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Effect of modified shelter arrangements on growth performance, stress and water usage of commercial broilers in hot and humid climate

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Supplementary Fig. 1. A. Asbestos roof as control (TA); B. Asbestos roof with gunny bags as screen (TAG); C. Modified asbestos with thatched roof (TH); D. Modified asbestos with thatched roof with gunny bags as screen (THG).

Supplementary Table 1. Behavioural parameters of the experimental broiler birds

Parameter	Week	Treatment				P-value
		TA	TAG	TH	THG	
Thermoregulatory behavio	oural parameter					
Panting/min	Week 3	$98.20^{cA} \pm 0.66$	$94.40^{bA} \pm 0.68$	$80.40^{aA} \pm 0.93$	$79.80^{aA} \pm 0.73$	< 0.01
	Week 4	$102.80^{cB} \pm 0.66$	$97.80^{bB}\pm0.80$	$88.80^{aB} \pm 0.86$	$86.40^{aB} \pm 0.93$	< 0.01
	Week 5	$108.20^{cC} \pm 0.73$	$100.60^{bC} \pm 0.81$	$91.40^{aC} \pm 0.51$	$89.20^{aC} \pm 0.86$	< 0.01
Percentage showing comfo	ort behavioural par	ameter				
Litter bathing	Week 3	8.43±0.10	8.25±0.57	6.79 ± 0.46	8.14 ± 0.45	0.154
	Week 4	8.69±0.11	8.52±0.55	7.05±0.48	8.4 ± 0.4	0.150
	Week 5	9.22±0.15	9.05±0.52	7.58±0.51	8.93±0.40	0.145
Wing flapping	Week 3	27.03±0.49	29.35±0.90	26.73±0.41	26.89 ± 0.35	0.087
	Week 4	27.53±0.54	29.85±0.86	27.22±0.37	27.38±0.31	0.078
	Week 5	28.02±0.58	30.34±0.81	27.72±0.32	27.88±0.26	0.070
Preening	Week 3	8.01±0.32	6.19±0.34	7.96±0.72	8.89±0.64	0.090
	Week 4	9.11±0.22	7.28±0.24	9.06±0.82	9.99±0.74	0.111
	Week 5	10.21±0.12	8.38±0.14	10.16±0.92	11.09±0.84	0.142
Percentage showing maint	enance behavioura	l parameter				
Feeding	Week 3	13.51±1.26	13.85±0.61	15.96±0.68	17.36 ± 0.92	0.104
	Week 4	13.81±1.31	14.15±0.66	16.26±0.73	17.66±0.87	0.112
	Week 5	14.11±1.36	14.45±0.71	16.56±0.78	17.96±0.81	0.121
Drinking	Week 3	50.89±1.45	46.45±2.02	42.35±2.03	40.92±2.16	0.068
	Week 4	52.77±1.57	48.33±2.14	44.23±1.90	42.80±2.28	0.075
	Week 5	54.64±1.70	50.20±2.27	46.10±1.78	44.67±2.41	0.083

 $^{^{}abc}$ Means with different superscripts in a row differ significantly (P<0.01). ABC Means with different superscripts in a column differ significantly (P<0.01).