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### *Calendula officinalis*: Activity in subclinical mastitis

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Subclinical mastitis is the highest prevalent disease in dairy farms, causing serious economic losses in production and decrease in quality of milk and its derivatives. Due to the widespread use of antimicrobials against mastitis, there is a resistance to these agents rendering the milk and dairy products too resistant to those antimicrobials. Research has started to screen new antimicrobial agents, such as herbal medicines. Among them, the *Calendula officinalis* L. is known for use in wound healing, that exhibits antimicrobial activity, mainly on Gram-positive bacteria. In this work we carried out with 12 milk herds from State Goiás, Brazil, to characterize the microbial population in cases of subclinical mastitis related to pathogens identified by somatic cell counts (SCC). *Staphylococcus aureus* was the main agent isolated and determined larger values of SCC. Then, behavior of pathogen in relation to main antimicrobial drugs and ethanolic extract of *Calendula officinalis* (EEC) was evaluated. The sensitivity spectrum was verified by the immunodiffusion method, and the effect of EEC was evaluated by the minimum inhibitory concentration. Quinolone antimicrobial agents showed the highest percentage of efficiency and EEC inhibited bacterial growth. Thus, *Calendula officinalis* may be used for the production of herbal medicines used in cases of subclinical mastitis as an alternative to antibiotics available in the market.

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