**Supplementary Material 2**

**2D-GC-TOF/MS profiles of *Celtis africana* and the endophytes**

**TABLE 1: Leaves hexane extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Compound name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 32 | 2,3-Pentanedione | 4.8039 | C5H8O2 | 881 | DATABASE | 15644072 | 14777 | 121.48 | 100.0524 |
| 45 | Hexane, 2-methyl- | 4.0601 | C7H16 | 832 | replib | 15302565 | 14455 | 131.72 | 100.1252 |
| 49 | Heptane | 4.0601 | C7H16 | 919 | DATABASE | 15302565 | 14455 | 133.98 | 100.1252 |
| 21 | Disulfide, diheptyl | 3.5182 | C14H30S2 | 970 | DATABASE | 13432459 | 12688 | 115.74 | 262.1789 |
| 50 | 1-Propanamine, N-ethyl-N-methyl- | 2.3887 | C6H15N | 782 | replib | 14294513 | 13502 | 135.8 | 101.1204 |
| 53 | 2-Butenoic acid, 3-methyl-, 2,6,6,9-tetramethyl-11-oxotricyclo[5.4.0.0(2,8)]undec-9-ene-3,5-diyl ester, stereoisomer | 2.3887 | C25H34O5 | 842 | DATABASE | 14294513 | 13502 | 136.74 | 414.2406 |
| 35 | 2,3-Heptanedione | 2.1357 | C7H12O2 | 871 | DATABASE | 15367898 | 14516 | 123.66 | 128.0837 |
| 42 | Pentane, 3,3-dimethyl- | 1.818 | C7H16 | 923 | replib | 10777204 | 10180 | 129.28 | 100.1252 |
| 24 | 1-Butene, 4-bromo- | 1.476 | C4H7Br | 709 | replib | 13094620 | 12369 | 117.42 | 133.9731 |
| 54 | 3-Hexen-1-ol, (Z)- | 1.3574 | C6H12O | 713 | mainlib | 5681771 | 5366.9 | 139.22 | 100.0888 |
| 5 | 5H-Benzocyclohepten-5-one, 1,4,4a,6,7,9a-hexahydro-4-methoxy-4a,7,7-trimethyl-, (4à,4aà,9aà)-(.+-.)- | 0.76529 | C15H22O2 | 870 | DATABASE | 6979821 | 6593 | 103.74 | 234.162 |
| 16 | Diazene, bis(1,1-dimethylethyl)- | 0.58188 | C8H18N2 | 848 | mainlib | 3994767 | 3773.4 | 112.1 | 142.147 |
| 31 | 2,4,6-Octanetrione | 0.45915 | C8H12O3 | 841 | DATABASE | 12903525 | 12188 | 120.46 | 156.0786 |
| 68 | Cyclohexane, 1,1-dimethyl- | 0.24691 | C8H16 | 748 | DATABASE | 1470544 | 1389.1 | 157.3 | 112.1252 |
| 102 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.18935 | C18H30O2 | 893 | mainlib | 1072219 | 1012.8 | 1188.8 | 278.2246 |
| 88 | Ethanone, 1-(1,2,2,3-tetramethylcyclopentyl)-, (1R-cis)- | 0.14387 | C11H20O | 743 | mainlib | 1021874 | 965.24 | 265.5 | 168.1514 |
| 94 | Hexadecane | 0.12356 | C16H34 | 954 | replib | 944686 | 892.33 | 853.84 | 226.2661 |
| 113 | á-Sitosterol | 0.10953 | C29H50O | 892 | replib | 373749 | 353.04 | 1806.5 | 414.3862 |
| 100 | Eicosane | 0.10611 | C20H42 | 921 | replib | 728976 | 688.58 | 1107.24 | 282.3287 |
| 36 | (Z,E)-4-Oxo-2,6-decadien-9-olide | 0.1056 | C10H12O3 | 757 | DATABASE | 2139697 | 2021.1 | 124.82 | 180.0786 |
| 96 | n-Hexadecanoic acid | 0.083579 | C16H32O2 | 912 | replib | 527350 | 498.13 | 1084.78 | 256.2402 |
| 108 | Heneicosane | 0.069737 | C21H44 | 921 | replib | 335230 | 316.65 | 1539.72 | 296.3443 |
| 109 | 1-Eicosanol | 0.069737 | C20H42O | 833 | DATABASE | 335230 | 316.65 | 1540.58 | 298.3236 |
| 86 | Octane, 3-methyl- | 0.062244 | C9H20 | 872 | DATABASE | 405146 | 382.69 | 251.56 | 128.1565 |
| 87 | p-Xylene | 0.062244 | C8H10 |  | replib | 405146 | 382.69 | 252.68 | 106.0783 |
| 101 | 9,12-Octadecadienoic acid (Z,Z)- | 0.057738 | C18H32O2 | 881 | replib | 271397 | 256.36 | 1184.04 | 280.2402 |
| 38 | 3-(Azidomethyl)cyclohexene | 0.05639 | C7H11N3 | 742 | DATABASE | 980408 | 926.08 | 126.58 | 137.0953 |
| 93 | Tetradecane | 0.031951 | C14H30 | 947 | replib | 246143 | 232.5 | 706.12 | 198.2348 |
| 66 | Tetrahydrofuran, 2,2-dimethyl- | 0.03142 | C6H12O | 786 | mainlib | 294991 | 278.64 | 154.94 | 100.0888 |
| 74 | Cyclopentane, 1,2,4-trimethyl-, (1à,2à,4á)- | 0.02686 | C8H16 | 862 | DATABASE | 219766 | 207.59 | 165.18 | 112.1252 |
| 98 | 1-Docosene | 0.025248 | C22H44 | 856 | replib | 162610 | 153.6 | 1103.86 | 308.3443 |
| 99 | Hexadecanoic acid, ethyl ester | 0.025248 | C18H36O2 | 829 | DATABASE | 162610 | 153.6 | 1104.38 | 284.2715 |
| 111 | Pentatriacontane | 0.021968 | C35H72 | 893 | DATABASE | 111114 | 104.96 | 1633 | 492.5634 |
| 91 | 3-Hexanol, 4,4-dimethyl- | 0.021615 | C8H18O | 702 | mainlib | 128759 | 121.62 | 274.9 | 130.1358 |
| 82 | Cyclohexane, 1,2-dimethyl-, cis- | 0.016929 | C8H16 | 885 | DATABASE | 117873 | 111.34 | 187.8 | 112.1252 |
| 112 | dl-à-Tocopherol | 0.006751 | C29H50O2 | 847 | mainlib | 37481 | 35.404 | 1666.46 | 430.3811 |
| 97 | Dibutyl phthalate | 0.005727 | C16H22O4 | 868 | mainlib | 32384 | 30.589 | 1091.36 | 278.1518 |
| 110 | ç-Tocopherol | 0.002072 | C28H48O2 | 823 | replib | 15074 | 14.238 | 1621.4 | 416.3654 |

**TABLE 2: Fruits hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Compound name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 47 | Pentane, 2,3-dimethyl- | 4.5506 | C7H16 | 842 | DATABASE | 16357314 | 15564 | 134.1 | 100.1252 |
| 45 | 2H-tetrazole, 2-acetyl- | 4.5177 | C3H4N4O | 794 | DATABASE | 16275492 | 15486 | 132.92 | 112.0385 |
