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Antimicrobial susceptibility of *Staphylococcus* spp. strains isolated from domestic cats oral cavity to essential oils**Mariel Dalmedico Policano, Natália Bertini Contieri, Camila Aparecida Cruz Reis, Andréia Cristina Nakashima Vaz, Ana Maria Centola Vidal, Adriano Bonfim Carregaro, Carlos Eduardo Ambrósio and Valéria Maria Lara**

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The oral affections in domestic cats are multifactorial diseases of unknown etiopathogenesis. It is believed that imbalance of the oral microbiota and local immune response results in an inflammatory process, which in the long term leads to physiological changes. *Staphylococcus* spp. is an important bacterial genera present in the oral microbiota. The treatment of oral affections is based with anti-microbial and anti-inflammatory, but with a high failure rate. The often empirical choice of antimicrobials can lead to the emergence of multiresistant bacteria. In recent years, several efforts have been made to overcome the onset of bacterial resistance, and essential plant oils have the potential for this. Thus, the present study aimed to isolate and identify strains of *Staphylococcus* spp. of samples from the oral cavity of healthy domestic cats and with gingivitis. The isolates were submitted to the antimicrobial susceptibility test for essential oils (EOs) *Citrus bergamia*, *Anthemis nobile*, *Cymbopogon citratus*, *Copaifera officinalis*, *Eugenia caryophyllus* and *Melaleuca alternifolia*. The results showed that *Staphylococcus* spp. is present in the oral cavity of healthy cats and with gingivitis. The EOs with better antimicrobial effectiveness was *C. citratus* and *E. caryophyllus*. The findings obtained in the present study were performed in previous investigations. The EOs of *C. officinalis* and *C. bergamia* did not present the antimicrobial action. These different results between the EOs can be explained by chemical composition, concentration of chemical compounds, by the synergism between them, by the origin and conditions of cultivation of the plant used to obtain the EOs.

Biography

Mariel Dalmédico Policano has completed her Biochemical Technical Course from ETEC Conselheiro Antonio Prado in the city of Campinas. She is now student of scientific initiation at the Veterinary Medicine Department of the Faculty of Animal Science and Food Engineering, University of São Paulo, Pirassununga and researching about feline oral microbiome, looking for bacterial genera which have public health importance.

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