

**Abdulrahman M D. Antioxidant, alpha glucosidase and antibacterial evaluation of *Syzygium mytifolium*. Plant Science Today. 2021;8(2): 410–415. <https://doi.org/10.14719/pst.2021.8.2.1113>**

**Supplementary Tables**

**Table 1.** Disk diffusion antibacterial evaluation of ethanolic, methanolic and aqueous extracts of leaves, bark, root and whole plant of *Syzygium mytifolium* against Gram positive bacteria

P	E	Conc $\mu\text{g/mL}$	ZI(mm)				
			S.A	E.F	L.M	B.C	S.E
L	E	1000	5.8 $\pm$ 0.1	13.8 $\pm$ 0.2	8.2 $\pm$ 0.2	3.8 $\pm$ 0.1	-
L	E	2000	6.1 $\pm$ 0.3	15.5 $\pm$ 0.3	8.9 $\pm$ 0.8	4.4 $\pm$ 0.2	-
L	E	4000	12.2 $\pm$ 0.8	16.9 $\pm$ 0.1	10.5 $\pm$ 0.5	4.8 $\pm$ 0.4	-
L	M	1000	7.5 $\pm$ 0.3	6.8 $\pm$ 0.8	7.3 $\pm$ 0.1	5.8 $\pm$ 0.3	-
L	M	2000	9.2 $\pm$ 0.2	9.2 $\pm$ 0.2	8.9 $\pm$ 0.3	7.2 $\pm$ 0.6	-
L	M	4000	11.2 $\pm$ 0.1	12.8 $\pm$ 0.9	11.7 $\pm$ 0.1	11.1 $\pm$ 0.1	-
L	A	1000	-	-	-	-	-
L	A	2000	-	-	-	-	-
L	A	4000	5.2 $\pm$ 0.1	6.4 $\pm$ 0.7	-	-	-
B	E	1000	3.3 $\pm$ 0.5	10.0 $\pm$ 1.0	3.1 $\pm$ 0.2	-	-
B	E	2000	3.7 $\pm$ 0.6	12.1 $\pm$ 0.3	3.6 $\pm$ 0.5	-	-
B	E	4000	4.8 $\pm$ 0.7	12.9 $\pm$ 0.1	4.8 $\pm$ 0.1	5.3 $\pm$ 0.8	-
B	M	1000	3.1 $\pm$ 0.1	13.8 $\pm$ 0.3	-	7.1 $\pm$ 0.1	-
B	M	2000	4.8 $\pm$ 0.2	16.0 $\pm$ 0.6	-	10.7 $\pm$ 0.2	-
B	M	400	6.9 $\pm$ 0.1	18.1 $\pm$ 0.2	3.7 $\pm$ 0.3	13.2 $\pm$ 0.4	-
B	A	1000	-	-	-	-	-
B	A	2000	-	-	-	-	-
B	A	4000	-	7.1 $\pm$ 0.2	-	3.1 $\pm$ 1.0	-
R	E	1000	7.7 $\pm$ 0.6	4.7 $\pm$ 0.8	5.0 $\pm$ 0.1	7.8 $\pm$ 0.3	-
R	E	2000	8.5 $\pm$ 0.4	6.3 $\pm$ 0.5	5.3 $\pm$ 0.7	11.6 $\pm$ 0.4	-
R	E	4000	10.3 $\pm$ 6	7.2 $\pm$ 0.6	6.9 $\pm$ 0.1	15.4 $\pm$ 0.1	-
R	M	1000	4.8 $\pm$ 0.8	-	-	2.8 $\pm$ 0.1	-
R	M	2000	7.1 $\pm$ 0.7	-	-	5.2 $\pm$ 0.1	-
R	M	4000	10 $\pm$ 0.3	5.3 $\pm$ 0.7	-	8.1 $\pm$ 0.9	-
R	A	1000	-	-	-	-	-
R	A	2000	-	-	-	4.1 $\pm$ 0.5	-
R	A	4000	-	6.3 $\pm$ 0.7	-	6.9 $\pm$ 0.1	-
W	E	1000	8.6 $\pm$ 0.3	8.3 $\pm$ 0.5	9.2 $\pm$ 0.4	5.3 $\pm$ 0.1	-
W	E	2000	9.5 $\pm$ 0.4	8.9 $\pm$ 0.2	9.9 $\pm$ 0.1	8.4 $\pm$ 0.5	-
W	E	4000	13.2 $\pm$ 0.4	12.5 $\pm$ 0.1	12.1 $\pm$ 0.3	11.7 $\pm$ 0.6	-
W	M	1000	5.1 $\pm$ 0.2	-	-	-	8.0 $\pm$ 0.2
W	M	2000	7.2 $\pm$ 0.4	-	-	-	11.9 $\pm$ 0.9
W	M	4000	9.8 $\pm$ 0.5	4.9 $\pm$ 0.5	-	-	16.9 $\pm$ 1.0
W	A	1000	-	-	-	-	-
W	A	2000	-	-	-	-	-
W	A	4000	3.8 $\pm$ 0.1	-	-	-	-
STD		10	18.0 $\pm$ 0.1	15.3 $\pm$ 0.5	-	18.2 $\pm$ 0.2d	-

