

# Assessment of the Antioxidant and Antimicrobial Potential of *Ptychotis verticillata* Duby Essential Oil from Eastern Morocco: An In Vitro and In Silico Analysis

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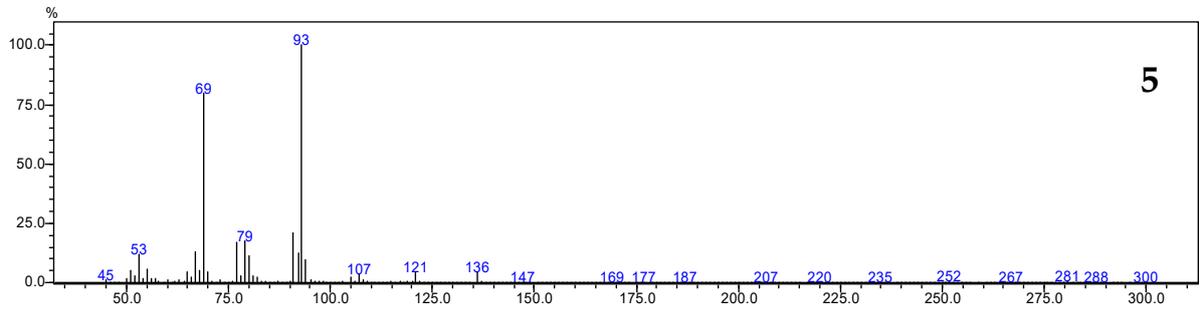