| 46 | 2-Oxabicyclo[4.1.0]heptan-3-one, 5-methyl-, (1à,5à,6à)-(.+-.)- | 4.5177 | C7H10O2 | 727 | DATABASE | 16275492 | 15486 | 133.56 | 126.0681 |
| 19 | 2-Propylhexanal | 3.434 | C9H18O | 914 | DATABASE | 12500572 | 11895 | 115.94 | 142.1358 |
| 26 | 2,4,6-octanetrione | 2.3701 | C8H12O3 | 807 | DATABASE | 15188042 | 14452 | 120.36 | 156.0786 |
| 27 | Cyclopentanol, 2-ethenyl-2-methoxy-, trans- | 2.3701 | C8H14O2 | 835 | DATABASE | 15188042 | 14452 | 120.68 | 142.0994 |
| 29 | 2,3-Pentanedione | 1.7474 | C5H8O2 | 837 | DATABASE | 14963835 | 14238 | 121.72 | 100.0524 |
| 22 | Cyclohexane, [3-(2,2,2-trifluoroethoxy)propyl]- | 1.7394 | C11H19F3O | 737 | DATABASE | 13080053 | 12446 | 117.62 | 224.1388 |
| 52 | butanoic ACID, 2-HEXENYL ESTER, (E)- | 1.5102 | C10H18O2 | 741 | DATABASE | 5493629 | 5227.3 | 139.62 | 170.1307 |
| 2 | 1,1-Cyclopentanedicarboxylic acid, 3,4-bis(methylene)-, diethyl ester | 1.2781 | C13H18O4 | 773 | DATABASE | 6953218 | 6616.1 | 101.26 | 238.1205 |
| 28 | Cyclopentane, (1,1-dimethylethyl)- | 0.75252 | C9H18 | 721 | mainlib | 14781016 | 14064 | 120.98 | 126.1409 |
| 14 | Oxalic acid, diallyl ester | 0.73436 | C8H10O4 | 833 | mainlib | 4314809 | 4105.6 | 112.22 | 170.0579 |
| 15 | Acetonyl decyl ether | 0.73436 | C13H26O2 | 802 | DATABASE | 4314809 | 4105.6 | 112.36 | 214.1933 |
| 16 | 1,1-Ethanediol, diacetate | 0.73436 | C6H10O4 | 824 | DATABASE | 4314809 | 4105.6 | 112.52 | 146.0579 |
| 32 | Propanoic acid, 2,2-dimethyl-, 1-[(acetyloxy)methyl]-4-oxobutyl ester | 0.67261 | C12H20O5 | 838 | DATABASE | 8963502 | 8529 | 123.94 | 244.1311 |
| 35 | Cyclohexene, 3-(3-nitro-2-propenyl)-, (e)- | 0.076611 | C9H13NO2 | 776 | DATABASE | 1201063 | 1142.8 | 126.84 | 167.0946 |
| 96 | Eicosane | 0.067234 | C20H42 | 914 | replib | 402421 | 382.91 | 1106.58 | 282.3287 |
| 87 | Octane, 3-methyl- | 0.064679 | C9H20 | 873 | replib | 393067 | 374.01 | 252.02 | 128.1565 |
| 88 | p-Xylene | 0.064679 | C8H10 | 955 | replib | 393067 | 374.01 | 253.1 | 106.0783 |
| 89 | Ethanone, 1-(1,2,2,3-tetramethylcyclopentyl)-, (1R-cis)- | 0.047898 | C11H20O | 735 | mainlib | 310084 | 295.05 | 265.9 | 168.1514 |
| 75 | Hexane, 2,3-dimethyl- | 0.042165 | C8H18 | 939 | replib | 305561 | 290.75 | 175.46 | 114.1409 |
| 98 | Triacontane | 0.029073 | C30H62 | 911 | DATABASE | 181947 | 173.13 | 1216.52 | 422.4852 |
| 65 | Tetrahydrofuran, 2,2-dimethyl- | 0.0284 | C6H12O | 791 | replib | 256089 | 243.67 | 155.32 | 100.0888 |
| 97 | 9,12-Octadecadienoic acid (Z,Z)- | 0.028337 | C18H32O2 | 896 | replib | 157865 | 150.21 | 1182.22 | 280.2402 |
| 72 | Hexane, 3,3-dimethyl- | 0.024385 | C8H18 | 870 | mainlib | 188638 | 179.49 | 165.26 | 114.1409 |
| 64 | Butane, 2,2,3,3-tetramethyl- | 0.024165 | C8H18 | 924 | replib | 239263 | 227.66 | 154.76 | 114.1409 |
| 95 | n-Hexadecanoic acid | 0.018881 | C16H32O2 | 899 | replib | 121404 | 115.52 | 1082.96 | 256.2402 |
| 91 | Nonane | 0.011579 | C9H20 | 910 | DATABASE | 79780 | 75.913 | 274.74 | 128.1565 |

**TABLE 3: Stems hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Compound name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 29 | 2,3-Pentanedione | 4.4393 | C5H8O2 | 760 | mainlib | 15918202 | 14738 | 121.68 | 100.0524 |
| 44 | Hexane, 2-methyl- | 4.0481 | C7H16 | 840 | DATABASE | 16105665 | 14912 | 132.44 | 100.1252 |
| 20 | Sulfurous acid, dibutyl ester | 3.0674 | C8H18O3S | 959 | DATABASE | 12822362 | 11872 | 115.92 | 194.0977 |
| 51 | 2-Ethylthiolane, S,S-dioxide | 2.3127 | C6H12O2S | 755 | mainlib | 14222635 | 13168 | 137.06 | 148.0558 |
| 27 | 2,3-Heptanedione | 2.0787 | C7H12O2 | 864 | DATABASE | 15736940 | 14570 | 120.32 | 128.0837 |
| 33 | Propanoic acid, 2,2-dimethyl-, 1-[(acetyloxy)methyl]-4-oxobutyl ester | 2.0521 | C12H20O5 | 841 | DATABASE | 15671467 | 14510 | 123.9 | 244.1311 |
| 40 | Hydroperoxide, 1-methylpentyl | 1.8629 | C6H14O2 | 761 | DATABASE | 10550940 | 9768.7 | 129.38 | 118.0994 |
| 14 | Diazene, bis(1,1-dimethylethyl)- | 0.65396 | C8H18N2 | 850 | mainlib | 4377976 | 4053.4 | 112.34 | 142.147 |
| 15 | 2,5-Dioxotetrahydro-3-furanyl acetate # | 0.65396 | C6H6O5 | 783 | DATABASE | 4377976 | 4053.4 | 112.52 | 158.0215 |
| 103 | Octacosane | 0.6282 | C28H58 | 917 | replib | 3745869 | 3468.2 | 1540.3 | 394.4539 |
| 8 | 4,4-Dideuteriomethoxycyclohexane | 0.45161 | C7H12D2O | 853 | DATABASE | 3134401 | 2902 | 108.82 | 116.117 |
| 11 | 3,4-Dimethyldihydrofuran-2,5-dione | 0.45161 | C6H8O3 | 808 | mainlib | 3134401 | 2902 | 109.74 | 128.0473 |
| 67 | Pentane, 2-isocyano-2,4,4-trimethyl- | 0.23553 | C9H17N | 739 | replib | 1393753 | 1290.4 | 157.68 | 139.1361 |
| 77 | Heptane, 4-methyl- | 0.19611 | C8H18 | 894 | mainlib | 1142303 | 1057.6 | 179.02 | 114.1409 |
| 83 | Octane | 0.1055 | C8H18 | 932 | mainlib | 840280 | 777.98 | 199.26 | 114.1409 |
| 104 | Triacontane | 0.10461 | C30H62 | 905 | DATABASE | 476127 | 440.83 | 1632.5 | 422.4852 |
