Summary

This study was conducted in the poultry house of Animal and Poultry Management and Wealth Development Department at the Faculty of Veterinary Medicine Beni-Suef University, Egypt at April 2016 to investigate the effect of rearing broilers under two different stocking densities and using Protexin® probiotics on the performance and welfare. A total number of 240 chicks were purchased from a commercial hatchery and brooded at 33ºC using electric heaters for the first week of age, then were randomly distributed at the end of the first week into four groups with three replicates of each in 12 floor pens -each measured 1m × 1.6 m- with a new wood shaving litter material to overcome the possible deteriorated air and litter quality that occur during the brooding period as following, Gp1, 48 chicks (16 bird/ replicate) were reared at density of 10 bird/m^2 without probiotic supplementation "control group", Gp2, 48 chicks (16 bird/ replicate) were reared at density of 10 bird/m^2 with probiotic supplementation, Gp3, 72 chicks (24 bird/ replicate) were reared at density of 15 bird/m^2 without probiotic supplementation and Gp4, 72 chicks (24 bird/ replicate) were reared at density of 15 bird/m^2 with probiotic supplementation, and the results showed that: