**Table S1.** Phytochemical constituents of flower and leaf extracts of *L. camara.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Wavenumber** | **FE (Probable functional group)** | **LE (Probable functional group)** | **Relevant chemical compound** |
| 1. | 667.83 cm-1 | C-H group | C-H group | Aliphatic compound |
| 2. | 758.00 cm-1 | C-H group | C-H group | Aliphatic compound |
| 3. | 1062.08 cm-1 | - | OH bend/Phenolics | Aromatic compound |
| 4. | 1162.38 cm-1 | - | C-O group | Tertiary alcohol |
| 5. | 1215.47 cm-1 | CO stretch | - | Ester |
| 6. | 1229.33 cm-1 | - | CO stretch | Ester |
| 7. | 1377.77 cm-1 | - | CH bend/Alkanes | Aliphatic compound |
| 8. | 1458.83 cm-1 | CH group/ Alkanes | CH group/Alkanes | Aliphatic compound |
| 9. | 1735. 64 cm-1 | C=O group/Aldehyde | C=O group/Aldehyde | Aldehyde compound |
| 10. | 2341.27 cm-1 | NH component | NH component | Amino-related component |
| 11. | 2359.66 cm-1 | NH component | NH component | Amino-related component |
| 12. | 2853.20 cm-1 | C-H stretch/Alkanes | C-H stretch/ Alkanes | Aliphatic compound |
| 13. | 2923.88 cm-1 | C-H stretch/ Alkanes | C-H stretch/ Alkanes | Aliphatic compound |
| 14. | 3412.40 cm-1 | OH group/ Phenolics | OH group/ Phenolics | Aromatic compound |

**Table S2.** Chemical composition of methanolic extract of *Lantana camara* leaf and flower crude extract mixture.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Peak No.** | **R. time** | **Area** | **Percentage (%)** | **Compound** |  | **Mol. formula** | **Mol. weight** |
| 1 | 3.270 | 2123285 | 0.90 | 2-Propenoic acid, 2-methoxyethyl ester |  | C6H10O3 | 130 |
| 2 | 3.442 | 1014692 | 0.43 | 2,3-Epithiopropyl allyl ether |  | C6H10OS | 130 |
| 3 | 3.701 | 842939 | 0.36 | 3(2H)-Thiophenone, dihydro |  | C4H6OS | 102 |
| 4 | 4.373 | 229276 | 0.10 | BETA.-D-Erythro-pentopyranoside |  | C8H12D3BO4 | 189 |
| 5 | 6.223 | 15314610 | **6.47** | Tiglic acid |  | C5H8O2 | 100 |
| 6 | 6.299 | 4911314 | **2.07** | 2-Cyclopenten-1-one, 2-hydroxy- |  | C5H6O2 | 98 |
| 7 | 7.432 | 701498 | 0.30 | Ethyl (trimethylsilyl)acetate |  | C7H16O2Si | 160 |
| 8 | 7.963 | 9890587 | **4.18** | tert-Butyl phenyl carbonate |  | C11H14O3 | 194 |
| 9 | 8.794 | 783449 | 0.33 | Proceroside |  | C29H40O10 | 548 |
| 10 | 9.060 | 401243 | 0.17 | 4-propyl-1,3-oxathiane 3-oxide |  | C7H14O2S | 162 |
| 11 | 9.393 | 2324752 | 0.98 | Benzofuran |  | C8H6O | 118 |
| 12 | 9.635 | 639407 | 0.27 | 2*,*3-Dihydro-5-hydroxy-6-methyl-4H-pyran-4-one |  | C6H8O3 | 128 |
| 13 | 9.945 | 1396890 | 0.59 | 2'-Azoisobutane |  | C8H18N2 | 142 |
| 14 | 11.100 | 645854 | 0.27 | 4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl |  | C6H8O4 | 144 |
| 15 | 11.228 | 256308 | 0.11 | o-Toluic aldehyde |  | C8H8O | 120 |
| 16 | 11.550 | 658138 | 0.28 | 3*-*Phenylacrylaldehyde |  | C9H8O | 132 |
| 17 | 11.773 | 1275478 | 0.54 | Octanoic acid |  | C8H16O2 | 144 |
| 18 | 11.932 | 339679 | 0.14 | Salicylic Acid Methyl Ester |  | C8H8O3 | 152 |
| 19 | 12.984 | 14805740 | **6.25** | 2,3- Dihydrobenzofuran |  | C8H8O | 120 |
| 20 | 14.275 | 536956 | 0.23 | Indole |  | C8H7N | 117 |
| 21 | 14.388 | 4440153 | 1.87 | 2-Methoxy-4-vinylphenol |  | C9H10O2 | 150 |
| 22 | 15.048 | 8414857 | 3.55 | 2,6-Dimethoxyphenol |  | C8H10O3 | 154 |
| 23 | 15.606 | 1171402 | 0.49 | 1,3-Cyclopentanediol |  | C5H10O2 | 102 |
| 24 | 16.736 | 941927 | 0.40 | Isopropoxy-1,1,1,7,7,7-hexamethyl-3,5,5-tris(trimethylsiloxy)tetrasiloxane |  | C18H52O7Si7 | 576 |