Note: S/N= Serial Number, Data are means of three replicates ( $n = 3$ )  $\pm$  standard deviation of three different experiments. L: Leaves, B: Bark, R: Root, W: Whole Plant E: Ethanol, M: Methanol, A: Aqueous, S.A: *Staphylococcus aureus*, E.F: *Enterococcus faecalis*, L.M: *Listeria monocytogenes*, B.C: *Bacillus*, S.E: *Staphylococcus epidermidis*, P: Parts, E: Extracts and STD: Ampicillin

**Table 2.** Disk diffusion antibacterial evaluation of ethanolic, methanolic and aqueous extracts of leaves, bark, root and whole plant of *Syzygium mytifolium* against Gram negative bacteria

P	E	Conc $\mu\text{g/mL}$	ZI(mm)				
			E.C	E.B	P.A	K.P	S.T
L	E	1000	16.1 $\pm$ 0.1	6.3 $\pm$ 0.2	9.2 $\pm$ 0.3	10.2 $\pm$ 0.1	17.1 $\pm$ 0.2
L	E	2000	20.2 $\pm$ 0.1	6.9 $\pm$ 0.3	9.9 $\pm$ 0.1	10.9 $\pm$ 0.3	19.3 $\pm$ 0.5
L	E	4000	23.8 $\pm$ 0.5	11.2 $\pm$ 0.1	10.8 $\pm$ 0.1	12.3 $\pm$ 0.2	24.1 $\pm$ 0.4
L	M	1000	8.9 $\pm$ 0.3	12.0 $\pm$ 0.1	-	5.2 $\pm$ 0.2	8.1 $\pm$ 1.0
L	M	2000	10.1 $\pm$ 0.7	15.7 $\pm$ 0.3	-	7.3 $\pm$ 0.1	14.3 $\pm$ 0.2
L	M	4000	14.2 $\pm$ 0.2	20.2 $\pm$ 0.4	-	8.1 $\pm$ 0.3	20.1 $\pm$ 0.4
L	A	1000	-	-	-	-	4.2 $\pm$ 0.8
L	A	2000	4.4 $\pm$ 0.2	-	-	-	6.4 $\pm$ 0.7
L	A	4000	7.9 $\pm$ 0.1	-	3.4 $\pm$ 0.1	-	10.2 $\pm$ 0.3
B	E	1000	-	-	11.8 $\pm$ 0.7	15.1 $\pm$ 0.2	-
B	E	2000	-	4.2 $\pm$ 0.1	15.0 $\pm$ 0.5	16.7 $\pm$ 0.5	-
B	E	4000	-	6.8 $\pm$ 0.3	18.4 $\pm$ 0.1	20.3 $\pm$ 0.5	-
B	M	1000	9.8 $\pm$ 0.3	-	-	-	9.2 $\pm$ 0.3
B	M	2000	10.2 $\pm$ 0.4	-	-	-	11.4 $\pm$ 0.1
B	M	400	14.6 $\pm$ 0.1	-	-	-	14.5 $\pm$ 0.2
B	A	1000	-	-	-	2.7 $\pm$ 0.1	-
B	A	2000	6.1 $\pm$ 0.1	-	-	3.8 $\pm$ 0.0	-
B	A	4000	8.9 $\pm$ 0.6	3.1 $\pm$ 0.3	-	5.8 $\pm$ 0.9	-
R	E	1000	14.1 $\pm$ 0.2	9.8 $\pm$ 0.3	10.1 $\pm$ 0.2	9.7 $\pm$ 0.4	11.4 $\pm$ 0.5
R	E	2000	17.2 $\pm$ 0.1	11.2 $\pm$ 0.1	10.9 $\pm$ 0.8	11.8 $\pm$ 0.5	13.3 $\pm$ 0.1
R	E	4000	19.9 $\pm$ 0.3	16.1 $\pm$ 0.9	13.1 $\pm$ 0.1	13.3 $\pm$ 0.2	15.9 $\pm$ 0.1
R	M	1000	-	-	-	-	10.7 $\pm$ 0.2
R	M	2000	2.6 $\pm$ 0.3	-	-	-	12.8 $\pm$ 0.9
R	M	4000	5.9 $\pm$ 0.2	6.9 $\pm$ 0.3	-	6.1 $\pm$ 0.1	13.9 $\pm$ 0.4
R	A	1000	-	11.9 $\pm$ 0.9	-	-	-
R	A	2000	-	14.1 $\pm$ 0.1	-	-	-
R	A	4000	-	17.9 $\pm$ 0.1	-	-	-
W	E	1000	19.2 $\pm$ 0.1	-	-	13.1 $\pm$ 0.1	11.1 $\pm$ 0.5

