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Prevalence of Bovine Brucellosis and Tuberculosis in Benin

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Abstract

Livestock and especially milk production plays a predominant role in reducing poverty and enhance the economic growth. This current study is the prevalence of the main diseases related to dairy production in cattle herds. Its targets three pathologies: brucellosis and tuberculosis that have a great economic and health importance in the livestock yield. A first part of the study carried out in 2015, was to evaluate the prevalence of brucellosis and bovine tuberculosis in Benin in the cities of Parakou, Nikki, Tchaourou, Gogonou and Malanville. Thus, 525 sera were collected from September to December 2015 and were tested by the indirect enzyme-linked immunosorbent assay (ELISA) for the specific detection of anti-brucella antibodies. *B. Abortus* was detected in 77 cases, with the prevalence of 14.66 %. 182 milk samples have been taken in the same period and each one was submitted to the three major stages of Ziehl-Neelsen staining for the detection of bacilli responsible for bovine tuberculosis. Therefore, 67 (36.81 %) were positive. Bovine tuberculosis is present in the 3 communes of the department of Borgou and in one commune of the Department of Alibori (Malanville). We obtained a prevalence of 12.5 % in Tachourou; 9.8 % in Parakou; 8.33 % in Nikki, 0 % in Gogounou and 32.11 % in Malanville. This study confirms the main diseases related to dairy production in cattle herds. *Brucella abortus* is one the species responsible for bovine brucellosis in the communes studied. The Treatment of bovine tuberculosis is contraindicated and an emphasis should be placed on prevention and control measures. The best management of herds is very important for the development of livestock especially in Benin where the disease is really neglected

Keywords: Antibodies, bacilli, brucellosis, prevalence, Tuberculosis