**Abstract**

The freshwater fish *Channa striata* were exposed to lethal concentration of *Cleistanthus collinus* plant extract (10 mg L-1) 48 h. At the end of the 48 h exposure period, blood samples were taken from the control and experimental fish. Blood was assayed for selected haematological parameters (haematocrit, haemoglobin, red blood cell counts, white blood cells counts and erythrocyte sedimentation rate). The derived haematological indices of mean corpuscular volume (MCV), mean corpuscular haemoglobin (MCH) and mean corpuscular haemoglobin concentration were calculated. Significant decreases observed RBC (P<0.05), Hb content (P<0.01)

PCV (P<0.01) WBC (P<0.05) were observed during the exposure period.