W	E	2000	19.9 ± 0.3	-	-	17.6 ± 1.0	14.8 ± 0.3
W	E	4000	21.9 ± 0.2	-	-	24.4 ± 0.3	18.1 ± 0.4
W	M	1000	-	10.1 ± 0.4	-	7.9 ± 0.1	-
W	M	2000	-	12.2 ± 0.1	-	8.8 ± 0.8	-
W	M	4000	-	14.6 ± 1.0	-	13.4 ± 0.1	-
W	A	1000	-	-	-	-	-
W	A	2000	-	3.6 ± 0.1	-	-	-
W	A	4000	-	6.8 ± 0.3	-	-	-
STD		10	18.0 ± 0.1	15.3±0.5	-	18.2 ± 0.2	-

**Note:** S/N= Serial Number, Data are means of three replicates (n = 3) ± standard deviation of three different experiments. L: Leaves, B: Bark, R: Root, W: Whole Plant E: Ethanol, M: Methanol, A: Aqueous, S.A: *Staphylococcus aureus*, E.F: *Enterococcus faecalis*, L.M: *Listeria monocytogenes*, B.C: *Bacillus*, S.E: *Staphylococcus epidermidis*, SPP: Species, P: Parts, E: Extracts and STD: Ampicillin, - = No Activity Detected.

**Table 3.** Ager well antibacterial evaluation of ethanolic, methanolic and aqueous extracts of leaves, bark, root and whole plant of *Syzygium myrtifolium* against Gram positive bacteria

