

Correlation of the Biometric Parameters of Eggs

Authors : S. Zenia, A. Menasseria, A. E. Kheidous, F. Lariouna, A. Smal, H. Saadi, F. Haddadj, A. Milla, F. Marniche

Abstract : The objective of this study was to estimate the correlation ship between different pheasant external egg quality traits. A total of 938 eggs were collected. Egg weight (g), egg length (mm), egg width (mm), volume (cm³), shape index egg, surface area and water loss were measured. The overall mean values obtained for the different variables are respectively $29.2 \pm 2,24$, $43.01 \pm 1,84$, $34.05 \pm 1,44$, 25.63 ± 2.88 cm³, $79.00 \pm 3\%$, 68% and 13%. Concerning studied regressions, it was considered only the most important regressions. Those that show significant links between the different parameters studied. The ANOVA procedure was applied to estimate correlations for the examined traits. The weights of the eggs being observed before incubation and before hatching are linearly correlated with a positive correlation coefficient of order 0.75. Egg length and the weight before incubation had a good and positive correlation with a coefficient $r = 0.6$. However, density had high and negative correlations with egg height $r = -0.78$. Shape index had a good linear and negative $r = -0.71$ correlation with water loss.

Keywords : correlation, egg, morphometry of eggs, analysis of variance

Conference Title : ICCSS 2016 : International Conference on Computational and Statistical Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : April 19-20, 2016