| 89 | Ethanone, 1-(1,2,2,3-tetramethylcyclopentyl)-, (1R-cis)- | 0.08573 | C11H20O | 739 | mainlib | 650517 | 602.29 | 265.96 | 168.1514 |
| 105 | á-Sitosterol | 0.074704 | C29H50O | 886 | replib | 251011 | 232.4 | 1805.98 | 414.3862 |
| 88 | p-Xylene | 0.064665 | C8H10 | 956 | replib | 439809 | 407.2 | 253.16 | 106.0783 |
| 98 | 9,12-Octadecadienoic acid (Z,Z)- | 0.059937 | C18H32O2 | 911 | Replib | 342364 | 316.98 | 1183 | 280.2402 |
| 99 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.049034 | C18H30O2 | 887 | Replib | 284954 | 263.83 | 1186.88 | 278.2246 |
| 97 | Heneicosane | 0.048801 | C21H44 | 922 | replib | 360246 | 333.54 | 1106.64 | 296.3443 |
| 52 | 2-Propenoic acid, anhydride | 0.040439 | C6H6O3 | 745 | mainlib | 1640390 | 1518.8 | 138.1 | 126.0317 |
| 96 | n-Hexadecanoic acid | 0.037859 | C16H32O2 | 901 | replib | 262263 | 242.82 | 1083.62 | 256.2402 |
| 65 | 3-Buten-2-ol, 2,3-dimethyl- | 0.032777 | C6H12O | 793 | DATABASE | 304042 | 281.5 | 155.32 | 100.0888 |
| 93 | Tetradecane | 0.03275 | C14H30 | 947 | replib | 272893 | 252.66 | 705.9 | 198.2348 |
| 64 | Butane, 2,2,3,3-tetramethyl- | 0.031589 | C8H18 | 914 | replib | 298448 | 276.32 | 154.76 | 114.1409 |
| 73 | Cyclopentane, 1,2,4-trimethyl- | 0.027166 | C8H16 | 872 | mainlib | 219114 | 202.87 | 165.6 | 112.1252 |
| 100 | Pentacosane | 0.025239 | C25H52 | 837 | DATABASE | 170530 | 157.89 | 1216.46 | 352.4069 |
| 91 | Nonane | 0.016539 | C9H20 | 860 | DATABASE | 112004 | 103.7 | 274.84 | 128.1565 |
| 82 | Cyclopentane, 1-ethyl-2-methyl- | 0.01232 | C8H16 | 875 | DATABASE | 70318 | 65.105 | 196.14 | 112.1252 |
| 101 | Heptacosane | 0.011681 | C27H56 | 916 | replib | 76251 | 70.598 | 1317.38 | 380.4382 |
| 84 | Heptane, 2,5-dimethyl- | 0.003874 | C9H20 | 860 | replib | 38617 | 35.754 | 224.48 | 128.1565 |

**TABLE 4: Leaves ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Compound name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 20 | Butane, 1-ethoxy- | 3.1338 | C6H14O | 830 | DATABASE | 8172249 | 7623.1 | 146.26 | 102.1045 |
| 15 | Acetic acid, 1-methylethyl ester | 2.0377 | C5H10O2 | 933 | DATABASE | 8767594 | 8178.5 | 135 | 102.0681 |
| 19 | Di-n-propyl ether | 0.42751 | C6H14O | 917 | mainlib | 1595308 | 1488.1 | 143.34 | 102.1045 |
| 36 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.23411 | C18H30O2 | 896 | mainlib | 575300 | 536.65 | 1187.16 | 278.2246 |
| 39 | Heptacosane | 0.14725 | C27H56 | 880 | replib | 241096 | 224.9 | 1538.82 | 380.4382 |
| 22 | Butane, 1-propoxy- | 0.11754 | C7H16O | 812 | mainlib | 251127 | 234.25 | 166.9 | 116.1201 |
| 23 | 3-Hexanol, 4-methyl- | 0.11754 | C7H16O | 758 | replib | 251127 | 234.25 | 167.24 | 116.1201 |
| 21 | Erythro-2-ethyl-3-ethoxybutan-1-ol | 0.11137 | C8H18O2 | 815 | DATABASE | 438659 | 409.19 | 156.84 | 146.1307 |
| 37 | 1-Eicosanol | 0.087282 | C20H42O | 901 | replib | 213754 | 199.39 | 1454.46 | 298.3236 |
| 33 | n-Hexadecanoic acid | 0.083802 | C16H32O2 | 909 | replib | 229871 | 214.43 | 1083.3 | 256.2402 |
| 28 | p-Xylene | 0.082038 | C8H10 | 955 | replib | 278424 | 259.72 | 254.1 | 106.0783 |
| 35 | 9,12-Octadecadienoic acid (Z,Z)- | 0.080293 | C18H32O2 | 898 | replib | 183963 | 171.6 | 1182.82 | 280.2402 |
| 38 | Tricosyl acetate | 0.051613 | C25H50O2 | 867 | mainlib | 114081 | 106.42 | 1503 | 382.3811 |
| 34 | 2-Hexadecen-1-ol, 3,7,11,15-tetramethyl-, [r-[r\*,r\*-(e)]]- | 0.04245 | C20H40O | 919 | DATABASE | 106321 | 99.178 | 1172.5 | 296.3079 |
| 14 | Butane, 2-ethoxy- | 0.039893 | C6H14O | 867 | mainlib | 273536 | 255.16 | 132.84 | 102.1045 |
| 30 | 1,2,3-Propanetriol, diacetate | 0.037298 | C7H12O5 | 941 | DATABASE | 109213 | 101.87 | 576.72 | 176.0685 |
| 27 | Ethylbenzene | 0.031046 | C8H10 | 951 | replib | 118044 | 110.11 | 248.02 | 106.0783 |
| 31 | 2,3-Dihydroxypropyl acetate | 0.024184 | C5H10O4 | 908 | DATABASE | 52456 | 48.932 | 579.82 | 134.0579 |
| 26 | 1,3-Dimethylcyclohexane,c&t | 0.01354 | C8H16 | 917 | mainlib | 42542 | 39,684 | 189,82 | 112,1252 |
| 32 | 1-Dodecanamine, n,n-dimethyl | 0.006411 | C14H31N | 908 | DATABASE | 15632 | 14.582 | 784.74 | 213.2457 |
| 18 | 3-Methoxy-1-pentene | 0.001477 | C6H12O | 739 | mainlib | 11616 | 10.835 | 138.86 | 100.0888 |

**TABLE 5: Fruits ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 8 | 1-Propylethanoate | 23.122 | C5H10O2 | 707 | DATABASE | 19356686 | 18606 | 116.92 | 102.0681 |
| 21 | Butane, 1-ethoxy- | 2.1887 | C6H14O | 854 | DATABASE | 7964193 | 7655.3 | 146.12 | 102.1045 |
| 16 | Acetic acid, 1-methylethyl ester | 1.3763 | C5H10O2 | 924 | Mainlib | 8316127 | 7993.6 | 134.84 | 102.0681 |
| 4 | Sulphuric acid dibutyl ester | 0.5779 | C8H18O4S | 871 | Mainlib | 1898908 | 1825.3 | 109.56 | 210.0926 |
| 20 | Di-n-propyl ether | 0.30427 | C6H14O | 917 | Mainlib | 1610018 | 1547.6 | 143.2 | 102.1045 |