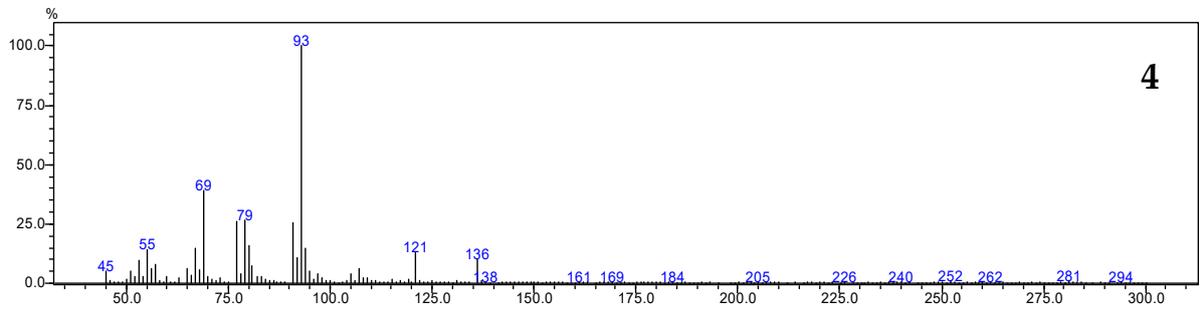
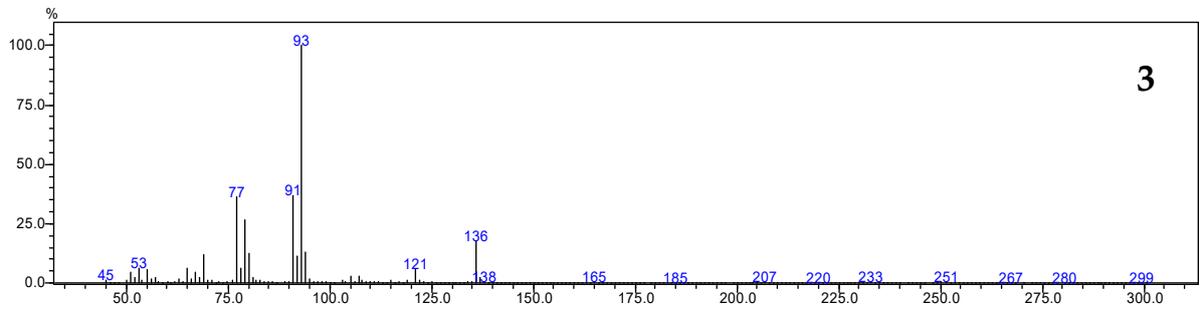
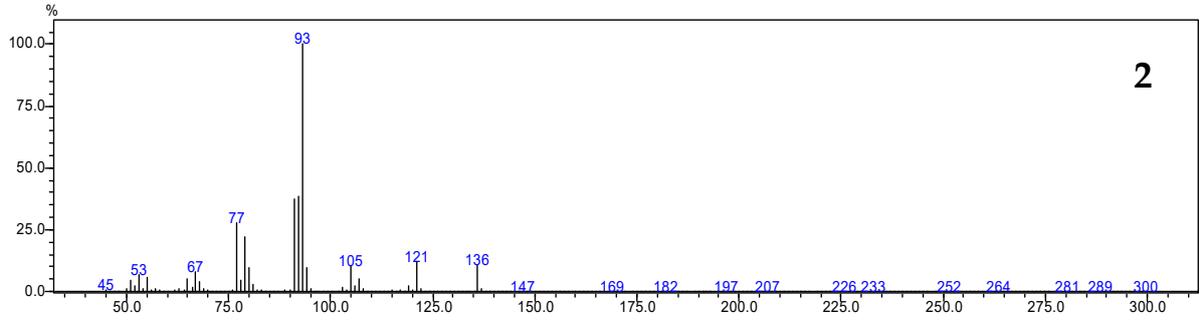
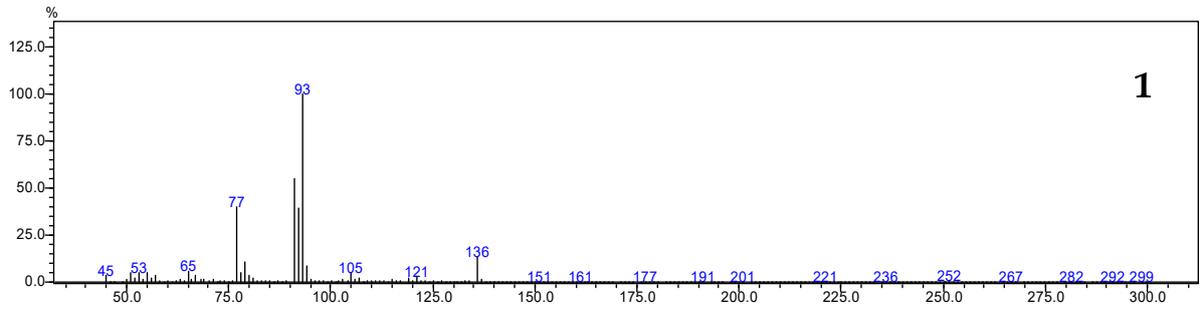
