



## Current status of Brucellosis and helminthosis in cattle and goats in the southwestern rangeland zone of Uganda

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### ABSTRACT

*Objectives of study:* Between July 2008 and September 2009, a cross-sectional study was undertaken with the main aim of establishing the current status of Brucellosis and Helminthosis in cattle and goats in the nine districts comprising the Southwestern Rangeland Zone (SWRZ) of Uganda.

*Methodology and results:* Blood and faecal samples were collected from a total of randomly selected 912 cattle and 530 goats in the nine districts of Sembabule, Kiruhura, Rakai, Lyantonde, Isingiro, Mbarara, Bushenyi, Ntungamo and Ibanda. Serum was subsequently prepared from the blood samples and antibody titres for Brucellosis were established using the Indirect Enzyme Linked Immuno-sorbent Assay (ELISA) procedure. All the faecal samples were examined for Strongyle eggs using the standardized procedure of Mac-master technique. This study established that Kiruhura and



Isingiro districts had the highest prevalence of cattle Brucellosis with sero-prevalences of 41 and 34%, respectively; while Ntungamo district had the lowest sero-prevalence of 5%. The sero-prevalence of Brucellosis in goats was highest in Rakai and Isingiro districts with sero-prevalences of 46 and 27%, respectively; while Ntungamo district had a sero-prevalence of 1.9%. Cattle and goats more than 24 months old had the highest sero-prevalence of at least 50%. Trichostrongylus, Strongyloides and Haemonchus eggs were the most commonly identified, making these worm species the commonest cause of helminthosis which could be due to lack of host specificity.

*Conclusion and application of findings:* These findings will contribute to the improvement of strategies for the control of Brucellosis and Helminthosis in cattle and goats in SWRZ of Uganda.

**Key words:** Brucellosis, Helminthosis, Cattle, Goats, Rangeland