| 23 | Oxalic acid, butyl propyl ester | 0.079114 | C9H16O4 | 787 | Mainlib | 243359 | 233.92 | 166.82 | 188.1049 |
| 25 | 3-Nitropropanoic acid | 0.079114 | C3H5NO4 | 811 | DATABASE | 243359 | 233.92 | 167.8 | 119.0219 |
| 22 | Erythro-2-ethyl-3-ethoxybutan-1-ol | 0.078744 | C8H18O2 | 814 | DATABASE | 432982 | 416.19 | 156.72 | 146.1307 |
| 33 | 9,12-Octadecadienoic acid (Z,Z)- | 0.075275 | C18H32O2 | 907 | Replib | 275629 | 264.94 | 1182.34 | 280.2402 |
| 32 | n-Hexadecanoic acid | 0.057704 | C16H32O2 | 910 | Replib | 244655 | 235.17 | 1083.32 | 256.2402 |
| 30 | p-Xylene | 0.055816 | C8H10 | 958 | replib | 258376 | 248.36 | 254.02 | 106.0783 |
| 29 | Ethylbenzene | 0.025063 | C8H10 | 950 | replib | 111923 | 107.58 | 247.96 | 106.0783 |
| 34 | 9,12,15-Octadecatrienoic acid, methyl ester, (Z,Z,Z)- | 0.023735 | C19H32O2 | 831 | replib | 74233 | 71.354 | 1186.22 | 292.2402 |
| 28 | Cyclohexane, 1,3-dimethyl-, cis- | 0.013481 | C8H16 | 784 | replib | 51455 | 49.46 | 189.7 | 112.1252 |
| 35 | 2H-1-benzopyran-6-ol, 3,4-dihydro-2,7,8-trimethyl-2-(4,8,12-trimethyltridecyl)- | 0.012007 | C28H48O2 | 809 | DATABASE | 46703 | 44.892 | 1620.6 | 416.3654 |
| 36 | dl-à-Tocopherol | 0.01123 | C29H50O2 | 826 | mainlib | 34443 | 33.107 | 1666.24 | 430.3811 |

**TABLE 6: Stems ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 6 | Acetic acid, anhydride | 5.42 | C4H6O3 | 854 | DATABASE | 17966591 | 17015 | 114.48 | 102.0317 |
| 20 | Butane, 1-ethoxy- | 2.7646 | C6H14O | 895 | DATABASE | 7919762 | 7500.3 | 146.22 | 102.1045 |
| 15 | Acetic acid, 1-methylethyl ester | 1.6952 | C5H10O2 | 944 | DATABASE | 8248944 | 7812.1 | 134.98 | 102.0681 |
| 16 | n-Propyl acetate | 1.6952 | C5H10O2 | 872 | replib | 8248944 | 7812.1 | 135.18 | 102.0681 |
| 44 | Triacontane | 0.68724 | C30H62 | 911 | DATABASE | 1803605 | 1708.1 | 1539.36 | 422.4852 |
| 47 | Friedelone | 0.57584 | C30H50O | 868 | DATABASE | 567337 | 537.29 | 2023 | 426.3862 |
| 18 | Di-n-propyl ether | 0.38483 | C6H14O | 914 | mainlib | 1608692 | 1523.5 | 143.32 | 102.1045 |
| 46 | D:A-Friedooleanan-3-ol, (3à)- | 0.18166 | C30H52O | 787 | replib | 181895 | 172.26 | 1992.48 | 428.4018 |
| 40 | n-Tridecan-1-ol | 0.14725 | C13H28O | 832 | mainlib | 241096 | 224.9 | 1540.08 | 200.214 |
| 40 | 9,12-Octadecadienoic acid (Z,Z)- | 0.13355 | C18H32O2 | 906 | replib | 384129 | 363.79 | 1182.82 | 280.2402 |
| 39 | n-Hexadecanoic acid | 0.11806 | C16H32O2 | 901 | replib | 347210 | 328.82 | 1083.64 | 256.2402 |
| 23 | Oxalic acid, allyl hexyl ester | 0.10748 | C11H18O4 | 802 | mainlib | 256890 | 243.28 | 166.88 | 214.1205 |
| 25 | Erythro-2-ethyl-3-ethoxybutan-1-ol | 0.10748 | C8H18O2 | 811 | DATABASE | 256890 | 243.28 | 167.86 | 146.1307 |
| 22 | 2-Ethoxypentane | 0.1062 | C7H16O | 811 | mainlib | 459824 | 435.47 | 156.82 | 116.1201 |
| 5 | Ethanedioic acid, dibutyl ester | 0.088091 | C10H18O4 | 791 | DATABASE | 445880 | 422.27 | 112.82 | 202.1205 |
| 41 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.083118 | C18H30O2 | 894 | mainlib | 199594 | 189.02 | 1186.56 | 278.2246 |
| 31 | p-Xylene | 0.077434 | C8H10 | 954 | replib | 283968 | 268.93 | 254.08 | 106.0783 |
| 33 | 2-Heptenal, (Z)- | 0.062049 | C7H12O | 930 | mainlib | 215837 | 204.41 | 324.62 | 112.0888 |
| 43 | 1-Decanol, 2-hexyl- | 0.051465 | C16H34O | 813 | replib | 138577 | 131.24 | 1454.82 | 242.261 |
| 29 | Hexanal | 0.040436 | C6H12O | 886 | DATABASE | 122251 | 115.78 | 200.78 | 100.0888 |
| 38 | Deca-2,4-dienal | 0.021502 | C10H16O | 808 | DATABASE | 63232 | 59.883 | 642.34 | 152.1201 |
| 35 | 1,2,3-Propanetriol, monoacetate | 0.020929 | C5H10O4 | 925 | Mainlib | 73019 | 69.152 | 445.08 | 134.0579 |
| 36 | 1,2,3-Propanetriol, diacetate | 0.020669 | C7H12O5 | 927 | DATABASE | 73237 | 69.359 | 576.76 | 176.0685 |
| 34 | 2,4-Heptadienal, (e,e)- | 0.016718 | C7H10O | 904 | DATABASE | 56354 | 53.37 | 360.78 | 110.0732 |
| 28 | 1,3-Dimethylcyclohexane,c&t | 0.009447 | C8H16 | 924 | Mainlib | 35039 | 33.183 | 189.78 | 112.1252 |
| 42 | 4,8,12,16-Tetramethylheptadecan-4-olide | 0.008906 | C21H40O2 | 869 | Mainlib | 31218 | 29.565 | 1301.94 | 324.3028 |

**TABLE 7: Leaves DCM:MeOH crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 6 | 1,1-Cyclopentanedicarboxylic acid, 3,4-bis(methylene)-, diethyl ester | 20.133 | C13H18O4 | 774 | DATABASE | 11225037 | 10736 | 107.5 | 238.1205 |
| 3 | Cyclopropanecarboxylic acid, 2-(1,1-dimethylethyl)-1,2-dimethyl-, methyl ester, cis- | 11.642 | C11H20O2 | 658 | DATABASE | 10470874 | 10014 | 104.24 | 184.1463 |
| 2 | 1,2-bis(dicyanmethylen)-3-(2,3-dimorpholinocyclopropenyliothio)cyclopropanid | 9.6825 | C20H16N6O2S | 849 | DATABASE | 9908964 | 9476.9 | 103.88 | 404.1055 |
| 19 | Mome inositol | 0.4775 | C7H14O6 | 826 | DATABASE | 122961 | 117.6 | 879.18 | 194.079 |
