

## Chemical profile, antimicrobial and antioxidant activities of *Citrus reticulata* and *Citrus clementina* (L.) essential oils

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### Description

The present investigation reports on the chemical composition of three citrus fruit essential oils (mandarin [*Citrus reticulata*], wilking [*Citrus reticulata* cultivar wilking] and clementine [*Citrus clementina*]) from Algeria, and examines their antioxidant and antimicrobial activity against eight spoiling and pathogenic microorganisms. The chemical composition of the essential oils obtained from the peels, by hydrodistillation, was analyzed by Gas chromatography–mass spectrometry (GC-MS). 12 compounds were identified and limonene was the common major component for the three essential oils (77- 97%).The disc agar diffusion technique indicated mandarin essential oil (EO), as evidenced by their zones of inhibition, as the best growth inhibitor followed by clementine and wilking essential oils. Among the tested microorganisms, the oils was very active against *Candida albicans*, *Escherichia coli*, *Lysteria innocua* ...