

Analyses of polyphenolic plant extracts have shown significant results when used to control different pathogens. Many of these pathogens are responsible for different infections causing significant public health problems. This work aims basically to determine the efficiency of polyphenolic extract of *Pulicaria crispera* to prevent biofilm formation by *Klebsiella pneumoniae*. Strains were identified by their biochemical characters and matrix-assisted laser desorption ionization time-of-flight mass spectrometry. *P. crispera* is a Saharan plant used to extract polyphenols to assess their inhibitory action against *K. pneumoniae* development and biofilm forming. High-performance liquid chromatography revealed quercetin as the most important component of the polyphenolic extract. All strains are biofilm forming and are resistant to many antibiotics. The Minimal inhibitory concentrations of biofilm (MICBs) of the extract range from 0.21 mg gallic acid equivalent (GAE) to 3.40 mg GAE. The minimal inhibitory concentrations vary from 0.1 mg GAE to 0.425 mg GAE. Although many plant extracts have already shown their antimicrobial and antibiofilm activities, their application in clinical cases requires a long-term endeavor