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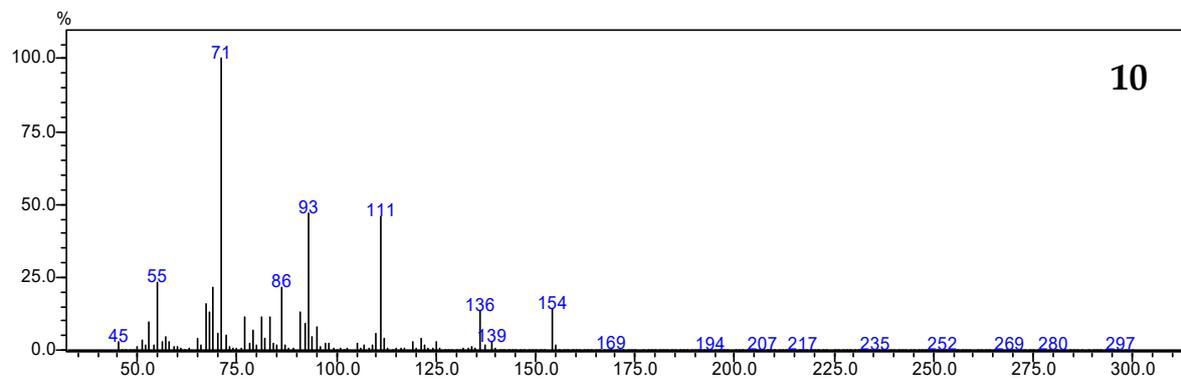
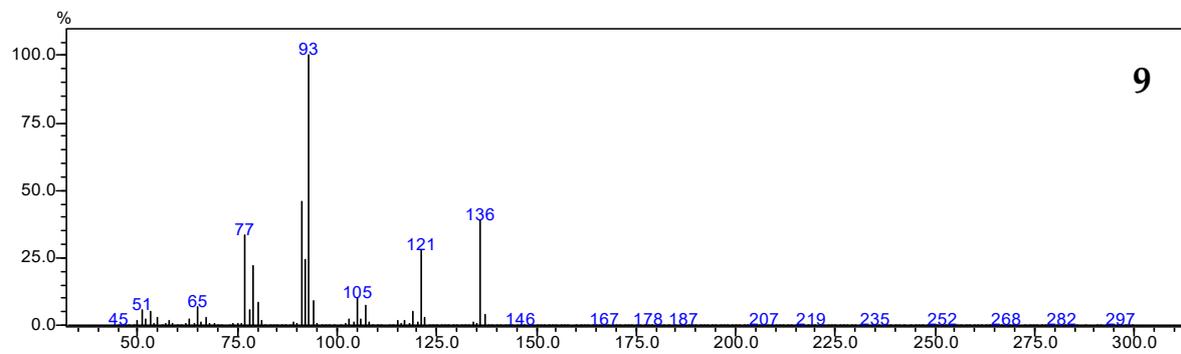
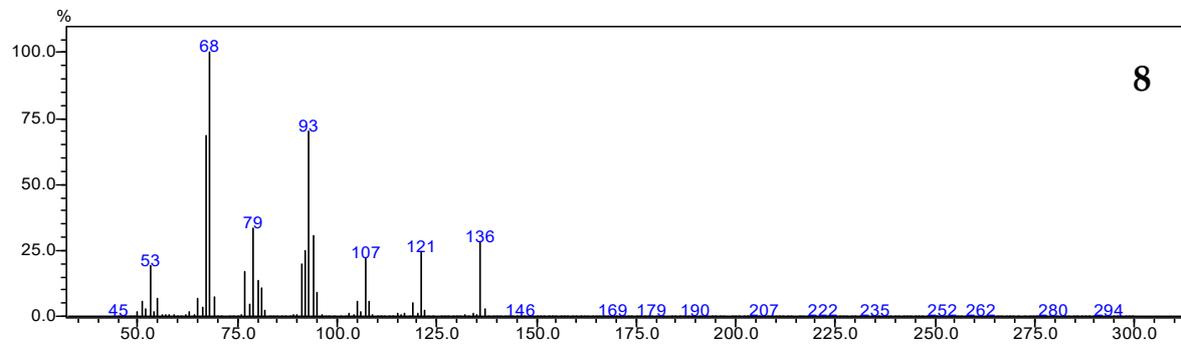
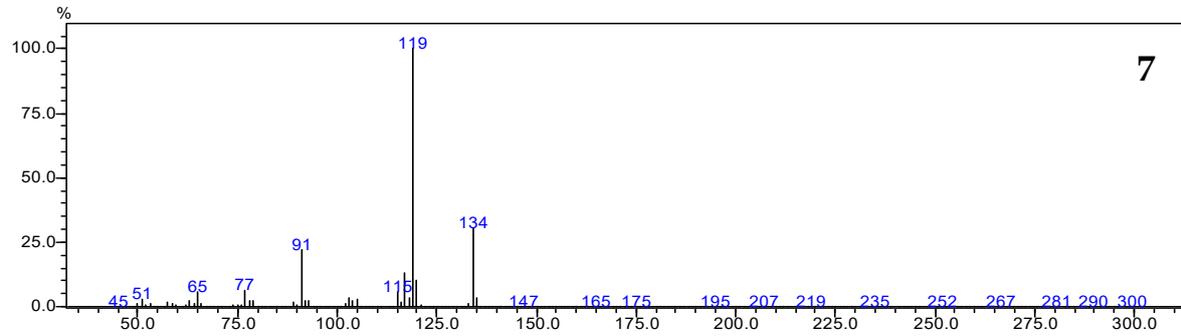
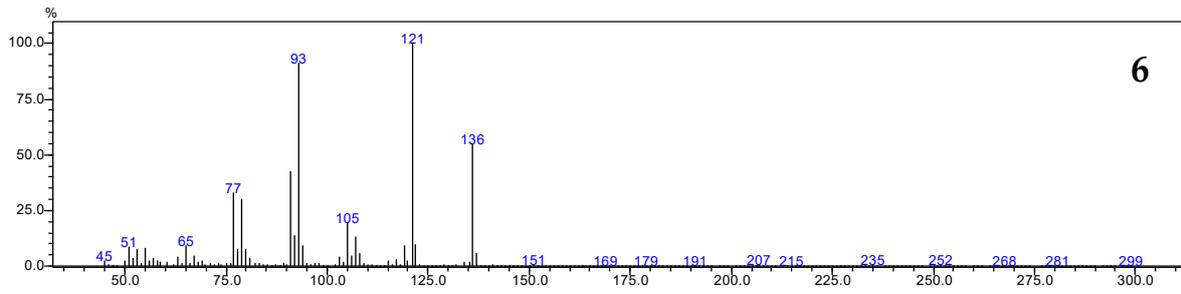
