Effect of Phytase on Semen Quality in Adult Male Turkey

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Abstract

The present study has been conducted to examine the effect of microbial phytase supplementation with diets on male reproductive performance in adult turkey tom. Forty adult turkey males (aged 36 weeks, weighted 3.755 ± 0.165 kg) have been assigned in to two experimental groups (20 males each). First group has been fed on standard provender for eight weeks and served as control, second group has been fed on standard provender supplemented with phytase (1000 PTU) for eight weeks and served as treated group .Two weeks intervals, semen has been collected from the males and semen analysis was qualified. A fter 8 weeks, male turkeys have been anesthetized and testis were removed, and testis weight and size were measured. The results of phytase treated groups revealed significant increase of testis weight and size compared with control. Semen evaluation of treated group recorded significant increase of ejaculate volume, sperm concentration, ejaculate sperm number, individual and mass sperm motility, and percentage of live sperm, whereas percentage of dead sperm and abnormal sperm recorded significant decrease in comparison with control .It can be concluded that dietary supplementation of microbial phytase has potent improvement role in reproductive performance of adult turkey tom.