Selected fertility of West African Dwarf (WAD) bucks experimentally infected with Trypanosoma congolense was investigated in a study that lasted 16 weeks. These parameters were libido, scrotal length and circumference as well as semen characteristics - volume, colour, mass activity, motility, live/dead ratio and sperm concentration. The animals served as their own control, the data obtained at the pre-infection period were regarded as the control with which the post-infection data were statistically compared.

There was a significant reduction in the libido score from the control mean value of 9.25 ± 0.96 to a minimum value of 6.00 ± 1.33 at the 10th week post-infection (P < 0.05). The changes in the scrotal length and circumference before and after infection were minimal and insignificant (P> 0.05). The mean percentage motility and live/dead ratio before infection were 92.06 ± 3.83 % and 96.87 ± 1.5 % respectively. These were significantly reduced to minimum values of 58.75 ± 6.3 % and 60.0 ± 5.00 % at the post-infection period, respectively (P<0.05). The concentration of the spermatozoa declined significantly from the pre-infection mean of 2.19 ± 1.87.10^9 ml^{-1} to a minimum of 1-28 ± 0.09.10^9 ml^{-1} (P< 0.05). The mean percent of abnormal spermatozoa increased significantly from the baseline value of 4.92±2.45 to 37.13±8.12 by the week 10 post-infection. The results show that Trypanosoma congolense caused poor semen quality, and reduced libido. Therefore, infertility is very imminent in Trypanosoma congolense infected bucks with accompanied economic loss, especially in tsetse-infected areas of the Sub Saharan Africa. Therefore, screening for trypanosomiasis in the course of investigation of infertility in farm animals in these areas should be a welcome initiative.