In vitro Pelargonium sidoides

1LMROH 6DYLFNLHQH
Lithuania Lithuanian University of Health Sciences, Lithuania

Elevated proportions of some subgingival microbial species have been associated with destructive periodontal diseas activity. Biologically active compounds of *Pelargonium sidoides* root extract (PSRE) or Proanthocyanidins (PACNs) from this extract modulate bacterial virulence and stimulate host immune responses. ere is no local delivery system of sustained release formulations with PSRE or PACNs available, however, bioactive capacities of these substances suggest them as promis prolonged local periodontitis treatment candidates.

e purpose of this study: to evaluate the antimicrobial e ect of di erent concentrations of PSRE and PACNs obtained from PSRE, against *Porphyromonas gingivalis, Aggregatibacter actinomycetemcomitans and Streptococcus salivarius.*

Speci c objective: Identi cation of the e ective dose of PSRE and PACNs obtained from PSRE against i) the anaerobic strain *P. gingivalis*, major cause of periodontitis; ii) the putative periodontal pathogen *A. actinomycetemcomitans* and iii) the oral commensal ($. salivarius)

Methodology: Preparation of di erent concentrations solutions from PSRE and (PACNs). Solutions were added in direct contact with bacteria at di erent concentration (v/v from mother solution). Bacteria and growth conditions: 1x105 /ml Bacteria were seeded in the log exponential growth phase (by o.d. evaluation). Metabolic evaluation: A er 48 hrs bacteria viability was evaluated by metabolic colorimetric assay (alamar blue).

Results: PSRE extract was e ective in reducing ... dd9 (l)- 833(0)87(a)8 ((b)-911 (i)-3 9 (l)-12 (t)-5 (y wa r)a sig3 9 (l)n037)5c3 (a)9 (r