P	E	Conc µg/mL	ZI(mm)				
			S.A	E.F	L.M	B.C	S.E
L	E	1000	7.2 ± 0.9	16.0 ± 0.9	10.0 ± 0.1	5.1 ± 0.8	-
L	E	2000	8.9 ± 0.1	18.2 ± 0.1	12.7 ± 0.5	8.9 ± 0.1	-
L	E	4000	14.9 ± 0.7	21.0 ± 0.9	15.9 ± 0.9	9.81 ± 0.8	-
L	M	1000	10.1 ± 0.1	9.0 ± 0.1	9.0 ± 0.9	7.1 ± 0.2	-
L	M	2000	14.3 ± 0.9	11.7 ± 0.8	11.3 ± 0.9	9.9 ± 0.3	-
L	M	4000	17.5 ± 0.4	15.1 ± 0.1	14.2 ± 0.7	13.2 ± 0.2	-
L	A	1000	-	-	-	-	-
L	A	2000	-	-	-	-	-
L	A	4000	8.1 ± 0.4	7.0 ± 0.1	-	-	-
B	E	1000	4.7 ± 0.3	13.1 ± 0.0	6.3 ± 0.2	-	-
B	E	2000	5.1 ± 0.1	16.3 ± 0.1	7.2 ± 0.3	-	-
B	E	4000	7.2 ± 0.6	14.1 ± 0.8	9.4 ± 0.4	6.9 ± 0.3	-
B	M	1000	4.7 ± 0.4	15.2 ± 0.1	-	9.3 ± 0.4	-
B	M	2000	6.0 ± 0.4	20.0 ± 0.1	-	13.1 ± 0.8	-
B	M	400	9.0 ± 0.4	22.2 ± 0.8	5.0 ± 0.5	15.9 ± 0.1	-
B	A	1000	-	-	-	-	-
B	A	2000	-	-	-	-	-
B	A	4000	-	9.2 ± 0.8	-	6.0 ± 0.6	-
R	E	1000	10.1 ± 0.9	7.1 ± 0.2	6.0 ± 0.4	9.1 ± 0.8	-
R	E	2000	14.3 ± 0.1	7.1 ± 0.9	6.9 ± 0.9	14.1 ± 0.9	-
R	E	4000	17.9 ± 1.0	10.5 ± 0.1	8.1 ± 0.3	18.1 ± 0.7	-
R	M	1000	6.1 ± 0.1	-	-	3.1 ± 0.3	-
R	M	2000	10.3 ± 0.3	-	-	6.4 ± 0.0	-
R	M	4000	13.9 ± 0.1	7.1 ± 0.1	-	10.0 ± 0.1	-
R	A	1000	-	-	-	-	-
R	A	2000	-	-	-	5.0 ± 0.1	-
R	A	4000	-	8.1 ± 0.1	-	8.3 ± 0.7	-
W	E	1000	8.6 ± 0.3	10.0 ± 0.1	11.8 ± 0.4	7.7 ± 0.8	-
W	E	2000	11.1 ± 0.1	12.7 ± 0.9	13.1 ± 0.3	11.1 ± 0.1	-
W	E	4000	17.6 ± 0.7	15.0 ± 0.4	16.2 ± 0.9	15.1 ± 0.1	-
W	M	1000	6.8 ± 0.7	-	-	-	10.1 ± 0.8
W	M	2000	10.5 ± 0.1	-	-	-	14.3 ± 0.2
W	M	4000	12.9 ± 0.1	6.0 ± 0.1	-	-	19.1 ± 0.0
W	A	1000	-	-	-	-	-
W	A	2000	-	-	-	-	-
W	A	4000	4.0 ± 0.9	-	-	-	-
STD		10	18.0 ± 0.1	15.3±0.5	-	18.2 ± 0.2d	-

**Note:** S/N= Serial Number, Data are means of three replicates (n = 3) ± standard deviation of three different experiments. L: Leaves, B: Bark, R: Root, W: Whole Plant E: Ethanol, M: Methanol, A: Aqueous, S.A: *Staphylococcus aureus*, E.F: *Enterococcus faecalis*, L.M: *Listeria monocytogenes*, B.C: *Bacillus*, S.E: *Staphylococcus epidermidis*, SPP: Species, P: Parts, E: Extracts and STD: Ampicillin, - = No Activity Detected.