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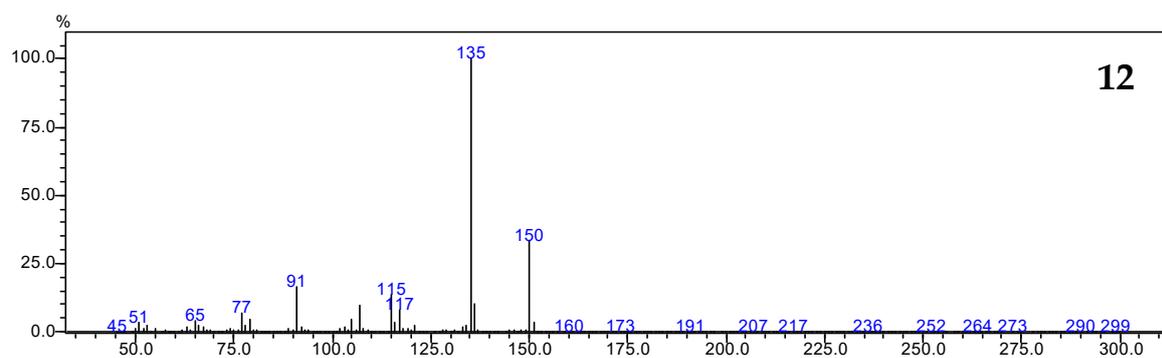
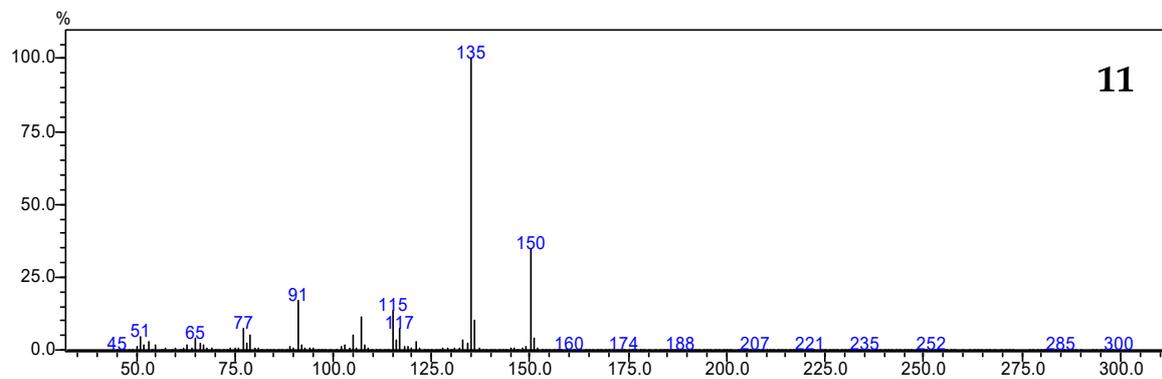
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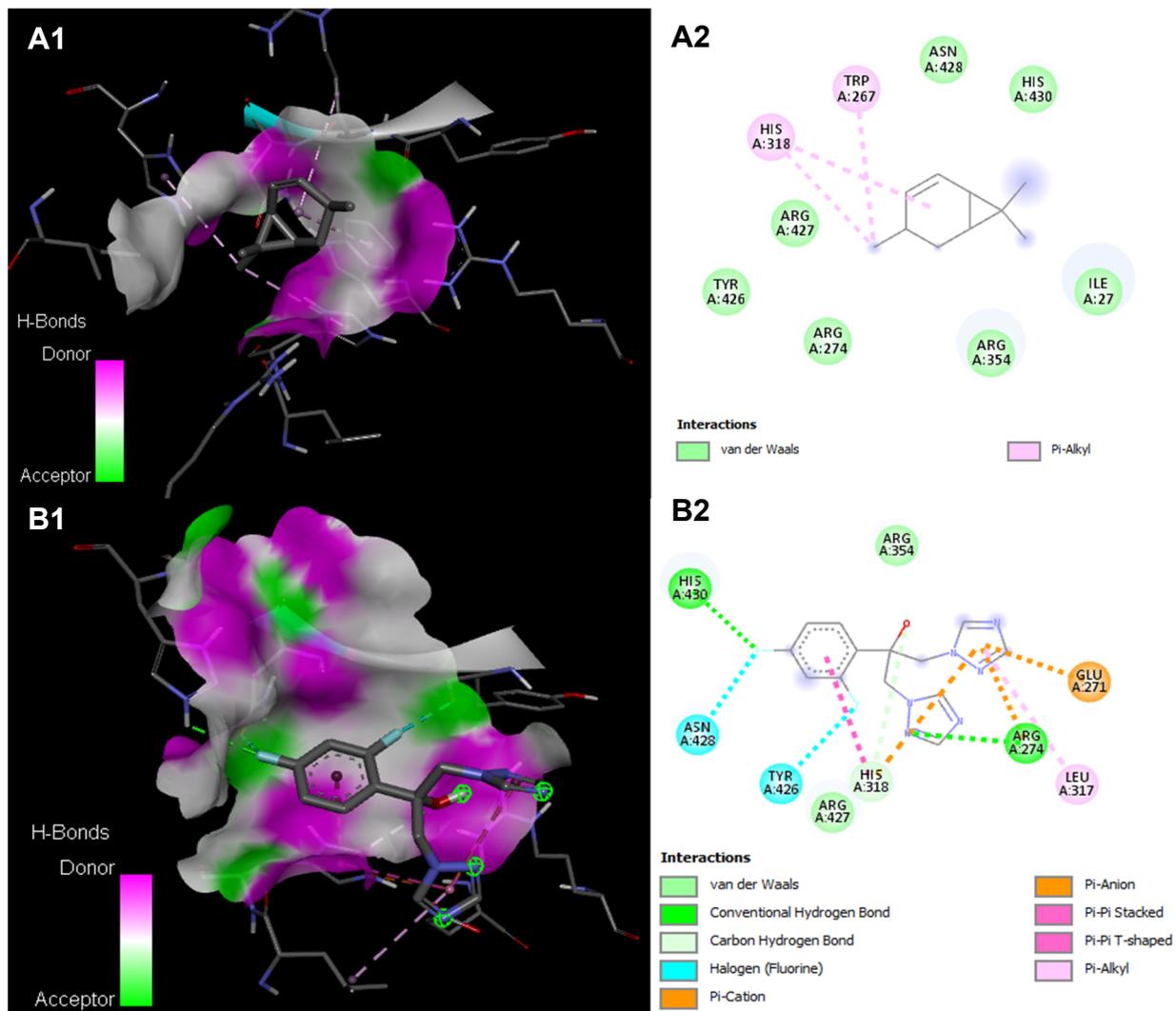
