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Isolation and phenotypic characterization of Streptococcus uberis from mastitic cows in and around Batu town, Ethiopia.

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1 ABSTRACT

Streptococcus uberis have emerged to be pathogens causing intramammary infections in dairy herds. In Ethiopia, knowledge about the Streptococcus uberis (S.uberis) involved in mastitis is limited. A cross-sectional study was carried out in Batu East shoa Zone of Oromia State, Ethiopia from December 2014 to April 2015 with the aim of isolation and phenotypic characterization of Streptococcus uberis from bovine mastitis. A total of 230 lactating (Holstein (n=115), Borena (68) and Jersey (n=71)) cows were included in this study and out of those, 97 (42.2%) were found to be affected with mastitis infection which was detected by clinical examination and the California Mastitis Test (CMT), of which 16(7%) and 81(35.2%) had clinical and subclinical mastitis, respectively. Positive milk samples were used for bacteriological examination and a total of 18 isolate of S. uberis were obtained. In the present study out of seven in vitro antimicrobial used, Nalidixic acid (37.5%), Amoxicillin (25%), Streptomycin (25%), Oxytetracycline (25%), Kanamycin (18.75%), Ceftriaxone (18.75%), and Compound sulphonamide (12.5%) showed resistance to S. uberis. Among the potential risk factors considered, age, parity, stage of lactation, breed and floor type were found to affect the occurrence of S. uberis mastitis significantly (P<0.05). In this study, it is observed that S. uberis should be given a great concern as a threat for the dairy industries.