



Tropentag, September 17-19, 2018, Ghent

“Global food security and food safety:
The role of universities”

Biosecurity Measures as Practiced in Selected Dairy Farms in Khartoum State, Sudan

AHMED MAHMOUD¹, NASREEN MUSA²

¹*Faculty of Veterinary Medicine, University of Khartoum, Preventive Medicine and Public Health (MSc Student),*

²*Faculty of Veterinary Medicine, University of Khartoum, Preventive Medicine and Veterinary Public Health, Sudan*

Abstract

The research was conducted to evaluate the level of compliance with biosecurity practices by dairy farmers and identify the important factors may lead to occurrence and spread of disease in dairy farms.

The study was conducted in Khartoum state, Sudan. The data were collected through the use of structured questionnaire. The questionnaire designed and validated and submitted to seventy five dairy farms randomly, oral interview for non literate respondents (based on questionnaire) was conducted. Biosecurity measures studied were : fencing of dairy farm, exclusion of other animal species from dairy farm, quarantine of incoming cows, isolate of sick cows, insect control.

The study found the predominant herds were cross breeds dairy cows. The study showed that most of the dairy farms 54(72 %) was managed under veterinary supervision.

Quarantine of newly introduced cows was practised in 31(41.4 %) of total farms.

72(96 %) of farm owners keep their dairy cows under zero grazing system. A single use of disposal syringes for one animal was practised in 40(53.4 %), while several uses of the syringe for many animals were found in 35(46.6 %) farms.

The study revealed high frequencies of ticks infestation 54(72 %), and Theileriosis 40(53.4 %), mastitis 47(62.7 %) and calves mortality (%) in farms.

Regarding to the risks of the incidence and spread of epidemic diseases within and among the herds, the study found that important factors and some critical points related to the application of biosecurity measures that are likely lead to disease occurrence and spread such as presence of vectors (ticks and rodents), not well farm design, presence of other animal species in farms, inadequate spaces between farms, poor of general hygiene and sanitation, absence of dipping pool in the entrances, bad environment and accumulation of dung in farms, improper dead animal handling.

The study recommended training programs targeting both dairy farmers and labours to increasing the awareness of diseases and their economical impacts and necessity to implementation of biosecurity programs in their farms to prevent disease occur and spreading. Also conducted training on house designing, herd management and health supervision of their herds.

Keywords: Biosecurity, dairy farms, khartoum state, Management, Sudan

Contact Address: Nasreen Musa, Faculty of Veterinary Medicine, University of Khartoum, Preventive Medicine and Veterinary Public Health, Shambat Street Khartoum North, 13314 Khartoum North, Sudan, e-mail: nasreenmusa@uofk.edu