| 25 | 16.870 | 157764 | 0.07 | 3H-Naphth[1,8a-b]oxiren-2(1aH)-one, hexahydro |  | C10H14O2 | 166 |
| 26 | 16.995 | 1761565 | 0.74 | 3(2H)-Benzofuranone, 7-methyl- |  | C9H8O2 | 148 |
| 27 | 17.982 | 230695 | 0.10 | Heneicosanoic acid methyl ester |  | C22H44O2 | 340 |
| 28 | 18.823 | 376605 | 0.16 | 6-Dodecanone |  | C12H24O | 184 |
| 29 | 18.914 | 492192 | 0.21 | 6-(1-Methylethylidene) hexahydrocyclopenta [c]pyran-1(3H)-one |  | C11H16O2 | 180 |
| 30 | 19.145 | 589108 | 0.25 | (7E)-1-Chloro-7-heptadecene |  | C17H33Cl | 272 |
| 31 | 19.241 | 408002 | 0.17 | Myristyl chloride |  | C14H29Cl | 232 |
| 32 | 19.334 | 740476 | 0.31 | Icosapentaenoic acid |  | C20H30O2 | 302 |
| 33 | 19.438 | 933882 | 0.39 | Methoxyeugenol |  | C11H14O3 | 194 |
| 34 | 19.528 | 452099 | 0.19 | Benzeneacetic acid*,*alpha*,*3*,*4*-*tris*[(*trimethylsilyl*)*oxy]-, methyl ester |  | C20H40O5Si4 | 472 |
| 35 | 19.792 | 32745282 | **13.83** | Methylhexopyranoside |  | C7H14O6 | 194 |
| 36 | 20.488 | 18875123 | **7.97** | 3-Deoxy-d-mannonic acid |  | C6H12O6 | 180 |
| 37 | 20.862 | 229051 | 0.10 | 2-Methyltetracosane |  | C25H52 | 352 |
| 38 | 21.002 | 571190 | 0.24 | 2-Ethyl-1,3-dimethyl-2-cyclopentene-1-carboxylic acid |  | C10H16O2 | 168 |
| 39 | 21.172 | 330742 | 0.14 | Myristaldehyde |  | C14H28O | 212 |
| 40 | 21.289 | 669707 | 0.28 | 2- Bromopropionic acid, pentadecyl ester |  | C18H35BrO2 | 362 |
| 41 | 21.714 | 395713 | 0.17 | 9-(3,3-Dimethyloxiran-2-yl)-2,7-dimethylnona-2,6-dien-1-ol |  | C15H26O2 | 238 |
| 42 | 21.892 | 153370 | 0.06 | 1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsiloxy)hexasiloxane |  | C13H42O6Si7 | 490 |
| 43 | 22.052 | 561594 | 0.24 | (2Z)-3,7-Dimethyl-2-octenyl 2-methylpropanoate |  | C14H26O2 | 226 |
| 44 | 22.214 | 303855 | 0.13 | 3,4,5-Trimethoxybenzoic acid |  | C10H12O5 | 212 |
| 45 | 22.315 | 434020 | 0.18 | 1-Nonadecene |  | C19H38 | 266 |
| 46 | 22.414 | 380583 | 0.16 | 1-Chlorohexadecane |  | C16H33Cl | 260 |
| 47 | 22.556 | 598680 | 0.25 | (-)-Loliolide |  | C11H16O3 | 196 |
| 48 | 22.730 | 795993 | 0.34 | Z,Z-8,10-Hexadecadien-1-ol |  | C16H30O | 238 |
| 49 | 22.963 | 1362724 | 0.58 | Neophytadiene |  | C20H38 | 278 |
| 50 | 23.074 | 2304810 | 0.97 | Hexahydrofarnesyl acetone |  | C18H36O | 268 |
| 51 | 23.587 | 1294184 | 0.55 | 3,7,11,15-Tetramethyl-2-hexadecen-1-ol |  | C20H40O | 296 |
| 52 | 23.861 | 417966 | 0.18 | 9-Octadecen-12-ynoic acid, methyl ester |  | C19H32O2 | 292 |
| 53 | 24.247 | 16554809 | **6.99** | Palmitic acid, methyl ester |  | C17H34O2 | 270 |
| 54 | 24.408 | 169883 | 0.07 | Methyl 6,8-octadecadiynoate |  | C19H30O2 | 290 |
| 55 | 24.791 | 297563 | 0.13 | Phthalic acid, butyl oct-3-yl ester |  | C20H30O4 | 334 |
| 56 | 25.183 | 158230 | 0.07 | 1-Hexadecene |  | C16H32 | 224 |
| 57 | 25.624 | 253668 | 0.11 | Cyclopentaneundecanoic acid, methyl ester |  | C17H32O2 | 268 |
| 58 | 26.420 | 652182 | 0.28 | 2,4,4-Trimethylcyclopentanol |  | C8H16O | 128 |
| 59 | 26.550 | 5273057 | **2.23** | 9,12-Octadecadienoic acid, methyl ester |  | C19H34O2 | 294 |
| 60 | 26.643 | 30066072 | **12.70** | Linolenic acid, methyl ester |  | C19H32O2 | 292 |
| 61 | 26.803 | 34870372 | **14.72** | 3,7,11,15-Tetramethylhexadec-2-en-1-ol |  | C20H40O | 296 |
| 62 | 26.948 | 980003 | 0.41 | Methyl stearate |  | C19H38O2 | 298 |
| 63 | 28.741 | 2205830 | 0.93 | Hahnfett |  | No formula in table | 9999 |
| 64 | 29.083 | 639508 | 0.27 | 1*-*Chlorooctadecane |  | C18H37Cl | 288 |
| 65 | 29.533 | 1152285 | 0.49 | Methyl (Z)-5,11,14,17-eicosatetraenoate |  | C21H34O2 | 318 |