| 23 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.37731 | C18H30O2 | 898 | mainlib | 377414 | 360.96 | 1186.46 | 278.2246 |
| 22 | 9,12-Octadecadienoic acid (Z,Z)- | 0.19853 | C18H32O2 | 900 | replib | 183593 | 175.59 | 1182.36 | 280.2402 |
| 20 | n-Hexadecanoic acid | 0.15941 | C16H32O2 | 902 | replib | 167158 | 159.87 | 1083.02 | 256.2402 |
| 24 | 1-Docosene | 0.12555 | C22H44 | 922 | replib | 122397 | 117.06 | 1454.52 | 308.3443 |
| 15 | Butanoic acid, methyl ester | 0.073237 | C5H10O2 | 738 | DATABASE | 47852 | 45.766 | 156.84 | 102.0681 |
| 30 | Squalene | 0.063327 | C30H50 | 891 | replib | 97555 | 90.643 | 1513.9 | 410.9313 |
| 21 | Phytol | 0.052203 | C20H40O | 890 | replib | 47476 | 45.406 | 1172.46 | 296.3079 |
| 25 | Heptacosane | 0.031825 | C27H56 | 815 | replib | 74210 | 70.974 | 1538.9 | 380.4382 |
| 29 | Benzyl á-d-glucoside | 0.029258 | C13H18O6 | 850 | mainlib | 43243 | 40.179 | 1245.76 | 270.1103 |

**TABLE 8: Fruits DCM:MeOH crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 8 | Bicyclo[1.1.1]pentane-1,3-dithiol | 3.0181 | C5H8S2 | 844 | DATABASE | 6198217 | 5746.8 | 110 | 132.0067 |
| 30 | 2(3H)-Furanone, dihydro-4-hydroxy- | 0.90583 | C4H6O3 | 879 | mainlib | 336784 | 312.26 | 501.14 | 102.0317 |
| 28 | 4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl- | 0.76958 | C6H8O4 | 885 | replib | 351439 | 325.84 | 494.86 | 144.0423 |
| 40 | 9,12-Octadecadienoic acid (Z,Z)- | 0.42285 | C18H32O2 | 915 | replib | 520772 | 482.85 | 1182.74 | 280.2402 |
| 38 | n-Hexadecanoic acid | 0.39054 | C16H32O2 | 897 | replib | 471053 | 436.75 | 1083.82 | 256.2402 |
| 32 | 1,2,3-Propanetriol, diacetate | 0.3767 | C7H12O5 | 821 | DATABASE | 381631 | 353.84 | 577.12 | 176.0685 |
| 35 | 2-Amino-9-(3,4-dihydroxy-5-hydroxymethyl-tetrahydro-furan-2-yl)-3,9-dihydro-purin-6-one | 0.3644 | C10H13N5O5 | 761 | DATABASE | 116799 | 108.29 | 735.84 | 283.0917 |
| 39 | Ethyl (9z,12z)-9,12-octadecadienoate # | 0.31127 | C20H36O2 | 913 | DATABASE | 525098 | 472.19 | 1198.78 | 308.2715 |
| 36 | Methyl octadeca-9,12-dienoate | 0.30501 | C19H34O2 | 911 | DATABASE | 498815 | 448.56 | 1162.46 | 294.2559 |
| 45 | á-Sitosterol | 0.33028 | C29H50O | 871 | replib | 210215 | 194.91 | 1805.46 | 414.3862 |
| 19 | Acetic anhydride | 0.25759 | C4H6O3 | 823 | mainlib | 134276 | 124.5 | 181.14 | 102.0317 |
| 17 | 2-Heptenal, (Z)- | 0.29631 | C7H12O | 924 | mainlib | 451482 | 405.99 | 325.04 | 112.0888 |
| 22 | Propanoic acid, 2-oxo-, methyl ester | 0.23088 | C4H6O3 | 727 | mainlib | 138054 | 128 | 257.86 | 102.0317 |
| 41 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.20749 | C18H30O2 | 861 | mainlib | 177214 | 164.31 | 1186.36 | 278.2246 |
| 36 | Mome inositol | 0.20168 | C7H14O6 | 702 | DATABASE | 67571 | 62.65 | 888.28 | 194.079 |
| 29 | Deca-2,4-dienal | 0.20383 | C10H16O | 929 | DATABASE | 238979 | 214.9 | 642.46 | 152.1201 |
| 39 | 9,12-Octadecadienoic acid, methyl ester, (e,e)- | 0.17376 | C19H34O2 | 906 | DATABASE | 242415 | 224.76 | 1162.48 | 294.2559 |
| 42 | 9,12-Octadecadienoic acid (Z,Z)-, 2-hydroxy-1-(hydroxymethyl)ethyl ester | 0.097612 | C21H38O4 | 841 | mainlib | 125989 | 116.81 | 1455.26 | 354.277 |
| 33 | Butanedioic acid, 2-hydroxy-2-methyl-, (S)- | 0.089717 | C5H8O5 | 756 | mainlib | 78639 | 72.912 | 660.24 | 148.0372 |
| 31 | Valeric anhydride | 0.084685 | C10H18O3 | 779 | replib | 76931 | 71.328 | 552.42 | 186.1256 |
| 26 | 4H-pyran-4-one, 3-hydroxy-2-methyl- | 0.083375 | C6H6O3 | 70 | DATABASE | 94841 | 87.934 | 429.78 | 126.0317 |
| 16 | Hydroperoxide, hexyl | 0.070622 | C6H14O2 | 728 | DATABASE | 63521 | 58.895 | 132.74 | 118.0994 |
| 43 | 2H-1-benzopyran-6-ol, 3,4-dihydro-2,7,8-trimethyl-2-(4,8,12-trimethyltridecyl)- | 0.060783 | C28H48O2 | 822 | DATABASE | 59223 | 54.91 | 1620.96 | 416.3654 |
| 37 | Hexadecanoic acid, methyl ester | 0.048906 | C17H34O2 | 901 | replib | 60945 | 56.506 | 1063.82 | 270.2559 |
| 44 | dl-à-Tocopherol | 0.048906 | C29H50O2 | 806 | Mainlib | 28396 | 26.328 | 1665.92 | 430.3811 |
| 34 | 1,2,3-Benzenetriol | 0.033536 | C6H6O3 | 745 | DATABASE | 36181 | 33.546 | 690.12 | 126.0317 |

**TABLE 9: Stems DCM:MeOH crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 2 | 1,2-Bis(dicyanmethylen)-3-(2,3-dimorpholinocyclopropenyliothio)cyclopropanid | 6.6681 | C20H16N6O2S | 869 | DATABASE | 9693318 | 8783.2 | 103.8 | 404.1055 |
| 17 | Mome inositol | 0.398 | C7H14O6 | 837 | DATABASE | 134150 | 126.91 | 887.7 | 194.079 |
| 19 | 9,12-Octadecadienoic acid (Z,Z)- | 0.22874 | C18H32O2 | 912 | replib | 176382 | 166.87 | 1182.26 | 280.2402 |
| 21 | Heptacosane | 0.20482 | C27H56 | 913 | replib | 137334 | 129.93 | 1538.72 | 380.4382 |
| 20 | 9,12,15-Octadecatrienoic acid, (Z,Z,Z)- | 0.19441 | C18H30O2 | 884 | Mainlib | 121094 | 114.56 | 1186.06 | 278.2246 |
| 18 | n-Hexadecanoic acid | 0.15267 | C16H32O2 | 896 | Replib | 128433 | 121.51 | 1082.92 | 256.2402 |
