

## Healthy Aging Research

# Susceptibility and prevalence of the main zoonotic diseases in Tonpki region, Western Ivory Coast, West Africa

### N'Goran Edouard

Peleforo Gon Coulibaly University, Ivory Coast



#### Abstract

Epidemiological monitoring system is a major challenge in a developing country mainly in west Africa. Therefore, zoonotic diseases bring about public health issue in the mostly countries where screening system of the breeding animal is not well enough controlled. In order to have a better knowledge of zoonotic diseases, the interest to investigate the main breeding animal diseases has been undertaken in slaughterhouses of three departments (Man, Biankouma and Danané) from Tonkpi region western of Côte d'Ivoire. For this purpose, investigation was carried out on cattle carcass by the post-mortem and qualitative inspection approach. The study showed that pathologies observed were classified into three groups: bacterial infection (tuberculosis, emphysema and brucellosis), parasitic diseases (distomatosis and meninococcosis) and unidentified infections. However, these diseases infection rate in the department of Man (4.50%) was significantly (p<0.05) higher than those from Danané (3.99%) and Biankouma (3.93%) departments. Pathologies' identification showed that parasitic diseases were the most observed (64.87%), followed by bacterial infections (33.46%) and unidentified diseases (1.67%). Distomatosis (p<0.05) frequency recorded is up to 62.92%, showing that it was the most observed disease in the Tonpki region compared to others such as contagious bovine pleuropneumonia (17.47%), echinococcosis (1.95%), bovine tuberculosis (12.08%), emphysema (3.62%), brucellosis (0.28%) and unidentified pathologies (1.67%)). In addition, pathologies correlation matrix showed that distomatosis is positively and significant (p<0.05) correlated with tuberculosis. This result shows the higher susceptibility of tuberculosis (major zoonotic disease) in the Tonpki's region. However, serological analysis and other studies should be done to corroborate the present results and better explore other diseases, respectively.

#### Biography

N'Goran Edouard has completed his PhD in Genetic and animal breeding from Peleforo Gon Coulibaly University, Ivory Coast. He is a lecturer in genetics and animal breeding at Peleforo Gon Coulibaly University (UPGC), Korhogo, Ivory Coast. Also, he is Deputy Director (Vice-Dean) in charge of Research at Biological Sciences Training and Research Unit (UFR) of UPGC of Korhogo. He has over 12 years of experience in research and development in animal genetic and health by: i) study of domestic animal genetic diversity ii) their resistance capacity to various pathologies including zoonotic diseases and, iii) genetic diversity and resistance of animal and human disease vectors. These different works have generated 7 masters and over 10 publications in the last 5 years. Furthermore, he is serving as an editorial board member of Agonomie Africaine and reviewer of over four scientific journals.

#### **Publications**

- N'Goran K. Edouard, Zakpa L. Gbodjo, Dago D. Noel, Lallié Hermane Désiré M.N, Sokouri, Didier Paulin, Doumbia Ladji. Production and Reproduction Parameters Analysis of N'Dama Cattle Breed in the Dairy Station of Yamoussoukro (SLY), in the Savannah Zone, in Côte d'Ivoire. 2016. World Journal of Research and Review.
- 2. N'Goran K. E. Loukou N. E., Dago D. N., Ouattara D., Sidibé M., Vanga A. F. Characteristics of village chicken production in farming system in Côte d'Ivoire: case of Korhogo area. 2016. International Journal of Environmental & Agriculture Research.
- 3. Zakpa L. Gbodjo, Didier P. Sokouri, Sery Gonedele Bi, Kouamé E. N'Goran, Inza J. Fofana , Brahima Soro , Assanvo S.P. N'Guetta. Analysis of pathological constraints and productivity of cattle in traditional environment in northern Côte d'Ivoire. 2014. International Invention Journal of Agricultural and Soil Science.



<u>International Conference on Medical and Health Sciences</u> | Rome, Italy | February 24-25, 2020

Citation: N'Goran Edouard, Susceptibility and prevalence of the main zoonotic diseases in Tonpki region, Western Ivory Coast, West Africa, Medical Science 2020, International Conference on Medical and Health Sciences, Rome, Italy | February 24-25, 14

Healthy Aging Research 2020 ISSN: 2261-7434