



Essential Oil University

GC/MS Report

Item	Lot
Spikenard EO Green <i>Nardostachys jatamansi</i>	3J
Date	Analyst
3/4/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Spikenard EO Green, meets the expected chemical profile for authentic essential oil of *Nardostachys jatamansi*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Spikenard EO Green**Botanical Name:** Nardostachys jatamansi**Lot Number:** 3J**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Nepal**Analysis Date:** 3/4/2025**Manufacture Date:** February 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 µL**Temperature Program:** 2C/min

Physical Data

ANALYSIS

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

-1.56

1.50543

0.95122



Ret. Time	Component	Ret. Idx.	Conc. %	
4.727	2,4-Dimethylfuran	711	0.01%	
7.559	Isovaleric acid	825	0.12%	
8.338	Unidentified	846	0.03%	
11.630	alpha-Thujene	923	0.03%	
12.027	alpha-Pinene	931	0.84%	
12.910	Camphene	947	0.02%	
14.162	Sabinene	970	0.01%	
14.458	beta-Pinene	975	2.22%	
16.781	alpha-Terpinene	1015	0.02%	
17.258	para-Cymene	1023	0.04%	
17.550	Limonene	1027	0.08%	IFRA
17.670	beta-Phellandrene	1029	0.02%	
17.728	1,8-Cineole	1030	0.25%	
18.116	2-Heptyl acetate	1036	0.01%	
18.350	Unidentified	1039	0.01%	
19.403	gamma-Terpinene	1056	0.03%	
21.184	Terpinolene	1083	0.02%	
21.538	Unidentified	1089	0.02%	
22.140	Linalool	1098	0.03%	IFRA
24.914	Unidentified	1138	0.08%	
27.051	Borneol	1169	0.01%	
27.342	Isopinocamphe	1174	0.01%	
27.661	Terpinen-4-ol	1178	0.07%	
28.677	Myrtenal	1193	0.17%	
31.008	Thymol methyl ether	1227	0.06%	
32.927	Unidentified	1256	0.01%	
33.173	Unidentified	1259	0.26%	
34.134	Unidentified	1273	0.05%	
35.307	2-Undecanone	1291	0.03%	
35.450	Methyl myrtenate	1293	0.35%	
37.279	Myrtenyl acetate	1320	0.2%	
38.613	Unidentified	1341	0.17%	
39.049	Citronellyl acetate	1347	0.01%	IFRA
40.475	Unidentified	1369	0.04%	
40.742	Isolodene analogue	1373	0.12%	
40.922	Daucene	1376	0.5%	
41.151	Unidentified	1379	0.04%	
41.285	beta-Patchoulene	1381	2.81%	
41.485	Unidentified	1384	0.08%	
41.627	beta-Elemene	1387	0.38%	



Ret. Time	Component	Ret. Idx.	Conc. %	
41.745	Patchoulene analogue	1388	0.04%	
42.025	Unidentified	1393	0.08%	
42.092	Unidentified	1394	0.14%	
42.460	alpha-Funebrene	1399	0.13%	
42.777	Unidentified	1404	0.35%	
42.920	Unidentified	1407	0.26%	
42.986	beta-Maaliene	1408	1.12%	
43.179	Isolatedene	1411	0.32%	
43.320	Unidentified	1413	0.02%	
43.449	6,9-Guaiadiene isomer	1415	0.79%	
43.505	Unidentified	1416	0.2%	
43.662	Unidentified	1419	0.08%	
43.984	Aristol-1(10),8-diene	1424	0.66%	
44.213	beta-Gurjunene (Calarene)	1427	6.5%	
44.410	trans-alpha-Bergamotene	1431	0.57%	
44.521	alpha-Guaiene	1432	5.21%	
44.718	Unidentified	1436	0.07%	
44.915	6,9-Guaiadiene	1439	7.74%	
45.080	Unidentified	1441	0.08%	
45.178	Unidentified	1443	0.82%	
45.355	Seychellene	1446	3.88%	
45.613	Valerna-4,7(11)-diene	1450	2.77%	
45.769	alpha-Humulene	1452	0.63%	
45.935	Unidentified	1455	0.28%	
46.080	Alloaromadendrene	1457	1.74%	
46.115	alpha-Patchoulene	1458	2.25%	
46.298	9-epi-Caryophyllene isomer	1461	1.32%	
46.400	Unidentified	1462	1%	
46.531	9-epi-Caryophyllene isomer	1465	0.26%	
46.678	Unidentified	1467	0.08%	
46.863	Selina-4,11-diene	1470	0.31%	
47.008	Unidentified	1472	0.15%	
47.193	trans-beta-Ionone	1475	2.44%	
47.371	Ar-Curcumene	1478	0.23%	
47.563	gamma-Amorphene	1481	1.75%	
47.744	delta-Selinene	1484	0.54%	
47.848	beta-Selinene	1486	0.96%	
48.074	Valencene	1489	5.27%	
48.305	alpha-Selinene	1493	1.65%	
48.462	Unidentified	1496	1.08%	



