Abstract:

This study was conducted to evaluate, for the first time in Sudan, captive ostrich (*Struthio camelus camelus*) chick rearing. The parent red-necked (*Struthio camelus camelus*) flock (5 males and 7 females, 2-3 years old, at the second season of production) was stocked from the wild (Dindir National Park). Accommodation was in one breeding pen and feeding plane was 14% crude protein and 09.23 MJ ME/ kg. Thirty-eight hatched red-neck ostrich chicks, harvested in batches from a ratite incubator/hatcher, were used in this rearing trial. Hatching chicks, after spending 3-4 days in the brooder, were considered starters for eight weeks before becoming growers for other eight weeks. Starters and growers were fed 23% and 16% crude protein and 14.75 and 10.11 MJ ME/kg, respectively. Each chick was weighed initially on the first day of the starter ration feeding and, thereafter, weekly until the end of the grower rearing period. Feed intake (kg/flock) was recorded on a daily basis by weight difference. The overall average performance values of starter ostrich chicks for 8 weeks (initial -8 weeks) were 4267g, 156.21 g and 01.21, for body weight, average daily gain and feed conversion ratio, respectively. The average daily dry matter intake was 148.51 g. The overall average performance values of grower ostrich chicks for 8 weeks (8-16 weeks) were 13443g, 200 g and 2.44, for body weight, average daily gain and the feed conversion ratio, respectively. The average daily dry matter intake was 455 g. The starter and grower periods were characterized by high growth rates and high feed conversion ratios. Starter ostrich chick mortalities, due to omphalitis and heat stress, were 10% of the flock. Mortalities during chick grower period were due to strangulation, impaction, injury and leg deformities. Total mortalities were 37% of the flock. Chick performance was fair compared to red-necked and African black starter/grower chicks.