

Evaluation of antimicrobial properties of chicory extracts



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Cichorium intybus L. (Astraceae), is an important medicinal plant, rich in sesquiterpene lactones (STLs), inulin, biologically relevant elements, and vitamins which exert potent pro-health effects on the human organism. The aim of this study was to screen two extracts of chicory containing STLs, optimized extract (Ci_SFEopt) and the supercritical fluid extract (Ci_SFEpur) for their antimicrobial activities against range of pathogenic microorganisms.





The strong antimicrobial activity of the Ci_SFEpur against *P. aeruginosa* and *Candida* species is an important step towards the development of novel antimicrobial therapeutics and efficient utilization of this widely distributed plant.



Thin layer chromatography (TLC) bioautography was used to screen extracts and provide basic information in order to in the future isolate the bioactive compounds. Ci_SFEopt was active against all tested microorganisms (Rf 0.18 - 0.88). Ci_SFEpur extract was efficient in inhibition (Rf 0.76) of Staphylococcus aureus, Pseudomonas aeruginosa and Candida krusei.

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