Ret. Time	Component	Ret. Idx.	Conc. %	
48.630	alpha-Bulnesene	1498	1.33%	
48.801	Unidentified	1501	0.29%	
49.017	beta-Bisabolene	1505	0.13%	
49.130	Unidentified	1507	0.11%	
49.352	Unidentified	1510	0.7%	
49.475	Unidentified	1512	0.04%	
49.674	(-)-alpha-Panasinsen	1516	2.74%	
49.751	Unidentified	1517	1.2%	
49.990	Unidentified	1521	0.15%	
50.150	Unidentified	1524	0.05%	
50.278	Furopolargone A	1526	0.41%	
50.456	Selina-4(15),7(11)-diene isomer	1529	0.04%	
50.582	Unidentified	1531	0.11%	
50.720	Selina-4(15),7(11)-diene	1533	0.07%	
50.986	Unidentified	1538	0.09%	
51.132	Unidentified	1540	0.11%	
51.349	Unidentified	1544	0.04%	
51.578	Unidentified	1548	0.18%	
51.987	Unidentified	1555	0.46%	
52.131	Unidentified	1557	0.13%	
52.322	Unidentified	1561	0.13%	
52.630	Maaliol	1566	0.41%	
52.906	Citronellyl valerate analogue	1570	0.04%	
53.061	Spathulenol	1573	0.27%	
53.196	Unidentified	1575	0.07%	
53.393	Nardol A	1579	2.04%	
53.611	Unidentified	1582	0.65%	
53.825	Unidentified	1586	0.09%	
54.099	Unidentified	1591	0.3%	
54.257	Esquel-6-en-9-one	1593	0.55%	
54.395	Unidentified	1596	0.06%	
54.585	Carotol	1599	1.13%	
54.690	Unidentified	1601	0.08%	
54.820	Rosifoliol	1603	0.24%	
55.001	Unidentified	1606	0.16%	
55.180	Unidentified	1609	0.03%	
55.345	Unidentified	1612	0.05%	
55.429	Unidentified	1614	0.03%	
55.595	Nardol B	1617	0.48%	
55.722	Unidentified	1619	0.15%	



Ret. Time	Component	Ret. Idx.	Conc. %	
55.820	Unidentified	1621	0.04%	
55.926	Unidentified	1623	0.2%	
56.114	Nardostachone A	1626	2.14%	
56.262	gamma-Eudesmol	1629	0.25%	
56.415	Unidentified	1631	0.01%	
56.571	Unidentified	1634	0.04%	
56.675	Unidentified	1636	0.03%	
56.859	Unidentified	1639	0.15%	
56.947	epi-alpha-Muurolol	1641	0.16%	
57.066	Unidentified	1643	0.47%	
57.196	Unidentified	1645	0.92%	
57.336	Unidentified	1648	0.38%	
57.575	alpha-Cadinol	1652	0.45%	
57.706	Pogostol	1654	0.38%	
57.872	Unidentified	1657	0.07%	
58.021	1(10)-Aristolen-9-ol	1660	0.79%	
58.195	Unidentified	1663	0.32%	
58.421	Patchouli alcohol	1667	3.98%	
58.615	Jatamansone	1670	3.13%	
59.000	Unidentified	1677	0.01%	
59.225	Unidentified	1681	0.05%	
59.325	Unidentified	1683	0.02%	
59.510	Unidentified	1686	0.07%	
59.654	Unidentified	1689	0.02%	
59.944	Unidentified	1694	0.09%	
60.071	Unidentified	1696	0.17%	
60.177	Unidentified	1698	0.04%	
60.307	Unidentified	1701	0.02%	
60.473	Unidentified	1704	0.13%	
60.754	Unidentified	1709	0.12%	
61.140	Unidentified	1716	0.1%	
61.291	Unidentified	1719	0.92%	
61.464	Mustakone	1722	0.37%	
61.595	Unidentified	1725	0.05%	
61.655	Unidentified	1726	0.01%	
61.749	Unidentified	1728	0.07%	
61.896	Unidentified	1730	0.05%	
62.150	Unidentified	1735	0.05%	
62.245	Unidentified	1737	0.05%	
62.650	Unidentified	1744	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
63.074	Unidentified	1752	0.44%	
63.441	Unidentified	1759	0.16%	
63.585	Unidentified	1762	0.14%	
63.818	Unidentified	1766	0.04%	
63.979	Unidentified	1769	0.47%	
64.470	Spirojatamol	1778	2.1%	
64.900	Unidentified	1786	0.01%	
65.486	Nootkatone	1797	0.06%	IFRA
65.604	Unidentified	1800	0.05%	
66.030	Unidentified	1808	0.03%	
66.147	Unidentified	1810	0.05%	
66.411	Unidentified	1816	0.02%	
66.855	Unidentified	1824	0.84%	
67.206	Unidentified	1831	0.05%	
67.906	Pseudoisoeugenyl butyrate analogue	1845	0.04%	
68.101	Unidentified	1849	0.03%	
68.268	Unidentified	1852	0.03%	
68.537	Unidentified	1857	0.44%	
68.995	Unidentified	1866	0.02%	
70.947	Unidentified	1905	0.04%	
71.613	Unidentified	1919	0.02%	
76.320	Unidentified	2016	0.03%	
77.139	Unidentified	2034	0.14%	

Total Identified Compounds **81.28 %**

