

Heat-stress Mitigating Potential of PHYTOCEE® in Poultry : Effect on Body Weight, FCR, and Gut Integrity

OBJECTIVE

To evaluate the anti-stress effects of PHYTOCEE® in broiler chicken.

MATERIALS AND METHODS

A total of 672-day-old Cobb 500 broiler chicks were randomly assigned to four groups viz. G1: Normal control (NC), G2: Heat stress control (HSC), and G3: PHYTOCEE® (500 g/ton), and G4: PHYTOCEE® (1000 g/ton). The birds in G2, G3, and G4 were subjected to heat stress (35°C 8 h/day from 9:00 AM to 5:00 PM) from day 28 to 42. Effect of PHYTOCEE® on body weight, feed conversion ratio (FCR), and gut barrier integrity were evaluated.

RESULTS

Effect of PHYTOCEE® on body weight and FCR in broiler chickens on day 42

Parameters	G1-NC	G2-HSC	G4-PHYTOCEE®-500	G4-PHYTOCEE®-1000
BW, g	3638.80 ± 31.26	3323.57 ± 21.20	3348.16 ± 13.07	3378.26 ± 2085
FCR	1.577 ± 0.02	1.679 ± 0.07	1.625 ± 0.05	1.570 ± 0.065

Values are expressed as Mean ± SEM

BW, Body weight; FCR, Feed conversion ratio

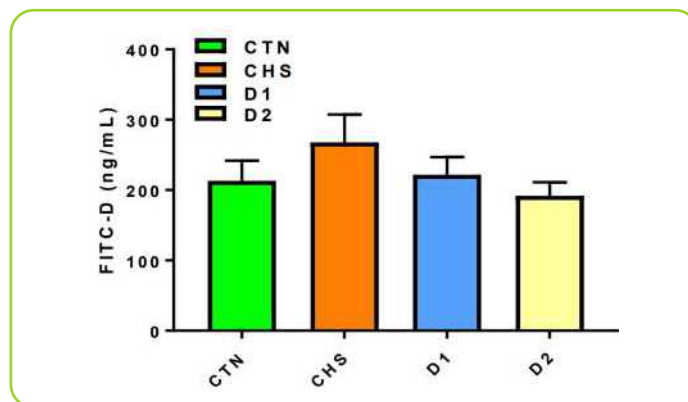


Figure: Effect of PHYTOCEE® on gut barrier integrity in broiler chickens

C, Control; TN, thermoneutral; HS, Heat stress; D1, PHYTOCEE® - 500; D2, PHYTOCEE® - 1000

CONCLUSIONS

Heat stress induces leaky gut, and thereby affects growth performance parameters. Supplementation of PHYTOCEE® demonstrated anti-stress effects through restoration of gut barrier integrity and improvement in growth performance of broiler chickens.

OUTCOME

Hence, PHYTOCEE® could be used as a natural adaptogen to mitigate the negative effects of heat stress in broiler chickens.