| 12 | Butanoic acid, methyl ester | 0.11726 | C5H10O2 | 916 | DATABASE | 47228 | 44.681 | 156.72 | 102.0681 |
| 16 | 1,2,3-Propanetriol, diacetate | 0.06616 | C7H12O5 | 792 | DATABASE | 40955 | 38.746 | 575.8 | 176.0685 |
| 37 | Friedelan-3-one | 2.7568 | C30H50O | 851 | Replib | 1429204 | 1295 | 2024.14 | 426.3862 |
| 33 | Pentatriacontane | 0.95682 | C35H72 | 907 | DATABASE | 1132535 | 1026.2 | 1539.02 | 492.5634 |
| 36 | D:A-Friedooleanan-3-ol, (3à)- | 0.91553 | C30H52O | 792 | Replib | 492275 | 446.06 | 1993.16 | 428.4018 |
| 24 | 2-Amino-9-(3,4-dihydroxy-5-hydroxymethyl-tetrahydro-furan-2-yl)-3,9-dihydro-purin-6-one | 0.70324 | C10H13N5O5 | 775 | DATABASE | 186324 | 168.83 | 740.1 | 283.0917 |
| 18 | 2,4(1H,3H)-pyrimidinedione, 5-methyl- | 0.053363 | C5H6N2O2 | 70 | DATABASE | 61548 | 55.769 | 429.68 | 126.0429 |
| 20 | 2,3-Dihydro-3,5-dihydroxy-6-methyl-4h-pyran-4-one | 0.11318 | C6H8O4 | 874 | DATABASE | 148080 | 134.18 | 494.58 | 144.0423 |
| 35 | 2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahydro-4,8a-dimethyl-6-(1-methylethenyl)- | 0.29854 | C15H22O | 788 | Mainlib | 140541 | 127.35 | 1883.7 | 218.1671 |
| 27 | 4-((1E)-3-Hydroxy-1-propenyl)-2-methoxyphenol | 0.10577 | C10H12O3 | 892 | Mainlib | 150934 | 136.76 | 953.56 | 180.0786 |
| 28 | Benzyl Benzoate | 0.045635 | C14H12O2 | 924 | Replib | 70904 | 64.247 | 974.6 | 212.0837 |
| 25 | Ethanone, 1-(4-hydroxy-3-methoxyphenyl)- | 0.015236 | C9H10O3 | 801 | DATABASE | 34381 | 31.153 | 851.88 | 166.063 |
| 23 | Piperidine, 1,1'-methylenebis- | 0.011762 | C11H22N2 |  | Mainlib | 20258 | 18.356 | 611.4 | 182.1783 |

**TABLE 10: *A. flavus* EKFA1 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 95 | Octadecane | 21.396 | C18H38 | 938 | DATABASE | 56705272 | 5742.4 | 1004.8 | 254.2974 |
| 64 | Hexadecane | 17.352 | C16H34 | 935 | replib | 54175546 | 5486.2 | 869.9 | 226.2661 |
| 167 | Pentacosane | 8.0833 | C25H52 | 902 | DATABASE | 33354552 | 3377.7 | 1237 | 352.4069 |
| 131 | Oxalic acid, allyl nonyl ester | 4.709 | C14H24O4 | 856 | Mainlib | 44986849 | 4555.7 | 1126.7 | 256.1675 |
| 63 | Tetradecane, 2-methyl- | 3.9618 | C15H32 | 887 | DATABASE | 38390069 | 3887.7 | 868.7 | 212.2504 |
| 42 | Tetradecane | 3.9222 | C14H30 | 941 | DATABASE | 22057870 | 2233.7 | 719.1 | 198.2348 |
| 212 | Heptacosane | 1.1147 | C27H56 | 912 | Replib | 4160675 | 421.34 | 1432.1 | 380.4382 |
| 93 | 1-Nonadecene | 0.59186 | C19H38 | 941 | Replib | 2657886 | 269.16 | 998.5 | 266.2974 |
| 65 | 7-Hexadecene, (Z)- | 0.55487 | C16H32 | 808 | Mainlib | 3624674 | 367.06 | 871.6 | 224.2504 |
| 229 | Eicosane, 2-methyl- | 0.4041 | C21H44 | 909 | Mainlib | 1594843 | 161.51 | 1519.3 | 296.3443 |
| 114 | 7,9-Ditert-butyl-1-oxaspiro[4.5]deca-6,9-diene-2,8-dione | 0.33291 | C17H24O3 | 923 | DATABASE | 1414758 | 143.27 | 1076.5 | 276.1725 |
| 166 | 1-Docosene | 0.30789 | C22H44 | 929 | Replib | 1754563 | 177.68 | 1232.9 | 308.3443 |
| 102 | Octadecane, 4-methyl- | 0.15368 | C19H40 | 864 | Mainlib | 693034 | 70.182 | 1038 | 268.313 |
| 171 | Heptadecane, 4-methyl- | 0.13966 | C18H38 | 862 | Replib | 540290 | 54.714 | 1265.4 | 254.2974 |
| 137 | Eicosane, 2-methyl- | 0.1181 | C21H44 | 890 | mainlib | 580931 | 58.829 | 1156.8 | 296.3443 |
| 72 | Hexadecane, 4-methyl- | 0.11633 | C17H36 | 888 | mainlib | 560654 | 56.776 | 907.5 | 240.2817 |
| 117 | Hexadecanoic acid, methyl ester | 0.11461 | C17H34O2 | 898 | DATABASE | 398607 | 40.366 | 1080.2 | 270.2559 |
| 14 | Benzene, 1,3-dimethyl- | 0.084548 | C8H10 | 948 | DATABASE | 303482 | 30.733 | 260.3 | 106.0783 |
| 156 | Sulfurous acid, hexyl pentadecyl ester | 0.07956 | C21H44O3S | 818 | mainlib | 333465 | 33.769 | 1208.2 | 376.3011 |
| 86 | Tridecane, 5-propyl- | 0.077548 | C16H34 | 863 | mainlib | 383870 | 38.874 | 965.7 | 226.2661 |
| 154 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.073665 | C18H38O3S | 819 | mainlib | 313929 | 31.791 | 1203.7 | 334.2542 |
| 155 | (2RS,3SR)-2-butyl-3-methylbutane-1,4-diol | 0.073665 | C9H20O2 | 765 | DATABASE | 313929 | 31.791 | 1203.9 | 160.1463 |
| 22 | Benzene, 1,2,4-trimethyl- | 0.072637 | C9H12 | 932 | DATABASE | 293972 | 29.77 | 368.8 | 120.0939 |
| 124 | N,N-Bis(2-hydroxyethyl)dodecanamide | 0.072026 | C16H33NO3 | 780 | DATABASE | 452861 | 45.86 | 1106.5 | 287.246 |
| 201 | Octadecane, 2-methyl- | 0.064547 | C19H40 | 844 | replib | 299624 | 30.342 | 1401 | 268.313 |
| 88 | Tetradecane, 4-ethyl- | 0.062423 | C16H34 | 868 | mainlib | 301177 | 30.5 | 970 | 226.2661 |
| 233 | 8-Heptylpentadecane | 0.047163 | C22H46 | 872 | DATABASE | 225107 | 22.796 | 1575.5 | 310.36 |
| 97 | 1-Decanol, 2-hexyl- | 0.046617 | C16H34O | 869 | mainlib | 228239 | 23.113 | 1014.1 | 242.261 |
| 245 | Sulfurous acid, butyl dodecyl ester | 0.046537 | C16H34O3S | 857 | mainlib | 199110 | 20.163 | 1723.8 | 306.2229 |
