

## Improved Antimicrobial Activities of *Boswellia Sacra* Essential Oils Nanoencapsulated into Hydroxypropyl-beta-cyclodextrins

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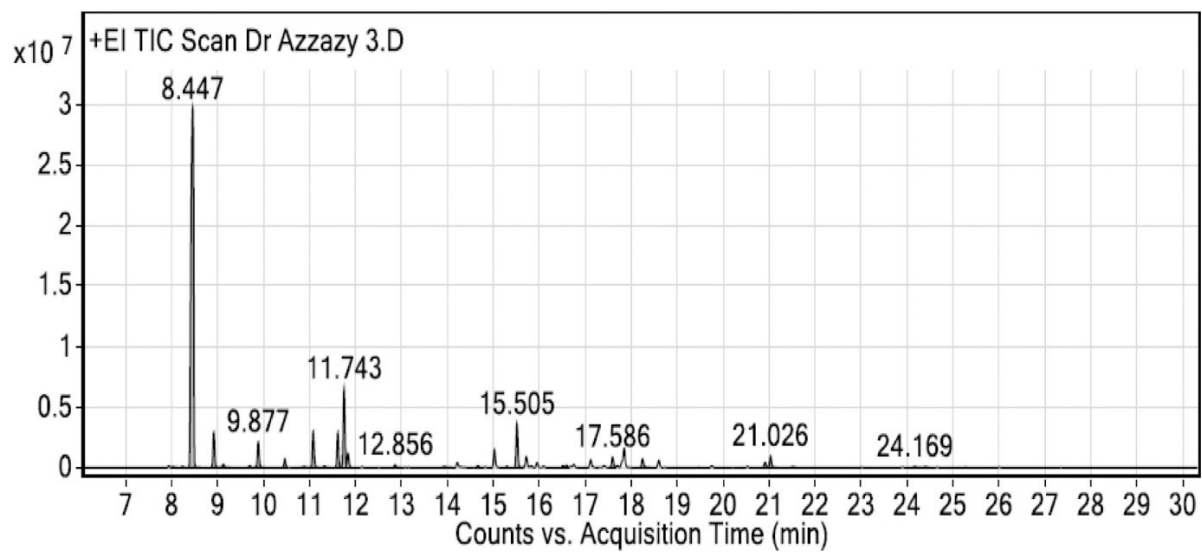
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**Supplementary Figure 1.**



**Figure 1.** GC-MS chromatogram of BO.<sup>1</sup> Reproduced from ref (1). Copyright 2022 American Chemical Society.

**Supplementary Table 1.****Table 1.** BO's Chemical Composition.<sup>1</sup> Reproduced from ref (1). Copyright 2022 American Chemical Society.

Peak no.	RT	Compound name	%
<b>Monoterpenes</b>			
1	8.024	tricyclene	0.11
2	8.229	$\alpha$ -thujene	0.13
3	8.447	$\alpha$ -pinene	61.05
4	8.908	camphene	3.67
5	9.118	verbenene	0.43
6	9.69	<i>p</i> -cymene	0.25
7	9.798	sabinene	0.09
8	9.877	$\beta$ -pinene	2.83
9	10.454	$\beta$ -myrcene	0.94
10	10.873	$\alpha$ -phellandrene	0.16
11	11.073	$\delta$ -3-carene	4.22
12	11.189	<i>p</i> -cymenene	0.06
13	11.32	$\alpha$ -terpinene	0.19
14	11.608	<i>o</i> -cymene	3.57
15	11.743	d-limonene	9
17	12.856	$\gamma$ -terpinene	0.35
24	17.586	alloocimene	1.35
29	21.52	<i>R</i> (+)-limonen	0.11
total			88.51
<b>Oxygenated Monoterpenes</b>			
16	11.827	eucalyptol	1.7

Peak no.	RT	Compound name	%
18	13.922	<i>trans</i> -d-dihydrocarveol	0.22
20	15.286	6-camphenol	0.19
21	15.505	2,3-epoxycarane, ( <i>E</i> )-	4.86
22	16.506	verbenol	0.24
23	16.585	pinocarvone	0.33
25	18.238	verbenone	1.18
26	19.453	carvone	0.06
		total	8.78
<b>Esters</b>			
27	20.905	bornyl acetate	0.66
28	21.026	bicyclo[2.2.1]heptane-3-methylene-2,2-dimethyl-5-ol acetate	1.44
		total	2.1
<b>Sesquiterpenes</b>			
30	24.169	$\beta$ -bourbonene	0.17
31	24.401	$\beta$ -elemene	0.11
32	25.267	caryophyllene	0.07
		total	0.35
<b>Others</b>			
19	14.658	6-isopropenyl-3-methoxymethoxy-3-methyl-cyclohexene	0.25

## References:

1. Azzazy, H. M. E.-S.; Abdelnaser, A.; Al Mulla, H.; Sawy, A. M.; Shamma, S. N.; Elhusseiny, M.; Alwahibi, S.; Mahdy, N. K.; Fahmy, S. A., Essential Oils Extracted from *Boswellia sacra* Oleo Gum Resin Loaded into PLGA–PCL Nanoparticles: Enhanced Cytotoxic and Apoptotic Effects against Breast Cancer Cells. *ACS Omega* **2023**, *8* (1), 1017-1025 DOI: 10.1021/acsomega.2c06390.