

Mineral Status of Feeds and Fodder and Its Subsequent Effect on Plasma of Livestock and Its Products in Red Lateritic Zone of West Bengal, India

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Abstract : A survey was carried out in red lateritic zone of West Bengal to compare the mineral status in plasma of livestock grazing over red lateritic region. Sufficient number of samples of soil, feeds, fodder and blood were collected from four districts of red lateritic zone namely, West Midnapore, Birbhum, Bankura and Purulia respectively. The samples were analysed for Calcium (Ca), Phosphorus (P), Copper (Cu), Zinc (Zn), Manganese (Mn) and Iron (Fe). Concentration of Cu, Mn and Fe in soil were above the minimum critical level, whereas, Zn deficiency is wide spread in red lateritic soil. Paddy straw is deficient in Ca, P, Zn and Mn in the region. Green fodders are also deficient in P, Cu, Zn. The richness of iron (Fe) in soil, feeds, fodder and tree leaves is the characteristics of this region. Phosphorus is deficient in plasma of all categories of livestock with the exception of bullock. Cu is deficient in plasma of calf. Plasma Mn and Fe were higher ($p < 0.01$) in the animals of red lateritic zone. The study reveals that the overall deficiency of phosphorus in different categories of livestock and there is need of dietary supplementation.

Keywords : mineral, red lateritic zone, grazing livestock, plasma

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