Chemical Compositon and Antimicrobial Activity of Daucus aristidis Coss. Essential Oil in Pre-Flowering Stage from Algeria

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Abstract : Essential oils can have significant antimicrobial activities and can successfully replace antibiotics that show their ineffectiveness against resistant germs. The chemical composition of the essential oil obtained by hydrodistillation from the aerial part of Daucus aristidis (Apiaceae) at the pre-flowering stage was investigated for the first time, by GC and GC-MS and evaluated for in vitro antimicrobial activity by the disk diffusion method. The Main components of D. aristidis oil were α -pinene (20.13%), cedrol (20.11%), and E- asarone (18.53%). The oil exhibited an antibacterial activity against almost strains tested except for Klebsiella pneumoniae ATCC 700603 K6 and Enterococcus faecalis ATCC 49452, the oil of D. aristidis had no activity against all fungi tested.

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