Trypanosomosis and Cattle Health Management in Three Regions of Burkina Faso

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Abstract

Trypanosomosis is an important disease affecting humans as well as animals. Despite several methods applied for many years, the control of this disease remains a big constraint to livestock productions in tropical areas. The objective of this study was to assess the importance of trypanosomosis among diseases in cattle in Burkina Faso, mainly in tsetse challenged areas and to capture information how farmers apply methods to control the disease. A survey has been carried out in 3 regions of Burkina Faso, one tsetse free region in the North and 2 tsetse challenged regions in the South-West and the West. 134 Cattle breeders were interviewed individually with a questionnaire consisting of open and closed questions. The results indicate that among the 16 diseases mentioned by cattle breeders, trypanosomosis is the most important one in tsetse challenged areas. More than 50% of breeders in the South-West and the West ranked trypanosomosis in the first position. Pure Zebu cattle are much more susceptible to the disease than the taurine Baoule cattle or Baoule × Zebu crosses. Zebu cattle are preferred by cattle breeders for their body size and draft power. Chemoprophylaxis/chemotherapy is widely used as a control method as well as insecticides to fight the flies. Farmers feel that the effects of some common trypanocidal drugs are less good than they used to be. Blood samples have been collected from cattle during the survey to state the level of admixture of Baoule breed and frequencies of alleles in trypanotolerance candidate genes. Crossing susceptible breeds with the trypanotolerant ones like the Baoule cattle can help to reduce trypanosomosis occurrence in cattle. This can then be used as part of an integrated control method.

Keywords: Baoule, Burkina Faso, cattle, trypanocide, trypanosomosis, trypanotolerance, Zebu