

Appendix

Appendix 1. Suppressive effect of the extract of on *Plasmodium berghei berghei* infected mice

Treatment (mg/kg)	Average % parasitemia	% Chemo-suppression
D/W 10 ml/kg	70.50 ± 1.88	-
SBEXT (200)	8.40 ± 0.78*	88.09
SBEXT (400)	10.99 ± 1.72*	84.41
SBEXT (800)	14.71 ± 1.04*	79.13
CQ (10)	9.64 ± 0.71*	86.33
ART (5)	9.13 ± 0.65*	87.05

Abbreviations: D/W, Distilled Water; SBEXT, Stem Bark Extract; CQ, Chloroquine; ART, Artesunate.

*P < 0.001, n = 6.

Appendix 2. Prophylactic effect of the extract on *Plasmodium berghei berghei* infected mice

Treatment (mg/kg)	Average % parasitemia	% Prophylaxis
D/W 10 mL/kg	55.75 ± 3.26	-
SBEXT (200)	10.24 ± 0.58*	81.63
SBEXT (400)	13.28 ± 1.19*	76.18
SBEXT (800)	20.07 ± 2.27*	64.00
PYR (1.2)	9.39 ± 1.07*	83.16

Abbreviations: D/W, Distilled Water; SBEXT, Stem Bark Extract; PYR, Pyrimethamine.

*P < 0.001, n = 6.

Appendix 3. Effect of the extract on liver function test after 28 days oral administration

Parameter	Group I	Group II	Group III	Group IV
	CONTROL	SBEXT 200mg/kg	SBEXT 400mg/kg	SBEXT 800mg/kg
ALT (IU/L)	34.00 ± 9.43	30.00 ± 11.79	32.00 ± 9.08	35.25 ± 6.25
AST (IU/L)	43.50 ± 7.31	50.40 ± 3.04	65.25 ± 13.98	68.25 ± 11.77
ALP (IU/L)	7.94 ± 0.88	7.81 ± 0.62	7.17 ± 0.64	7.16 ± 0.63
TP (g/dL)	4.03 ± 0.49	3.69 ± 0.18	3.44 ± 0.62	3.45 ± 0.17
ALB (g/dL)	2.69 ± 0.12	2.86 ± 0.31	2.42 ± 0.12	2.53 ± 0.46
TB (mmol/L)	8.65 ± 0.87	7.54 ± 0.70	7.34 ± 0.87	6.99 ± 0.69

Abbreviations: ALT, Alanine amino transferase; AST, aspartate amino transferase; ALP, alkaline phosphatase; TP, total protein; ALB, albumin; TB, total bilirubin; SBEXT, stem bark extract, n= 6

Appendix 4. Effect of the extract on kidney function test after 28 days oral administration

Parameter	Group I	Group II	Group III	Group IV
	CONTROL	SBEXT 200mg/kg	SBEXT 400mg/kg	SBEXT 800mg/kg
UREA (mg/dL)	72.99 ± 4.37	81.36 ± 1.13	83.91 ± 5.54	82.62 ± 9.72
CRE (meq/L)	1.17 ± 0.16	0.82 ± 0.11	1.05 ± 0.96	1.20 ± 0.24
Na⁺ (mmol/L)	144.74 ± 22.02	150.96 ± 8.84	147.25 ± 29.00	135.65 ± 16.14
K⁺ (mmol/L)	25.58 ± 1.42	24.27 ± 1.13	23.24 ± 0.81	25.43 ± 2.28
Cl⁻ (mg/dL)	33.50 ± 1.61	34.80 ± 3.25	29.00 ± 2.16	29.50 ± 4.92
HCO₃⁻ (mg/dL)	98.67 ± 4.80	94.20 ± 4.26	94.25 ± 1.49	90.25 ± 4.39

Abbreviations: CRE, creatinine; Na⁺, sodium; k⁺, potassium; Cl⁻, chloride; HCO₃⁻, bicarbonate; SBEXT, stem bark extract; n = 6.

Appendix 5: Effect of the extract on hematological parameters after 28 days oral administration

	Group I	Group II	Group III	Group IV
Parameter	Control	SBEXT 200 mg/kg	SBEXT 400 mg/kg	SBEXT 800 mg/kg
WBC (10 ⁶ /uL)	4.58 ± 0.49	4.58 ± 0.49	4.80 ± 0.27	4.32 ± 0.20
Lymphocytes (%)	58.44 ± 1.87	58.40 ± 2.10	60.63 ± 2.15	57.85 ± 4.00
Monocytes (%)	4.78 ± 0.37	4.96 ± 0.41	4.40 ± 0.38	4.25 ± 0.18
Granulocytes(%)	37.80 ± 2.04	36.54 ± 2.49	34.72 ± 1.60	37.30 ± 3.89
RBC (10 ⁶ /uL)	6.00 ± 0.00	6.04 ± 0.24	5.85 ± 0.17	5.95 ± 0.17
HGB (g/dL)	13.00 ± 0.53	12.48 ± 0.63	12.50 ± 0.43	13.25 ± 0.21
HCT (%)	32.60 ± 5.78	38.40 ± 1.94	36.75 ± 1.18	39.75 ± 0.85
MCV (fL)	86.66 ± 1.91	89.16 ± 0.72	84.30 ± 3.10	88.23 ± 3.46
MCH (pg)	29.56 ± 0.34	30.12 ± 0.20	29.53 ± 1.65	32.18 ± 1.59
MCHC (g/dL)	33.92 ± 0.35	32.86 ± 0.43	33.73 ± 0.49	34.00 ± 2.12
RDW (%)	14.48 ± 0.94	15.98 ± 0.83	15.78 ± 0.96	14.15 ± 1.53
PLT (10 ³ /uL)	173.40 ± 5.78	194.80 ± 9.33	176.50 ± 11.73	175.25 ± 11.68
MPV (fL)	7.92 ± 0.3	8.06 ± 0.33	8.20 ± 0.41	8.60 ± 1.07
PDW (%)	14.48 ± 0.94	11.20 ± 1.81	11.70 ± 2.25	11.65 ± 2.31
PCT (10 ⁹ /uL)	0.13 ± 0.02	0.15 ± 0.02	0.11 ± 0.01	0.12 ± 0.02

White blood cell (WBC), red blood cell (RBC), hemoglobin (HGB), hematocrit (HCT), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), red cell distribution width (RDW), platelet (PLT), mean platelet volume (MPV), platelet distribution width (PDW), plateletcrit (PCT), SBEXT= Stem bark extract, n= 6