The results presented herein demonstrate development of anaemia in 4 groups of Balb/c mice exposed to varying numbers of cercariae of the Kenyan strain of Schistoma mansoni. Haemoglobin, micro-haematocrit and erythrocyte levels were determined at one-month intervals during this study. Coomb's test, complement fixation test and Enzyme Linked Immunosorbent Assay (ELISA) were carried out to determine the possible involvement of an immune response in this pathophysiological condition.

Four weeks post infection; the haematological indices in infected and control mice were not different. But by 8 weeks post infection there were significant reductions in erythrocytes counts, haemoglobin concentrations and micro-haematocrit values in infected mice. These decreases were dose dependent and continued up to the 12th week. However, corpuscular indices (MCHC) and MCV) were not significantly depressed in all the four infected groups.

Anaemia was normocytic normochromic in all infected mice by 8 weeks post infection. Twelve weeks post infection; a microcytic hypochromic anaemia was evident in heavily infected mice particularly in group five. Coomb's test failed to detect immunoglobulin or complement on the surface of red blood cells from anaemic mice complement fixation test demonstrated an agglutinating antibody which lysed normal erythrocytes in sera from immune animals. ELISA test showed significant elevation of erythrocyte- associated antibody in sera of infected mice. It suggested that schistosome eggs may be activating erythrocytes and their antigenic determinants exposing them to binding anti-erythrocyte antibody. Such a phenomenon may be suggestive of the involvement of an immune response in the induction of anaemia in murine schistosomiasis.