 11.23)	0.13	0.999
200 - 100	21.96	(11.15, 32.76)	6.51	0.001
200 - 150	21.53	(10.73, 32.34)	6.38	0.001

Individual confidence level = 98.74%

c. Tukey Pairwise Comparisons (Standard: L-Ascorbic Acid versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	3.147	(1.587, 4.707)	6.46	0.001
150 - 50	5.634	(4.074, 7.194)	11.57	0.000
200 - 50	14.575	(13.015, 16.135)	29.93	0.000
150 - 100	2.487	(0.927, 4.047)	5.11	0.004
200 - 100	11.428	(9.868, 12.988)	23.47	0.000
200 - 150	8.941	(7.381, 10.501)	18.36	0.000

Individual confidence level = 98.74%

d. Tukey Pairwise Comparisons at the tested concentrations

i. At 50 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-24.919	(-26.415, -23.423)	-51.11	0.000
PTW - L-ASA	21.529	(20.033, 23.026)	44.16	0.000
PTW - PTM	46.448	(44.952, 47.944)	95.27	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

ii. At 100 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-9.85	(-15.52, -4.17)	-5.32	0.004
PTW - L-ASA	18.75	(13.07, 24.42)	10.14	0.000
PTW - PTM	28.59	(22.92, 34.27)	15.46	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iii. At 150 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-11.909	(-14.339, -9.480)	-15.04	0.000
PTW - L-ASA	16.889	(14.459, 19.318)	21.33	0.000
PTW - PTM	28.798	(26.369, 31.228)	36.38	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iv. At 200 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	0.68	(-9.63, 10.99)	0.20	0.978
PTW - L-ASA	10.96	(0.65, 21.27)	3.26	0.039
PTW - PTM	10.28	(-0.03, 20.59)	3.06	0.051

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*; PTM= Methanolic stem bark extract of *P. thonningii*

2. In vitro DPPH radical scavenging activities

a. Tukey Pairwise Comparisons (The aqueous stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
0.10 - 0.01	1.47	(-6.30, 9.23)	0.63	0.986
1.00 - 0.01	3.33	(-4.43, 11.09)	1.44	0.704
10.00 - 0.01	5.96	(-1.80, 13.73)	2.58	0.176
100.00 - 0.01	17.00	(9.24, 24.76)	7.35	0.000
1000.00 - 0.01	24.67	(16.91, 32.44)	10.67	0.000
1.00 - 0.10	1.86	(-5.90, 9.63)	0.81	0.961
10.00 - 0.10	4.50	(-3.27, 12.26)	1.95	0.423
100.00 - 0.10	15.53	(7.77, 23.30)	6.72	0.000
1000.00 - 0.10	23.21	(15.44, 30.97)	10.04	0.000
10.00 - 1.00	2.63	(-5.13, 10.40)	1.14	0.856
100.00 - 1.00	13.67	(5.91, 21.43)	5.91	0.001
1000.00 - 1.00	21.34	(13.58, 29.11)	9.23	0.000
100.00 - 10.00	11.04	(3.27, 18.80)	4.77	0.005
1000.00 - 10.00	18.71	(10.95, 26.47)	8.09	0.000
1000.00 - 100.00	7.67	(-0.09, 15.44)	3.32	0.053

Individual confidence level = 99.43%

b. Tukey Pairwise Comparisons (The methanolic stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
0.10 - 0.01	2.63	(-0.95, 6.22)	2.47	0.208
1.00 - 0.01	7.23	(3.64, 10.81)	6.77	0.000
10.00 - 0.01	45.84	(42.26, 49.42)	42.96	0.000
100.00 - 0.01	48.20	(44.61, 51.78)	45.17	0.000
1000.00 - 0.01	48.36	(44.78, 51.95)	45.33	0.000

1.00 - 0.10	4.59	(1.01, 8.18)	4.30	0.010
10.00 - 0.10	43.21	(39.62, 46.79)	40.49	0.000
100.00 - 0.10	45.56	(41.98, 49.15)	42.70	0.000
1000.00 - 0.10	45.73	(42.15, 49.31)	42.86	0.000
10.00 - 1.00	38.61	(35.03, 42.20)	36.19	0.000
100.00 - 1.00	40.97	(37.39, 44.55)	38.40	0.000
1000.00 - 1.00	41.14	(37.55, 44.72)	38.55	0.000
100.00 - 10.00	2.36	(-1.23, 5.94)	2.21	0.301
1000.00 - 10.00	2.52	(-1.06, 6.11)	2.36	0.242
1000.00 - 100.00	0.17	(-3.42, 3.75)	0.16	1.000

Individual confidence level = 99.43%

c. Tukey Pairwise Comparisons (Standard: L-Ascorbic Acid versus concentration ($\mu\text{g/ml}$))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
0.10 - 0.01	4.38	(-1.44, 10.20)	2.53	0.191
1.00 - 0.01	12.44	(6.62, 18.26)	7.18	0.000
10.00 - 0.01	31.90	(26.08, 37.72)	18.41	0.000
100.00 - 0.01	31.97	(26.15, 37.79)	18.45	0.000
1000.00 - 0.01	31.97	(26.15, 37.79)	18.45	0.000
1.00 - 0.10	8.07	(2.25, 13.89)	4.66	0.006
10.00 - 0.10	27.52	(21.70, 33.34)	15.89	0.000
100.00 - 0.10	27.59	(21.77, 33.41)	15.93	0.000
1000.00 - 0.10	27.59	(21.77, 33.41)	15.93	0.000
10.00 - 1.00	19.46	(13.64, 25.28)	11.23	0.000
100.00 - 1.00	19.53	(13.71, 25.35)	11.27	0.000
1000.00 - 1.00	19.53	(13.71, 25.35)	11.27	0.000
100.00 - 10.00	0.07	(-5.75, 5.89)	0.04	1.000
1000.00 - 10.00	0.07	(-5.75, 5.89)	0.04	1.000
1000.00 - 100.00	0.00	(-5.82, 5.82)	0.00	1.000

