

Table 1: Physicochemical properties of ABEC

Physicochemical properties	<i>Cinnamomum zeylanicum</i> bark
Moisture content (%)	11.0
Extractable matters in water (%)	
Hot	8.4
Cold	5.3
Extractable matters in methanol (%)	
Hot	5.3
Cold	3.3
Heavy metals	
Lead	Not detected
Cadmium	Not detected
Arsenic	Not detected
Mercury	Not detected
Microscopic analysis	Cork cells, starch grains, thin and thick wall fibres, stone cells, resin containing cells needle shaped bark cell with crystals observed

ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*

Table 2: Phytochemical profile of ABEC

Phytochemicals	Positivity/ negativity
Saponins	Positive
Polyphenols	Positive
Alkaloids	Positive
Tannins	Positive
Flavonoids	Negative
Anthracene glycosides	Negative
Cyanogenic glycosides	Negative
Cardenoloid glycosides	Negative
Reducing sugars	Positive
Proteins	Positive

ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*

Table 3: Total polyphenol content and in vitro antioxidant activity of ABEC

	ABEC	Standard (Ascorbic acid)
Total polyphenol content (mg GAE/g dw)	11.60 ± 1.9	NA
IC ₅₀ value in DPPH assay (µg/mL)	95.08 ± 0.06	8.73 ± 0.21
IC ₅₀ value in NO inhibition assay (µg/mL)	166.29 ± 0.08	31.25 ± 0.16
FRAP value (µM)	23.49 ± 1.06	NA

ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*, NA; Not applicable

Table 4: Average grading of cells with necrotic changes in animals exposed to different doses of ABEC

Animal group	Subendocardial region of heart tissues (score out of 4)	Peripheral region of heart tissues (score out of 4)	Total score (out of 8)
Group 1	0	0	0
Group 2	4.0	3.9	7.9
Group 3	4.0	3.8	7.8
Group 4	3.8	3.3	7.1
Group 5	3.3	3.0	6.3
Group 6	2.0	2.3	4.3
Group 7	2.0	1.8	3.8

Group 1; Control, Group 2; Doxorubicin control, Group 3; Dox + 0.125 g/kg of ABEC, Group 4; Dox + 0.25 g/kg of ABEC, Group 5; Dox + 0.50 g/kg of ABEC, Group 6; Dox + 1.0 g/kg of ABEC, Group 7; Dox + 2.0 g/kg of ABEC

Grading scale; no cells with necrotic changes: 0; up to 10 cells with necrotic changes: 1; 10-50 cells with necrotic changes: 2; 50-100 cells with necrotic changes: 3; >100 cells with necrotic changes: 4

ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*, Dox; doxorubicin

Table 5: Dose response effect on reversible histological changes in myocardium of Wistar rats exposed to different doses of ABEC

Animal group	Haemorrhages	Interstitial oedema	Inflammatory infiltrations	Intracellular Vacuoles	Congestion of blood vessels	Wavy myocardial fibers
Group 1	Negative	Negative	Negative	Negative	Negative	Negative
Group 2	Positive	Positive	Positive	Positive	Positive	Positive
Group 3	Positive	Positive	Positive	Positive	Positive	Positive
Group 4	Positive	Positive	Positive	Positive	Positive	Positive
Group 5	Negative	Positive	Negative	Positive	Positive	Positive
Group 6	Negative	Negative	Negative	Positive	Positive	Positive
Group 7	Negative	Negative	Negative	Positive	Positive	Negative

Group 1; Control, Group 2; Doxorubicin control, Group 3; Dox + 0.125 g/kg of ABEC, Group 4; Dox + 0.25 g/kg of ABEC, Group 5; Dox + 0.50 g/kg of ABEC, Group 6; Dox + 1.0 g/kg of ABEC, Group 7; Dox + 2.0 g/kg of ABEC
 ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*, Dox; doxorubicin

Table 6: Effect of optimum dose of ABEC on reversible histological changes in myocardial tissues of Wistar rats

Reversible histopathological changes	Group I (Normal control)	Group II (Plant control)	Group III (Dox Control)	Group IV (Dox + ABEC)	Group V (Positive control)
Haemorrhages	Negative	Negative	Positive	Negative	Negative
Interstitial oedema	Negative	Negative	Positive	Negative	Negative
Inflammatory infiltrations	Negative	Negative	Positive	Negative	Negative
Intracellular vacuoles	Negative	Negative	Positive	Positive	Positive
Congestion of blood vessel	Negative	Negative	Positive	Positive	Negative
Wavy myocardial fibers	Negative	Negative	Positive	Negative	Negative

Dox; Doxorubicin, ABEC; Aqueous bark extract of *Cinnamomum zeylanicum*

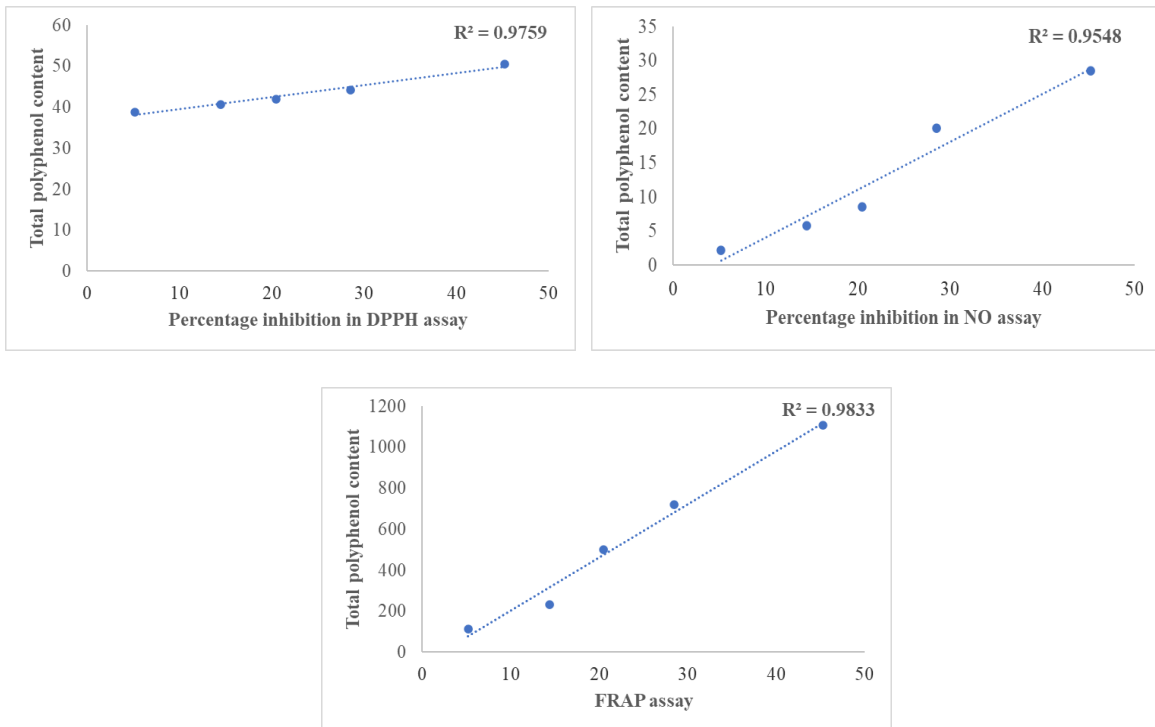


Figure 1: Linear regression analysis between total polyphenol content and the *in vitro* antioxidant assay results of ABEC