DIETARY CALCIUM REQUIREMENT OF BREEDER TURKEYS FOR EGG PRODUCTION, FERTILITY AND HATCHABILITY IN TROPICS

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A total of 96 Beltsville small white breeder turkeys (24 toms + 72 hens), belonging to the same hatch were selected and randomly divided into four treatment groups with three replicates of 2 toms and 6 hens per group. They were reared on open sided, deep litter pens and fed with four different dietary calcium levels of 2.0 per cent, 2.25 per cent, 2.5 per cent and 3.0 per cent with a constant metabolizable energy level of 2900 K cal/kg and constant level of 14 per cent dietary protein. Calcium and phosphorus ratio was maintained constant. They were utilized for a feeding trial of 12 weeks period from 34 to 45 weeks of age. Beltsville small white breeder turkeys fed with 25 g/kg (2.5 per cent) dietary calcium gave significantly (P=0.01) higher egg production (48.74 per cent) compared to other treatment groups of 2.0 per cent (36.03 per cent), 2.25 per cent (39.10 per cent) and 3.0 per cent (44.10 per cent) level of dietary calcium. Turkey breeder diets containing 2.5 per cent level of calcium gave significantly (P=0.01) higher per cent of fertility (83.98 per cent), higher percentage of hatchability on total eggs set (64.96 per cent) and fertile eggs set (75.85 per cent).

Key words: Dietary calcium, egg production, fertility, hatchability, turkey breeders