| 177 | Tetradecane, 1-iodo- | 0.045685 | C14H29I | 848 | mainlib | 213773 | 21.648 | 1287.6 | 324.1314 |
| 243 | 1-Iodo-2-methylundecane | 0.04387 | C12H25I | 796 | mainlib | 179036 | 18.131 | 1679.1 | 296.1001 |
| 136 | Undecane, 2-methyl- | 0.04351 | C12H26 | 847 | replib | 177908 | 18.016 | 1146.9 | 170.2035 |
| 218 | Tetracosane, 3-ethyl- | 0.042165 | C26H54 | 836 | DATABASE | 225602 | 22.846 | 1457.2 | 366.4226 |
| 205 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.040609 | C24H38O4 | 875 | replib | 205092 | 20.769 | 1405.5 | 390.277 |
| 204 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.039513 | C18H38O3S | 871 | mainlib | 222385 | 22.52 | 1404.2 | 334.2542 |
| 134 | 4,6-di-tert-Butyl-m-cresol | 0.038227 | C15H24O | 710 | mainlib | 174427 | 17.664 | 1140.6 | 220.1827 |
| 122 | 2,6-di-butyl-2,5-cyclohexadiene-1,4-dione | 0.036492 | C14H20O2 | 710 | DATABASE | 170504 | 17.267 | 1100.6 | 220.1463 |
| 172 | 9,12-Octadecadienoic acid, methyl ester, (e,e)- | 0.036269 | C19H34O2 | 733 | DATABASE | 231567 | 23.45 | 1266.5 | 294.2559 |
| 226 | Sulfurous acid, 2-propyl tridecyl ester | 0.034578 | C16H34O3S | 809 | mainlib | 144629 | 14.646 | 1508.2 | 306.2229 |
| 66 | 7-Hexadecene, (Z)- | 0.032205 | C16H32 | 885 | mainlib | 158539 | 16.055 | 879.6 | 224.2504 |
| 123 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.03187 | C16H22O4 | 906 | DATABASE | 194455 | 19.692 | 1103.8 | 278.1518 |
| 91 | Benzene, (1-ethyldecyl)- | 0.026083 | C18H30 | 759 | replib | 309767 | 31.369 | 984.2 | 246.2348 |
| 41 | 3-Tetradecene, (z)- | 0.024936 | C14H28 | 882 | DATABASE | 133426 | 13.512 | 712 | 196.2191 |
| 80 | Benzene, (1-methyldecyl)- | 0.020834 | C17H28 | 835 | DATABASE | 105363 | 10.67 | 942.5 | 232.2191 |
| 232 | Sulfurous acid, 2-propyl tetradecyl ester | 0.019078 | C17H36O3S | 763 | mainlib | 108293 | 10.967 | 1561.7 | 320.2385 |
| 111 | 9-Oxabicyclo[6.1.0]non-2-ene, cis- | 0.018325 | C8H12O | 824 | DATABASE | 157153 | 15.915 | 1066.7 | 124.0888 |
| 132 | 1-Dodecanol | 0.01726 | C12H26O | 758 | DATABASE | 118470 | 11.997 | 1135.8 | 186.1984 |
| 163 | Sulfurous acid, dodecyl 2-propyl ester | 0.015428 | C15H32O3S | 750 | mainlib | 124601 | 12.618 | 1225.2 | 292.2072 |
| 81 | Octadecanoic acid, methyl ester | 0.015097 | C19H38O2 | 737 | DATABASE | 93949 | 9.514 | 952.8 | 298.2872 |
| 25 | Benzene, 1-ethyl-3-methyl- | 0.01354 | C9H12 | 906 | DATABASE | 84949 | 8.6025 | 394.6 | 120.0939 |
| 231 | Sulfurous acid, 2-pentyl undecyl ester | 0.013054 | C16H34O3S | 836 | mainlib | 108330 | 10.97 | 1543.2 | 306.2229 |
| 228 | 2-Hexyl-1-octanol | 0.012813 | C14H30O | 833 | mainlib | 179426 | 18.17 | 1517.5 | 214.2297 |
| 236 | Docosane | 0.01142 | C22H46 | 762 | DATABASE | 77803 | 7.8789 | 1627.8 | 310.36 |
| 45 | Nonane, 5-propyl- | 0.009864 | C12H26 | 875 | DATABASE | 68625 | 6.9495 | 754.8 | 170.2035 |
| 127 | Dodecanoic acid, 3-methylbutyl ester | 0.008615 | C17H34O2 | 768 | DATABASE | 96668 | 9.7893 | 1116.8 | 270.2559 |
| 161 | 9-Octadecenoic acid (z)- | 0.008365 | C18H34O2 | 735 | DATABASE | 110595 | 11.2 | 1223.8 | 282.2559 |
| 105 | 1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester | 0.008147 | C16H22O4 | 803 | DATABASE | 74022 | 7.496 | 1045.4 | 278.1518 |
| 164 | Acetic acid, trifluoro-, 3,7-dimethyloctyl ester | 0.008041 | C12H21F3O2 | 837 | mainlib | 48793 | 4.9412 | 1229.6 | 254.1494 |
| 217 | Benzenepropanol, à,à-dimethyl-ç-(trimethylsilyl)- | 0.007327 | C14H24OSi | 884 | DATABASE | 66614 | 6.7458 | 1451.5 | 236.1596 |
| 2 | Cyclopentane, 1-ethyl-2-methyl-, cis- | 0.006964 | C8H16 | 825 | Replib | 60813 | 6.1584 | 203.8 | 112.1252 |
| 73 | Cyclobutanecarboxylic acid, 3-methylbut-2-enyl ester | 0.005804 | C10H16O2 | 737 | mainlib | 67799 | 6.8659 | 910.1 | 168.115 |
| 158 | Z-10-Pentadecen-1-ol | 0.004778 | C15H30O | 727 | mainlib | 65377 | 6.6206 | 1218.1 | 226.2297 |
| 239 | Sulfurous acid, 2-propyl undecyl ester | 0.004663 | C14H30O3S | 795 | mainlib | 51939 | 5.2597 | 1639.1 | 278.1916 |
| 96 | Benzene, (1-methylundecyl)- | 0.004505 | C18H30 | 837 | mainlib | 52353 | 5.3016 | 1010.6 | 246.2348 |
| 225 | Sulfurous acid, hexyl pentadecyl ester | 0.004373 | C21H44O3S | 826 | mainlib | 69389 | 7.0268 | 1504.9 | 376.3011 |
| 170 | Decane, 2,4,6-trimethyl- | 0.003637 | C13H28 | 773 | DATABASE | 49435 | 5.0061 | 1258.1 | 184.2191 |
| 241 | Methanone, (2-indanyl)(4-morpholyl)- | 0.00362 | C14H17NO2 | 755 | mainlib | 51501 | 5.2154 | 1676.6 | 231.1259 |
| 85 | Benzene, (1-butyloctyl)- | 0.003246 | C18H30 | 739 | DATABASE | 48393 | 4.9006 | 960 | 246.2348 |
| 55 | 2-[(Benzoyloxy)methyl]-1-chloro-1-(trichlorovinyl)cyclopropane | 0.003122 | C13H12Cl4O | 709 | DATABASE | 50085 | 5.072 | 829.7 | 323.9642 |
| 71 | Benzene, (1-propyloctyl)- | 0.002808 | C17H28 | 742 | mainlib | 36190 | 3.6648 | 900.5 | 232.2191 |
