

Analysis of 100 field cases of confirmed bovine tick-borne diseases clearly brought out the importance of East Coast fever (ECF), which was responsible for over 70% of the cases. There were major differences in clinical signs of ECF on the one hand and anaplasmosis and babesiosis (*B. bigemina*) on the other. The differences were more obvious in the blood picture where ECF was seen to be a disease of the leukocyte with extreme leukopenia as the most constant finding while anaplasmosis and babesiosis were seen to be diseases of the erythrocyte with extreme regenerative anaemia. The causes of the leukopenia in ECF and anaemia in anaplasmosis and babesiosis and difficulties in diagnosis of babesiosis in general are discussed.