

Determining the Presence of Brucella abortus Antibodies by the Indirect Elisa Method in Bovine Bulk Milk and Risk Factors in the Peri-Urban Zones of Bamenda Cameroon

Authors : Cha-ah C. N., Awah N. J., Mouiche M. M. M.

Abstract : Brucellosis is a neglected zoonotic disease of animals and man caused by bacteria of genus Brucella. Though eradicated in some parts of the world, it remains endemic in sub-Saharan Africa including Cameroon. The aim of this study was to contribute to the epidemiology of brucellosis in the North-West region of Cameroon by detecting the presence of anti-Brucella antibodies in bovine bulk milk as this serves as a route of transmission from animals to man. A cross sectional study was conducted to determine the prevalence of Brucella abortus antibodies in bovine bulk milk in the peri-urban zones of Bamenda. One hundred bulk milk samples were collected from 100 herds and tested by milk I-ELISA test. The conducted study revealed the presence of anti-Brucella abortus antibodies in bovine bulk milk. The study revealed that bovine brucellosis is widespread in animal production systems in this area. The animal infection pressure in these systems has remained strong due to movement of livestock in search of pasture, co-existence of animal husbandry, communal sharing of grazing land, concentration of animals around water points, abortions in production systems, locality of production systems and failure to quarantine upon introduction of new animals. The circulation of Brucella abortus antibodies in cattle farms recorded in the study revealed potential public health implication and suggest economic importance of brucellosis to the cattle industry in the Northwest region of Cameroon. The risk for re-emergence and transmission of brucellosis is evident as a result of the co-existence of animal husbandry activities and social-cultural activities that promote brucellosis transmission. Well-designed countrywide, evidence-based studies of brucellosis are needed. These could help to generate reliable frequency and potential impact estimates, to identify Brucella reservoirs, and to propose control strategies of proven efficacy.

Keywords : brucellosis, bulk milk, northwest region Cameroon, prevalence

Conference Title : ICASRANRD 2018 : International Conference on Animal Science, Ruminant Animal Nutrition and Recent Developments

Conference Location : Toronto, Canada

Conference Dates : June 21-22, 2018