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Antibacterial Activity of an Herbal Product in vitro on Mastitis Pathogens

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There is anecdotal evidence of the efficacy of plant essential oils for treatment of mastitis in dairy cattle and there is need for alternatives to antibiotics in the growing U.S. organic dairy industry, where antibiotic use is prohibited. However, the potential mechanisms of action of essential oils in mastitis therapy has not been well studied. An essential oil-based botanical intramammary infusion, Phyto-Mast (CowMaster LLC, Kutztown, PA), has been used with some effectiveness as a dry treatment in mature cows. One component of this botanical infusion, thyme essential oil, has documented evidence of antibacterial activity. The objective of the current study was to evaluate the antibacterial activity of Phyto-Mast and thyme essential oil against mastitis-causing pathogens.

Biography

K.A.E. Mullen completed her PhD in Animal Science from North Carolina State University in 2013. She is currently completing her post-doctoral studies involving research on organic dairy herds and the use of non-pharmacological agents to treat mastitis.

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