

Antibacterial effects of herb extraction against bovine mastitis causing pathogens

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Resistance to antimicrobial agents is a problem all over the world, and these problem also is so extended in veterinary fields. Therefore, this study aimed to find out antimicrobial substances from natural medicinal herbs against bovine mastitis pathogens. Among seventy two medicinal herbs, *Terminaliae fructus* showed antimicrobial effect against methicillin – resistant *Staphylococcus aureus*(MRSA) isolated from mastitic milk and human patients, and other pathogens causing mastitis, *Streptococcus uberis*, *Staphylococcus aureus*, one Vancomycin – resistant enterococci(VRE). Antimicrobial effects against MRSA were showed from fat – soluble fraction of *Terminaliae fructus*. The antimicrobial activity of fat – soluble substance of *Terminaliae fructus* was stable at pH 3.0–8.0 and various temperature. The minimum inhibitory concentration(MIC) of fat – soluble substance of *Terminaliae fructus* was 250ug/ml for MRSA. however the fat – soluble substance of *Terminaliae fructus* didn't show antimicrobial effects on various strains including contagious and environmental pathogens related with mastitis of dairy cows. In conclusion, we consider *Terminaliae fructus* as a part of good drug available for treatment of dairy cow infected mastitis.