

# Antibodies to *Leishmania donovani* in animals in a kala-azar endemic region in eastern Sudan: a preliminary report.

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## Abstract:

The prevalence of antibodies against *Leishmania donovani* in selected domestic and wild animal species in 2 villages in Sudan with active *L. donovani* transmission in humans was investigated. Screening of domestic animals (donkeys, cows, sheep, goats, camels and dogs) with the direct agglutination test (DAT) detected reaction rates above the cut-off titres in donkeys (68.7%), cows (21.4%) and goats (8.5%), and which were also found in wild rats (5.5%). Sera of sheep, camels and dogs had a weak agglutination reaction below the cut-off titre. Testing of the same sera by enzyme-linked immunosorbent assay (ELISA), against a lysate of *L. donovani* promastigotes, showed reaction rates above the cut-off optical density in cows (47.6%), goats (13.6%), and in rats (4.1%). No *Leishmania* parasite was isolated from spleen, liver, bone-marrow or spleen of Nile rats.