## **Abstract**

In an investigation primarily to determine the prevalence of bovine tuberculosis in slaughter cattle in Kenya, smears of tuberculous lesions and of cultures in BBL<sub>TM</sub>MGIT<sub>TM</sub>Mycobacterium growth indicator tubes were stained by Ziehl-Neelsen procedure and examined microscopically. Sections of formalin- fixed lesions were stained with the periodic acid Schiff reagent and examined for yeast fungi. Of the 176 animals with tuberculoses lesions, dimorphic yeast fungi were detected, as acid fast negative cell, in 70 (39.8 %) cases either alone (42, 23.8 %) or concurrent with acid fast bacilli (28, 15.9 %) in lesion smears. Yeast fungi were also detected in some BBL<sub>TM</sub> MGIT<sub>TM</sub> culture smears and in some tissue sections. The fungi comprised of *Paracoccidiodes brasiliensis* or *Blastomyces dermatitidis* species. The present report documents native *P. brasiliensis* infections outside the endemic region, and *B. dermatitidis* infection in a livestock species of animal. It also speculates infections in other animals, including humans, in the region of origin of the infected animals. The findings emphasize further the importance of including dimorphic yeast fungi infection in the differential diagnosis of bovine tuberculosis during meat inspection in the region.