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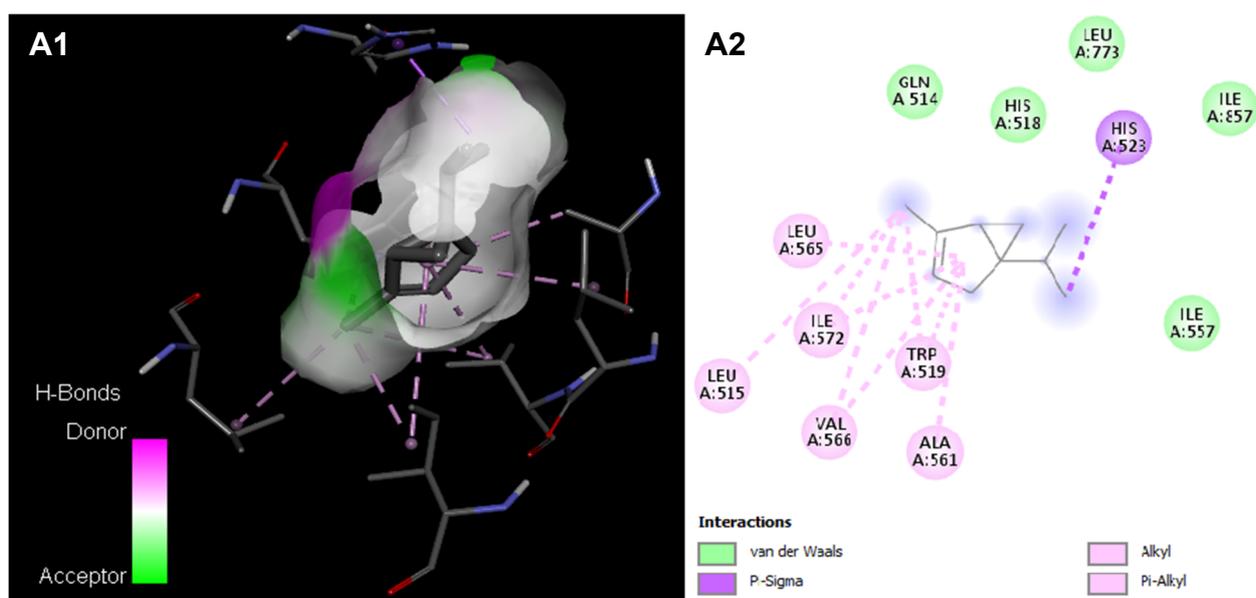


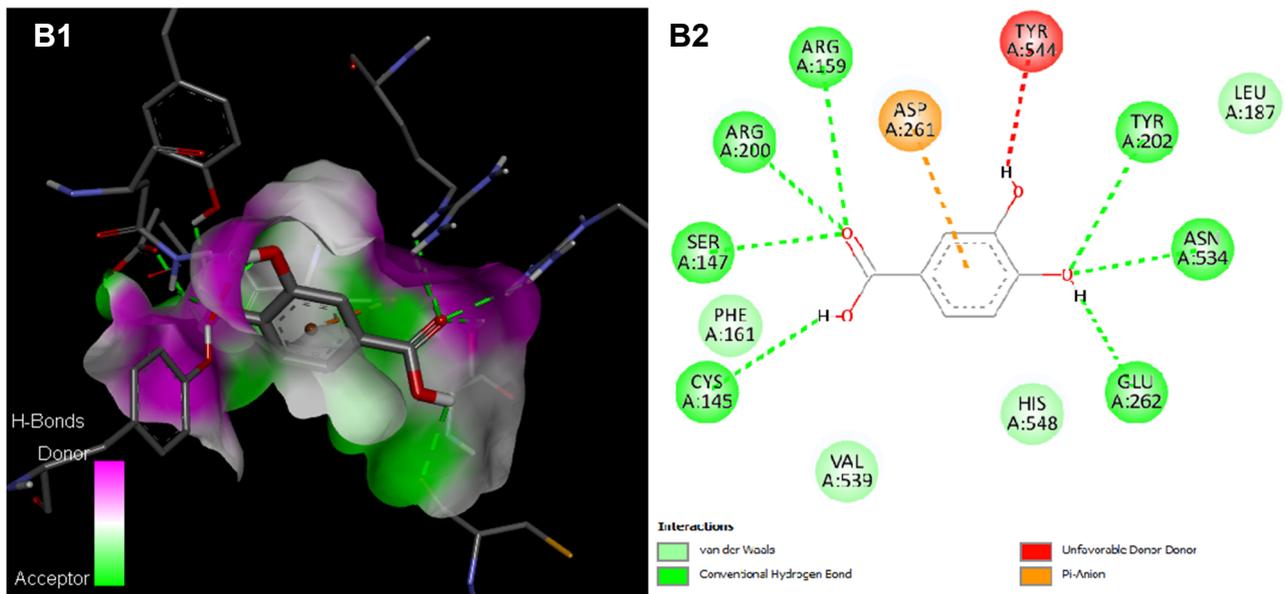


**Figure S1.** Copies of MS spectra of substances identified in PVEO using GC/MS. (1)  $\alpha$ -Thujene, (2)  $\alpha$ -Pinene, (3) Sabinene, (4)  $\beta$ -Pinene, (5)  $\beta$ -Myrcene, (6) (+)-4-Carene, (7) *m*-Cymene, (8) D-Limonene, (9)  $\gamma$ -Terpinene, (10) *p*-Menth-1-en-4-ol, (11) Thymol, (12) Carvacrol.

