

BETTER

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AUT, TIRANA ALBANIA

Book of abstracts



Preface

The COST action CA20103 titled “Biosecurity Enhanced Through Training Evaluation and Raising Awareness” (<https://better-biosecurity.eu/>) aims to reduce the risk of infectious disease introduction and spread by improving the implementation of biosecurity measures in animal production systems.

The 2023 Annual General Meeting of the COST action BETTER was held in Tirana, Albania, on the 20th and 21st of June. In addition, a call for the latest research on the topic “Challenges on implementation of biosecurity in smallholder farms” was set. Hereby, we present you the book of abstracts of the research that was presented in this event.

*On behalf of the COST BETTER action,
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Clinical mastitis (CM) is the most prevalent health disorder in dairy farms that causes poor milk quality and decreased milk yield. A one-year cross-sectional longitudinal survey was carried out to evaluate udder-related risk factors for CM occurring in dairy herds. The databases were used from three dairy farms. The research was divided into four calendar seasons. Cows with clinical mastitis were detected by clinical examination of the udder and determination of abnormalities in milk. The quarter milk samples were screened using California mastitis test (CMT) for the detection of abnormal milk secretion (AMS) and microbiological methods for the detection of intramammary infections (IMI). The isolated mastitis pathogens were grouped as contagious: *Streptococcus agalactiae* and *Staphylococcus aureus*; or environmental: *Enterococcus* spp., *Pseudomonas aeruginosa*, *Escherichia coli* and *Aspergillus niger*. The annual prevalence of clinical mastitis was 34,13% at the cow level, and 30,07% at the lactation level. The annual lactation incidence risk (LIR) for the entire population of cows was 45.86%. The prevalence of clinical mastitis and LIR tended to increase with increasing cow parity. Management of farms, the season of calving, and udder level factors entered in the regression model were significantly linked with the occurrence of CM. The odds ratio of CM increased significantly, as udder morphology was worsened, teat ends were flat and the distance from teat ends to the floor decreased. Hygiene scores of cows were significantly associated with CM prevalence. The ten-point mastitis control program is based on hygiene and includes teat disinfection, antibiotic therapy, and culling of chronically infected cows. Periodically screening protocols for monitoring udder health is another approach for preventing the spreading of mastitis in dairy herds. Positive CMT reaction may be a good indicator for IMI; there was a significant association between the frequency of isolation of major pathogens and the CMT score in milk samples. Developing and following good biosecurity plans takes time and planning, but the cost to the farm enterprise for not having these plans can be considerable.

Keywords: Dairy Management, Clinical Mastitis, Risk Factors

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