

CHEMICAL COMPOSITON AND ANTIMICROBIAL ACTIVITY OF *DAUCUS ARISTIDIS* COSS. ESSENTIAL OIL IN PRE-FLOWERING STAGE FROM ALGERIA.

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Abstract

The essential oil of aerial parts of *Daucus aristidis* Coss. (Apiaceae) in pre-flowering stage, obtained by hydrodistillation was analyzed by gas chromatography (GC) and gas chromatography-mass spectrometry (GC-MS), and evaluated for *in vitro* antimicrobial activity. Twenty-three compounds were identified in the oil, with α -pinene (20.13%), cedrol (20.11%) and E- asarone (18.53%) as major components. This oil was characterized by a significant oxygenated fraction (65.49%). *D. aristidis* oil exhibited an antibacterial activity against almost all the strains tested except for *Klebsiella pneumoniae* ATCC 700603 K6 and *Enterococcus faecalis* ATCC 49452 which exhibited a resistance against the oil with all the dilution. Also, the oil of *D. aristidis* had no activity against all the fungi tested.

Keywords: *Daucus aristidis*, Apiaceae, essential oil, antimicrobial activity, α -pinene.