

## **EFFECT OF DEFICIENT MINERAL SUPPLEMENTATION ON BLOOD METABOLITES IN PRE-PARTUM BLACK BENGAL DOES**

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### **ABSTRACT**

Eighteen healthy 1<sup>st</sup> parity, non-pregnant Black Bengal does were taken on the basis of body weight in the experimental goat farm, ERS-IVRI, Kalyani, West Bengal. Goats were reared under semi-intensive management. They were allowed to graze 6-7 h along with supplementation of concentrate @ 300 g/day/animal. Goats were divided into three groups *viz.* Group I, II and III supplemented with 0%, 2% CMM and 2% ASMS, respectively. Animals were mated and necessary blood samples were taken study the different blood metabolites during pregnancy stage at monthly interval. Overall Mean NEFA level in group I, II and III was 0.244±0.026, 0.245±0.056 and 0.237±0.028 mmol/L respectively. NEFA level differed significantly (P<0.05) among different groups. Overall Mean SGPT level in group I, II and III was 33.47±2.4, 36.45±3.32 and 34.89±3.10 IU/l respectively. Overall Mean Estrogen level in group I, II and III was 98.45±4.21, 110.94±4.32 and 105.87±3.27 pg/ml respectively. Estrogen level increased significantly (P<0.05) in supplemented groups. Overall Mean Progesterone level in group I, II and III was 7.08±1.42, 8.89±1.62 and 8.56±1.84 ng/ml respectively.

**KEYWORDS:** Black Bengal Goats, Pre-Partum, Blood Metabolites, Area Specific Mineral Supplements