

Effect of mineral and vitamin supplementation on milk production and reproductive performance in graded murrah buffaloes under field conditions

P.P. Singh, Neeraj, Reeta Mishra and B.P.S. Raghubanshi

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ABSTRACT : The on farm trial (OFT) was conducted to assess the effect of oral mineral and vitamin supplementation on production performance and reproductive traits of lactating graded murrah buffaloes during different seasons. The buffaloes in their 2nd or 3rd lactation were divided into two uniform groups of 10 each, on the basis of Farmers' practice (T₁) and Recommended practice (T₂) groups. After one month of calving, all T₂ group buffaloes were dewormed with Fenbendazole and supplemented with chelated calcium and phosphorus (100 gm/day/buffalo) and chelated mineral mixture (50 gm/day/buffalo) for four months (120 days). The overall increase in milk production in T₂ group was 24.64, 28.23 and 31.08 per cent in rainy, winter and summer seasons respectively, as compared to T₁ group. The conception rate was higher in winter season and lesser during rainy and summer seasons in both groups, while overall conception rate was higher in T₂ group, as compared to T₁ group. The study showed the beneficial effect of oral supplementation of minerals and vitamins on production and reproduction performance in lactating buffaloes.

Key Words: Buffalo; milk production; mineral; supplementation; vitamin.