Individual confidence level = 99.43%

d. Tukey Pairwise Comparisons at the tested concentrations

i. At 0.01 $\mu\text{g/ml}$ concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-17.68	(-23.58, -11.78)	-9.20	0.000
PTW - L-ASA	-0.83	(-6.73, 5.06)	-0.43	0.903
PTW - PTM	16.85	(10.95, 22.74)	8.77	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

ii. At 0.1 $\mu\text{g/ml}$ concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-19.42	(-24.72, -14.13)	-11.26	0.000
PTW - L-ASA	-3.74	(-9.04, 1.55)	-2.17	0.155
PTW - PTM	15.68	(10.39, 20.97)	9.09	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iii. At 1 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-22.90	(-29.85, -15.94)	-10.11	0.000
PTW - L-ASA	-9.95	(-16.90, -2.99)	-4.39	0.011
PTW - PTM	12.95	(6.00, 19.90)	5.72	0.003

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iv. At 10 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-3.740	(-5.813, -1.667)	-5.54	0.004
PTW - L-ASA	-26.770	(-28.843, -24.697)	-39.63	0.000
PTW - PTM	-23.030	(-25.103, -20.957)	-34.09	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

v. At 100 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-1.45	(-9.30, 6.40)	-0.57	0.841
PTW - L-ASA	-15.80	(-23.65, -7.95)	-6.18	0.002
PTW - PTM	-14.35	(-22.20, -6.50)	-5.61	0.003

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

vi. At 1000 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-1.287	(-2.556, -0.017)	-3.11	0.048
PTW - L-ASA	-8.130	(-9.400, -6.860)	-19.65	0.000
PTW - PTM	-6.843	(-8.113, -5.574)	-16.54	0.000

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

3. In vitro Ferric Reducing Antioxidant Power (PFRAP) activities

a. Tukey Pairwise Comparisons (The aqueous stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	0.1127	(-0.0877, 0.3130)	1.80	0.339
150 - 50	0.1753	(-0.0250, 0.3757)	2.80	0.088
200 - 50	0.2777	(0.0773, 0.4780)	4.44	0.009
150 - 100	0.0627	(-0.1377, 0.2630)	1.00	0.753
200 - 100	0.1650	(-0.0353, 0.3653)	2.64	0.111
200 - 150	0.1023	(-0.0980, 0.3027)	1.64	0.413

Individual confidence level = 98.74%

b. Tukey Pairwise Comparisons (The methanolic stem bark extract of *P. thonningii* versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	0.1320	(-0.1194, 0.3834)	1.68	0.391
150 - 50	0.2837	(0.0322, 0.5351)	3.61	0.028
200 - 50	0.3050	(0.0536, 0.5564)	3.89	0.019
150 - 100	0.1517	(-0.0998, 0.4031)	1.93	0.288
200 - 100	0.1730	(-0.0784, 0.4244)	2.20	0.202
200 - 150	0.0213	(-0.2301, 0.2728)	0.27	0.992

Individual confidence level = 98.74%

c. Tukey Pairwise Comparisons (Standard: L-Ascorbic Acid versus concentration (µg/ml))

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
100 - 50	0.0590	(-0.0436, 0.1616)	1.84	0.323
150 - 50	0.0977	(-0.0050, 0.2003)	3.05	0.062
200 - 50	0.1680	(0.0654, 0.2706)	5.24	0.003
150 - 100	0.0387	(-0.0640, 0.1413)	1.21	0.640
200 - 100	0.1090	(0.0064, 0.2116)	3.40	0.038
200 - 150	0.0703	(-0.0323, 0.1730)	2.19	0.204

Individual confidence level = 98.74%

d. Tukey Pairwise Comparisons at the tested concentrations

i. At 50 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	-0.0637	(-0.3181, 0.1908)	-0.77	0.735
PTW - L-ASA	0.3187	(0.0642, 0.5731)	3.84	0.020
PTW - PTM	0.3823	(0.1279, 0.6368)	4.61	0.009

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

ii. At 100 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	0.0093	(-0.1605, 0.1792)	0.17	0.984
PTW - L-ASA	0.3723	(0.2025, 0.5422)	6.73	0.001
PTW - PTM	0.3630	(0.1931, 0.5329)	6.56	0.001

Individual confidence level = 97.80%

Key: L-ASA=L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iii. At 150 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	0.1223	(-0.0572, 0.3019)	2.09	0.172
PTW - L-ASA	0.3963	(0.2168, 0.5759)	6.77	0.001
PTW - PTM	0.2740	(0.0944, 0.4536)	4.68	0.008

Individual confidence level = 97.80%

Key: L-ASA= L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*

iv. At 200 µg/ml concentration level

Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	95% CI	T-Value	Adjusted P-Value
PTM - L-ASA	0.0733	(-0.0430, 0.1897)	1.93	0.210
PTW - L-ASA	0.4283	(0.3120, 0.5447)	11.30	0.000
PTW - PTM	0.3550	(0.2386, 0.4714)	9.36	0.000

Individual confidence level = 97.80%

Key: L-ASA= L-Ascorbic Acid; PTW= Aqueous stem bark extract of *P. thonningii*;
PTM= Methanolic stem bark extract of *P. thonningii*