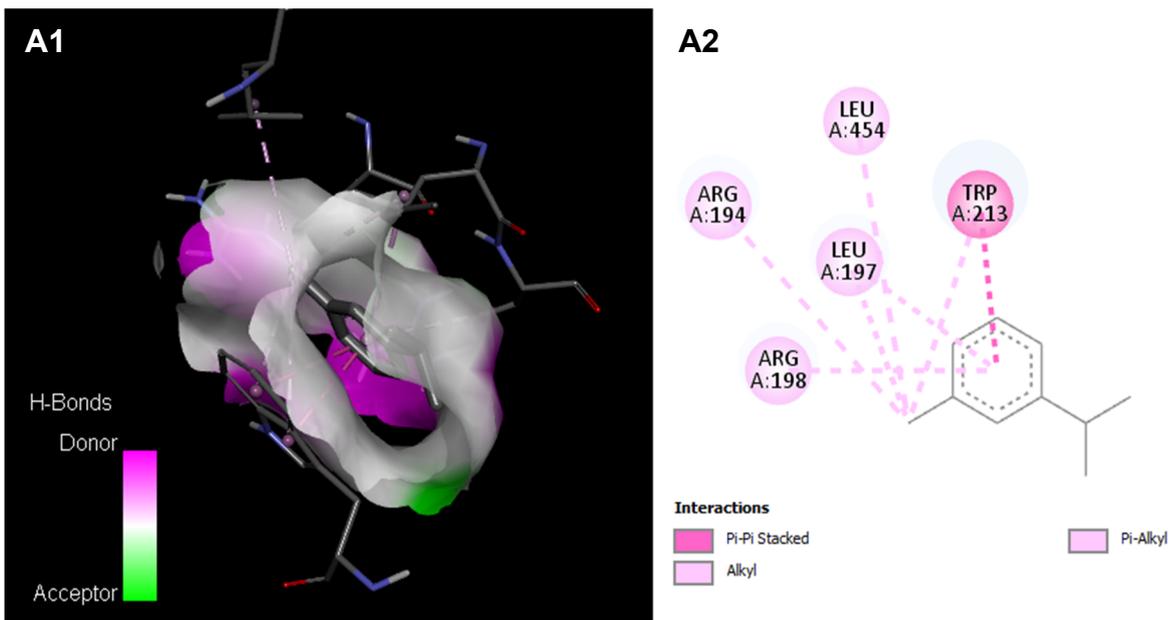


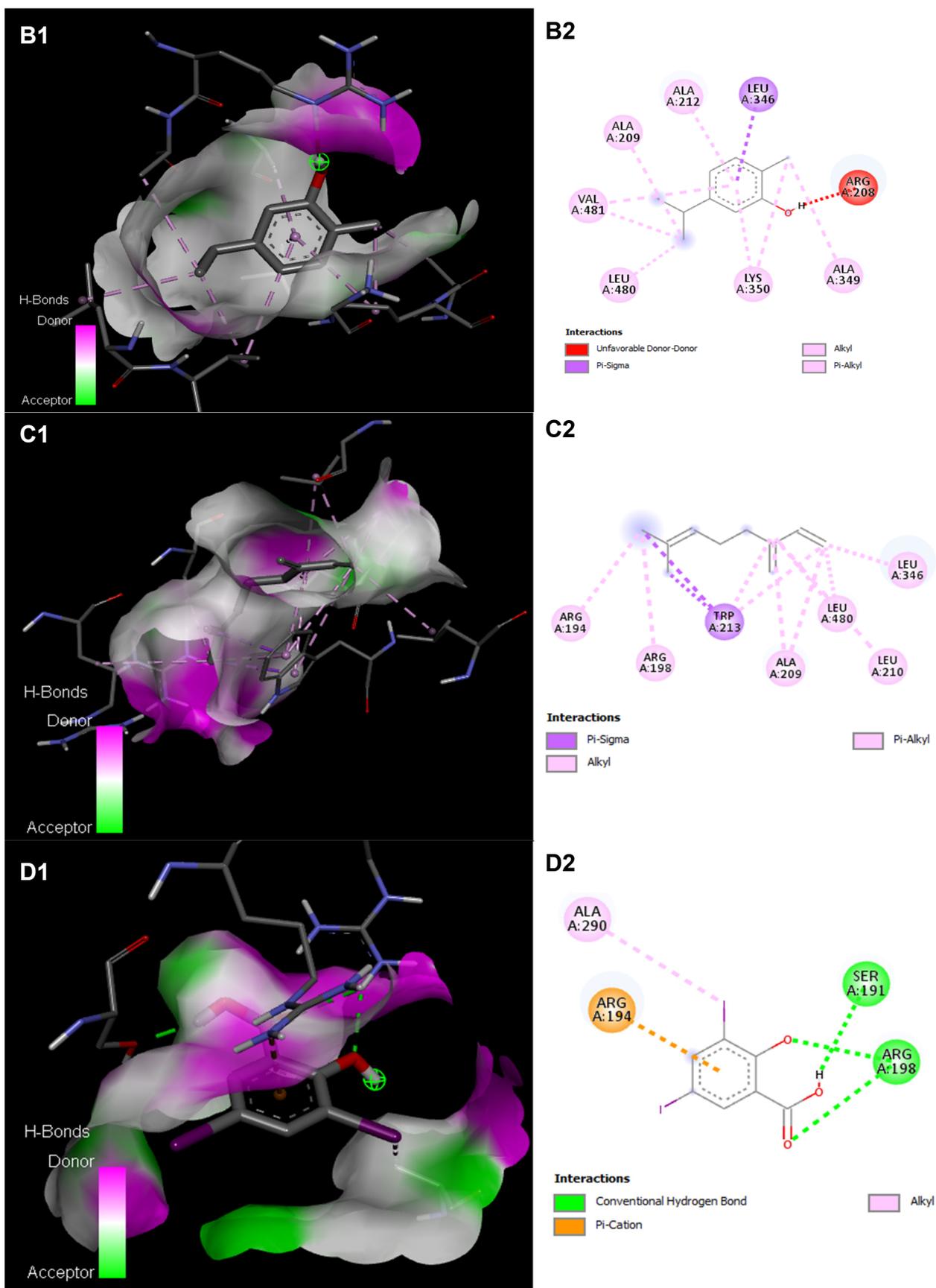
**Figure S2.** 2D, and 3D schemes of the interactions of 4-(+)-Carene (A1, and A2), the native ligand (Fluconazole) (B1, and B2), with the active site of Cytochrome P450 14  $\alpha$ -sterol Demethylase (PDB ID: 1EA1).





**Figure S3.** 2D, and 3D schemes of the interactions of  $\alpha$ -Thujene (A1, and A2), the native ligand (Protocatechuic Acid) (B1, and B2), with the active site of lipoxygenase (PDB ID: 1N8Q)





**Figure S4.** 2D, and 3D schemes of the interactions of *m*-Cymene (A1, and A2), Carvacrol (B1, and B2),  $\beta$ -Myrcene (C1, and C2), and the native ligand (3,5-Diiodosalicylic Acid) (D1, and D2), with the active site of bovine serum albumin (PDB ID: 4JK4)