



where, females had significant higher values than males.

5. Heritability estimates for BW and SL ranged from low to high (0.22 and 0.95) regardless of the estimation method. BW, SL and GR had higher dam component heritability than sire heritability estimates.
6. Heritability estimates of GPX based on sire, dam and sire+dam variance components were 0.45, 0.55 and 0.51, respectively.
7. Regardless of estimation method, heritability estimates of blood constituents at six weeks of age ranged from 0.25-0.76. Also, heritability estimates of GPX and most blood constituents based on maternal being considerably larger than the paternal heritability estimate.
8. The phenotypic correlations between BW, GR<sub>2-4</sub> and SL were positive and high in magnitude.
9. GPX enzymes activity and most of blood constituents are genetically and phenotypically correlated with each other with high and significant  $\hat{\sigma}^2_{\text{t a}}$