Detection and characterization of zoonotic haemo-pathogens of non-human primates from Zambia

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Wildlife may harbor infectious pathogens that are of zoonotic concern acting as a reservoir of diseases transmissible to humans and domestic animals. This is due to human-wildlife conflicts that have become more frequent and severe over recent decades, competition for the available natural habitats and resources leading to increased human encroachment on previously wild and uninhabited areas. A total of 88 spleen DNA samples from baboons and vervet monkeys from Zambia were tested for zoonotic haemo-pathogens using genus or species-specific PCR. The amplified products were subjected to sequencing. We detected three different pathogenic agents, including Anaplasma phagocytophilum in 12 samples (13.6%), Rickettsia spp. in 35 samples (39.8%) and Babesia microti in 2 samples (2.3%). The continuously increasing contacts between humans and primate populations raise concerns about transmission of pathogens between these groups. Therefore, increased physician awareness and public health surveillance support will be required to detect and control infections caused by these agents at the interface between human and wildlife.

Biography
Jesca Nakayima is a PhD graduate from Hokkaido University, Sapporo, Japan (2014). She specialized in Molecular Epidemiology (Dissertation: Molecular epidemiological study of protozoan and other zoonotic diseases from two countries in Africa). She holds a Master of Wildlife Health & Management (MWHM) from Makerere University and a Bachelor of Veterinary Medicine (BVM) from Makerere University, achieved in 2006 and 2002, respectively. She joined National Agricultural Research Organization (NARO)/National Livestock Resources Research Institute (NaLIRRI) in June 2006, where she has been working to-date. She has worked under the Biotechnology section and later in the Livestock Health Programme. She has participated in the surveillance and control of Trypanosomiasis. She also worked on the Molecular epidemiology of zoonoses, protozoan parasites, helminths, wildlife diseases, tick-borne diseases, viruses, among others.

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