

## Growth Performance Augmentation Efficacy of Ingredient of PHYTOCEE® in Broilers : *Withania somnifera* (Ashwagandha)

### OBJECTIVE

To evaluate the effects of using *Withania somnifera* roots on the performance parameters in Hubbard strain broiler chicken.

### MATERIALS AND METHODS

A total of five hundred one-day-old chicks were randomly divided into 25 separate floor pens each comprising 20 chicks and five pens (replicates) per treatment group in a completely randomized design. Basal broiler's diet supplementation with 0, 0.11% antibiotic, 1.25, 2.5 or 5.0% *Withania somnifera* roots (WSR) was investigated. The performance parameters viz. weight gain (g), FCR, and mortality (%) along with dressing (%) were evaluated on day 28 and 42.

### RESULTS

Effect of *Withania somnifera* roots on performance parameters and dressing percentage in broiler chicken

Treatments	Weight gain (g)		Feed: gain ratio		Mortality(%)		Dressing (%)*	
	28 d	42 d	28 d	42 d	28 d	42 d	28 d	42 d
Negative control	908 <sup>c</sup> ± 3.00	1709 <sup>c</sup> ± 3.35	1.68 <sup>a</sup> ± 0.13	2.21 <sup>a</sup> ± 0.16	1.50	2.00	46.90 <sup>b</sup> ± 01.52	55.10 <sup>b</sup> ± 02.29
Positive control	988 <sup>ab</sup> ± 3.08	1810 <sup>ab</sup> ± 4.50	1.51 <sup>ab</sup> ± 0.11	2.01 <sup>ab</sup> ± 0.10	1.00	1.00	52.81 <sup>a</sup> ± 02.00	67.17 <sup>a</sup> ± 02.52
WSR (%) 1.25	950 <sup>b</sup> ± 2.50	1770 <sup>b</sup> ± 3.30	1.54 <sup>b</sup> ± 0.10	2.05 <sup>b</sup> ± 0.15	1.00	0.50	51.60 <sup>a</sup> ± 02.10	66.35 <sup>a</sup> ± 02.09
2.50	995 <sup>a</sup> ± 3.02	1815 <sup>a</sup> ± 3.33	1.46 <sup>c</sup> ± 0.15	1.94 <sup>c</sup> ± 0.16	0.50	0.50	53.90 <sup>a</sup> ± 02.30	68.36 <sup>a</sup> ± 02.21
5.00	1009 <sup>a</sup> ± 3.09	1853 <sup>a</sup> ± 3.40	1.43 <sup>c</sup> ± 0.10	1.91 <sup>c</sup> ± 0.10	0.50	0.50	53.95 <sup>a</sup> ± 01.99	68.59 <sup>a</sup> ± 02.50

<sup>a-c</sup> Means with different letters in column are different (p ≤ 0.05)

### CONCLUSIONS

At 28 and 42 days of age, birds fed diets supplemented with 2.5 or 5.0% *Withania somnifera* roots had greater body weight than those fed diets with 1.25% *Withania somnifera* roots and negative control.

#### Reference:

Ansari J, Khan S H, Haq A U *et al.* Effect of supplementation of *Withania somnifera* (Linn.) Dunal roots on growth performance, serum biochemistry, blood hematology, and immunity of broiler chicks. Journal of herbs, spices & medicinal plants. 2013 Apr 3;19(2):144-58.