The aim of this study was to evaluate the biochemical, hematological and behavioral profile of hens supplemented with a commercial Panax ginseng product during initial hen’s laying cycle. The experimental design was completely randomized with five treatments which consisted in different levels of P. ginseng (T1: control, without P. ginseng; T2: 1.9; T3: 3.8; T4: 5.7 and T5: 7.6 mg/hen/day) in a total of 70 birds housed in 35 cages with seven replicates per treatment. The basal diets were prepared using corn and soybean meal in agreement with the nutritional values established by the breeder manual. To predict the effect of different levels of P. ginseng on biochemical and hematological traits the regression analysis was used. The Dunnett test was used in each P. ginseng levels to compare to the control treatment. Ethological parameters were evaluated using chi-square analysis.

No significant difference was found in hen’s hematological profile in all periods evaluated. In metabolic parameters was observed higher level of phosphorus in hens receiving 7.6 mg/hen/day of P. ginseng at second and third period and albumin was observed only in the last period when compared to the control group. Cholesterol level was higher in hens receiving 1.9 and 3.8 mg/hen/day of P. ginseng in comparison with the control treatment. In ethological parameters vigilant behavior was more frequent in control group, preening in the group receiving 7.6 mg/hen/day and drinking in the intermediate levels of P. ginseng (3.8 and 5.6 mg/hen/day). The supplementation with P. ginseng up to 7.6 mg/hen/ day do not change the hematological profile. Only small variations in the metabolic parameters and behavior frequency of the hens receiving ginseng could be expected.

**Abstract**

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**Keywords**

Physiology, Phytongenic additive, Welfare.