**Table 4.** Ager well antibacterial evaluation of ethanolic, methanolic and aqueous extracts of leaves, bark, root and whole plant of *Syzygium myrtifolium* against Gram negative b+acteria

P	E	Conc µg/mL	ZI(mm)				
			E.C	E.B	P.A	K.P	S.T
L	E	1000	18.9 ± 0.7	7.9 ± 0.8	10.2 ± 0.0	10.9 ± 0.1	18.9 ± 0.7
L	E	2000	23.7 ± 0.3	8.0 ± 0.1	11.1 ± 0.8	11.4 ± 0.5	21.2 ± 0.2
L	E	4000	26.9 ± 0.1	13.0 ± 0.9	12.1 ± 0.4	13.0 ± 0.7	27.8 ± 0.1
L	M	1000	10.3 ± 0.1	14.1 ± 0.3	-	7.1 ± 0.9	9.0 ± 0.0
L	M	2000	12.1 ± 0.1	16.9 ± 0.8	-	8.0 ± 0.4	16.9 ± 0.8
L	M	4000	17.9 ± 0.4	22.8 ± 0.1	-	8.9 ± 0.8	24.2 ± 0.9
L	A	1000	-	-	-	-	7.1 ± 0.1
L	A	2000	6.0 ± 0.8	-	-	-	8.1 ± 0.1
L	A	4000	10.1 ± 0.4	-	4.9 ± 0.8	-	13.0 ± 0.9
B	E	1000	-	-	13.5 ± 0.3	17.9 ± 0.7	-
B	E	2000	-	6.9 ± 0.8	17.1 ± 0.7	19.2 ± 0.9	-
B	E	4000	-	7.9 ± 0.1	20.9 ± 0.8	23.8 ± 0.1	-
B	M	1000	11.0 ± 0.1	-	-	-	10.9 ± 0.4
B	M	2000	13.4 ± 0.9	-	-	-	12.7 ± 0.3
B	M	400	16.8 ± 0.3	-	-	-	15.1 ± 0.8
B	A	1000	-	-	-	4.5 ± 0.3	-
B	A	2000	8.3 ± 0.3	-	-	5.7 ± 0.4	-
B	A	4000	9.9 ± 0.9	4.2 ± 0.1	-	7.1 ± 0.1	-

R	E	1000	16.3 ± 0.7	12.9 ± 0.8	11.4 ± 0.3	11.1 ± 0.3	12.9 ± 0.1
R	E	2000	19.4 ± 0.4	15.1 ± 0.7	12.1 ± 0.2	12.9 ± 0.1	16.0 ± 0.9
R	E	4000	21.0 ± 0.1	18.5 ± 0.1	14.9 ± 0.3	16.1 ± 0.8	19.1 ± 0.8
R	M	1000	-	-	-	-	11.4 ± 0.0
R	M	2000	4.9 ± 0.1	-	-	-	13.0 ± 0.1
R	M	4000	7.0 ± 0.9	9.0 ± 0.1	-	8.3 ± 0.7	14.7 ± 0.9
R	A	1000	-	14.6 ± 0.3	-	-	-
R	A	2000	-	15.5 ± 0.3	-	-	-
R	A	4000	-	19.9 ± 0.9	-	-	-
W	E	1000	19.0 ± 0.9	-	-	15.3 ± 0.2	12.9 ± 0.1
W	E	2000	20.1 ± 0.1	-	-	19.9 ± 1.3	15.1 ± 0.2
W	E	4000	21.0 ± 0.9	-	-	27.8 ± 0.0	21.2 ± 0.9
W	M	1000	-	12.0 ± 0.2	-	10.3 ± 0.1	-
W	M	2000	-	13.9 ± 0.8	-	11.5 ± 0.1	-
W	M	4000	-	16.5 ± 0.0	-	15.9 ± 0.9	-
W	A	1000	-	-	-	-	-
W	A	2000	-	4.9 ± 0.9	-	-	-
W	A	4000	-	8.0 ± 0.1	-	-	-
STD		10	18.0 ± 0.1	15.3±0.5	-	18.2 ± 0.2	-

**Note:** S/N= Serial Number, Data are means of three replicates (n = 3) ± standard deviation of three different experiments. L: Leaves, B: Bark, R: Root, W: Whole Plant E: Ethanol, M: Methanol, A: Aqueous, S.A: *Staphylococcus aureus*, E.F: *Enterococcus faecalis*, L.M: *Listeria monocytogenes*, B.C: *Bacillus*, S.E: *Staphylococcus epidermidis*, P: Parts, E: Extracts and STD: Ampicillin, - = No Activity Detected.