Abstracts

differentiate the species and the sub-species or detect the new species so as to characterize even the human infective trypanosomes as we found the T. brucei-like species.

2P4
Important foodborne bacteria and their antimicrobial resistances in Ecuadorian poultry
C. Vinueza and L. De Zutter

1Facultad de Medicina Veterinaria y Zootecnia, Universidad Central del Ecuador, Quito, Ecuador; 2Department of Veterinary Public Health and Food Safety, Faculty of Veterinary, Ghent University, Mellebeke, Belgium

INTRODUCTION Foodborne bacteria and their antimicrobial resistances are a major health concern in the world. In many tropical countries, this issue has been partially addressed because the lack of funds, public policies and technical limitations. In Ecuador, poultry meat is the main source of animal protein for human consumption

AIM We aimed to study the prevalence and antimicrobial resistance of E. coli ESBL, Salmonella and Campylobacter from poultry industry in Ecuador

METHODS 388 broiler flocks coming from 120 farms were sampled during one year. Isolation of E. coli ESBL, Salmonella and Campylobacter were carried out with specific protocols. Isolates were further typed with molecular techniques and antimicrobial resistant profiles were accessed by phenotypic and genotypic methods.

RESULTS E. coli ESBL, Salmonella and Campylobacter were present in 92%, 16% and 64% of broiler flocks respectively. For Salmonella and Campylobacter, S. Infantis (84%) and C. coli (81%) were mostly isolated. E. coli ESBL harboured genes of the families blaCTX-M (90.6%), blashv (10%), blatem (42%) and blascmy (22%). The gene mcr-1 responsible for resistances to colistin was found in 3 isolates. Resistance genes kpc and mcr-2 were not found. All bacteria showed high resistant phenotypes against most tested antibiotics. Genetic typing showed that isolates from different farms were closely related.

CONCLUSION This study shows the importance that these pathogens could have in the food chain in Ecuador. Reports in the region show different rates of S. Infantis and C. coli in broiler farms which could be attributed to differences in environmental conditions and specific risk factors for flock contamination. High resistance rates of the 3 bacteria could be linked to the common usage of antibiotics in poultry production. Bacterial genetic types common to different farms indicate the possibility of cross contamination between farms. This evidence suggests that a stricter biosecurity should be put in place to control these microorganisms in the primary sector. Our data shows that Ecuadorian poultry production is an important hotspot of antimicrobial resistances. This novel study in Ecuador gives insights on the epidemiology of these bacteria that will be used by policy makers and researches in the future.

REFERENCE(s)

2P5
Gastro-intestinal parasites infections in mountain gorillas (Gorilla beringei beringei) of Rwanda Volcanoes National Park: one health implications
S. R. Gashururu1, A. G. Umurerwa2 and E. M. Tukei1

1University of Rwanda, School of animal sciences and veterinary medicine, Nyagatare, Rwanda; 2University of Rwanda, Department of Wildlife and Aquatic Resources Management, Huye, Rwanda

INTRODUCTION Mountain gorillas (Gorilla beringei beringei) are endangered worldwide and are the best tourists’ attractions of Rwanda. Gorillas of Volcanoes National Park have close contact mostly with tourists, researchers, park workers and the community around the park. Foraging areas outside the park are crossed by village pathways or are in areas where villagers obtain firewood. In addition to poor health services and information, the local communities lack hygienic amenities including clean water and pit latrines.

AIM The study was conducted in the Volcanoes National Park of Rwanda, which is home to mountain gorillas, between March-June 2015. The study assessed the prevalence of the gastro-intestinal parasites affecting the gorillas and identified parasites that can be of public health importance.

METHODS 24 faecal samples were randomly collected from two gorilla families at different intervals. The faecal samples were examined for parasites using flotation and sedimentation methods.

RESULTS Of the 24 fecal samples examined, the study revealed 5 nematodes, 1 cestode and 4 protozoa. The nematodes eggs found include Trichostrongyle-type (11/24), Strongylus spp (6/24), Ascaris spp (3/24), Hysteroglyns (2/24) and Probantamaria spp. (1/24). The cestode parasite recovered is Ancylostoma gorilae (3/24). The protozoa include Iodamoeba buetschlii cysts and trophozoites (7/24), Entamoeba coli cysts and trophozoites (4/24), Entamoeba histolytica trophozoite (3/24) and Giardia sp. cyst (1/24).

CONCLUSION Some of the parasites could not be identified. E. hystolytica and Giardia are of zoonotic nature and could therefore be shared with humans. Most of the nematode types found are also found in humans, it is possible that these parasites were from daily human-gorilla interactions by zoonotic, reservoir or paratenic ways. However, there is a need to make the systematic coproculture to definitely identify some parasites and determine the transmission mode in order to confirm whether or not these are multi-host pathogens that can be shared. A similar research in the surrounding human community and livestock in close contact with gorillas would identify the potential one health actions to be taken.