

## Phytochemical Investigation of antimicrobial Seed Extrac of *Citrus Aurantifolia* (Lime)

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### Abstract

The seeds of Lime of the family Ructaceae are gaining grounds as important source for treatment in complementary medicine. The Sudanese varieties are one of the best in the market, which prompted investigation of seed extracts.

The 96% ethanolic extract exhibited significant antimicrobial activity and highlighted the biological monitoring of activity in order to isolate the active metabolites from the chloroform extract of the seeds.

The presence of sterols and triterpenes, carotenoids, coumarins, alkaloids, saponins, tannins and carbohydrates was confirmed by phytochemical screening of the diethyl ether, methanolic and aqueous extracts of the seeds. Isolation of the antibacterial secondary metabolites was achieved by fractionation of the active chloroform extract by sing, liquid solid column chromatographic technique and biological monitoring of activity of column fractions eluted with chloroform and methanol. The composition of fractions was monitored by analytical and preparative TLC from lime extracts we prepare an ointments with different concentrations.