

Susceptibility of Nigerian West African Dwarf and Red Sokoto goats to a strain of *Trypanosoma congolense*

Mohammed Ignatius Adah, Ebenezer Babatunde Otesile and Richard A. Joshua

Department of Veterinary University of Ibadan, Nigeria

ABSTRACT

West African Dwarf (WAD) and Red Sokoto (RS) goats were experimentally infected with the Kafanchan strain of *Trypanosoma congolense* and the course of the infection was monitored. The organism was pathogenic and produced fatal disease in the goats, which was characterized by rapid progressive anaemia, leucocytosis, weight loss and death. All RS goats died within 11 days of infection, and had a mean reduction in packed cell volume (PCV) of 11 %. In West African Dwarf goats, one death occurred on Day 13 post-infection with a mean drop in PCV of 9%. Statistically significant ($P < 0.05$) mean reductions in values of PCV, haemoglobin and red blood cell counts were observed between the infected and control animals of both breeds, and also between the infected WAD and infected RS goats. The anaemia produced was macrocytic. Leucocytosis characterized by neutropenia and lymphocytosis was observed among infected WAD goats, but leucopenia characterized by neutrophilia and lymphopenia was observed in infected RS goats. Infected WAD goats recorded some positive unit weight gain in spite of the infection. It was concluded that the RS breed of goats is more susceptible to *T. congolense* infection than the WAD breed.

Keyword