| 12 | Propanoic acid, 2-hydroxy-2-methyl-, methyl ester | 0.00161 | C5H10O3 | 831 | DATABASE | 34531 | 3.4968 | 257.8 | 118.063 |
| 152 | Octane, 2,4,6-trimethyl- | 0.001602 | C11H24 | 790 | DATABASE | 27203 | 2.7548 | 1198.2 | 156.1878 |
| 175 | Decane, 4-methylene- | 0.001281 | C11H22 | 762 | mainlib | 19054 | 1.9295 | 1274.8 | 154.1722 |
| 89 | Cyclohexane, propyl- | 0.001226 | C9H18 | 741 | DATABASE | 24666 | 2.4979 | 982.1 | 126.1409 |
| 176 | 1-Octadecanol | 0.001156 | C18H38O | 755 | DATABASE | 23016 | 2.3308 | 1277.7 | 270.2923 |
| 133 | Glycylglycine | 0.000934 | C4H8N2O3 | 784 | nist\_msms | 36969 | 3.7438 | 1139.5 | 132.0535 |
| 150 | 1,2-Butanediol, 2-[2,2-bis(1-methylethyl)-1,3-dioxolan-4-yl]-3,3-dimethyl- | 0.000666 | C15H30O4 | 791 | DATABASE | 19198 | 1.9441 | 1193.6 | 274.2144 |
| 37 | Naphthalene, 2-methyl- | 0.000253 | C11H10 | 786 | DATABASE | 6198.4 | 0.62769 | 659.6 | 142.0783 |
| 220 | Methylmalonic acid | 0.000178 | C4H6O4 | 732 | nist\_msms | 12631 | 1.2791 | 1470.4 | 118.0266 |
| 44 | Naphthalene, 2,3-dimethyl- | 0.000138 | C12H12 | 862 | DATABASE | 4418.1 | 0.44741 | 746.7 | 156.0939 |

**TABLE 11: *A. flavus* EKFA1 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact mass |
| 93 | Pentadecane | 21.79 | C15H32 | 928 | DATABASE | 48908318 | 4962.5 | 868.4 | 212.2504 |
| 61 | Tetradecane | 15.38 | C14H30 | 937 | DATABASE | 42485512 | 4310.8 | 718.8 | 198.2348 |
| 167 | Octadecane | 3.5567 | C18H38 | 916 | DATABASE | 8909156 | 903.98 | 1123.7 | 254.2974 |
| 160 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 1.0269 | C11H18N2O2 | 887 | mainlib | 1788229 | 181.44 | 1095.4 | 210.1368 |
| 124 | 1-Nonadecene | 0.69458 | C19H38 | 923 | replib | 1686646 | 171.14 | 997.2 | 266.2974 |
| 206 | Propiconazole | 0.6588 | C15H17Cl2N3O2 | 886 | Restek Pesticides 2010 Library | 1298211 | 131.72 | 1325.5 | 341.0698 |
| 43 | Dodecane | 0.59462 | C12H26 | 926 | mainlib | 1536519 | 155.9 | 551.2 | 170.2035 |
| 19 | Benzene, 1,2,3-trimethyl- | 0.47722 | C9H12 | 878 | DATABASE | 876231 | 88.908 | 369.5 | 120.0939 |
| 209 | 1-Iodo-2-methylundecane | 0.46709 | C12H25I | 894 | mainlib | 1031172 | 104.63 | 1336.4 | 296.1001 |
| 121 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.39169 | C7H10N2O2 | 887 | mainlib | 569877 | 57.823 | 991.3 | 154.0742 |
| 166 | 1-Nonadecene | 0.35377 | C19H38 | 938 | replib | 891527 | 90.46 | 1119.7 | 266.2974 |
| 210 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 0.32984 | C14H16N2O2 | 841 | mainlib | 524646 | 53.234 | 1346 | 244.1212 |
| 91 | Acetaldehyde, (acetyloxy)-, 1-oxime, (e)- | 0.32535 | C4H7NO3 | 797 | DATABASE | 3216035 | 326.32 | 866.4 | 117.0426 |
| 71 | Oxalic acid, heptyl isohexyl ester | 0.23833 | C15H28O4 | 745 | mainlib | 501979 | 50.934 | 753.1 | 272.1988 |
| 236 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.20094 | C24H42O4 | 729 | mainlib | 525057 | 53.275 | 1510.1 | 394.3083 |
| 74 | Tetradecane, 4-methyl- | 0.19269 | C15H32 | 893 | mainlib | 505717 | 51.313 | 762.3 | 212.2504 |
| 207 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.18983 | C22H42O4 | 900 | replib | 473418 | 48.036 | 1332.4 | 370.3083 |
| 128 | Acetonyl decyl ether | 0.16618 | C13H26O2 | 798 | DATABASE | 412109 | 41.815 | 1006.6 | 214.1933 |
| 221 | Eicosane, 2-methyl- | 0.1399 | C21H44 | 900 | mainlib | 335354 | 34.027 | 1430.4 | 296.3443 |
| 107 | Hexadecane | 0.1289 | C16H34 | 927 | replib | 386590 | 39.226 | 935.9 | 226.2661 |
| 191 | Cyproconazole | 0.10319 | C15H18ClN3O | 787 | Korean Pesticide | 265664 | 26.956 | 1262.4 | 291.1138 |
| 158 | 2,6-Dimethyloctadecane | 0.099093 | C20H42 | 873 | DATABASE | 229253 | 23.261 | 1089 | 282.3287 |
| 116 | Tetradecane, 4-ethyl- | 0.096535 | C16H34 | 855 | mainlib | 228408 | 23.176 | 969.1 | 226.2661 |
| 96 | 3-Hexadecene, (z)- | 0.093011 | C16H32 | 851 | DATABASE | 229643 | 23.301 | 878.7 | 224.2504 |
| 21 | Benzene, 1-ethyl-3-methyl- | 0.087721 | C9H12 | 918 | DATABASE | 186659 | 18.94 | 395.2 | 120.0939 |
| 41 | Dehydromevalonic lactone | 0.084813 | C6H8O2 | 906 | mainlib | 236620 | 24.009 | 522.2 | 112.0524 |
| 5 | Butanoic acid, 2-methyl- | 0.075136 | C5H10O2 | 895 | DATABASE | 175256 | 17.782 | 242 | 102.0681 |
| 14 | 3-Pentanone, 2,2,4,4-tetramethyl- | 0.074155 | C9H18O | 903 | DATABASE | 181957 | 18.462 | 343.6 | 142.1358 |
| 122 | 1-Undecene | 0.072494 | C11H22 | 843 | DATABASE | 312394 | 31.697 | 992.7 | 154.1722 |
| 83 | Pentadecane, 7-methyl- | 0.070431 | C16H34 | 875 | mainlib | 201220 | 20.417 | 827.8 | 226.2661 |
| 145 | Benzene, butoxy- | 0.070189 | C10H14O | 701 | replib | 203530 | 20.651 | 1047.6 | 150.1045 |
| 129 | 1-Octanol, 2-butyl- | 0.069221 | C12H26O | 736 | mainlib | 184353 | 18.706 | 1012.8 | 186.1984 |
| 114 | Heptadecane, 2,6-dimethyl- | 0.068725 | C19H40 | 898 | mainlib | 263585 | 26.745 | 964.8 | 268.313 |
| 26 | 4-Methyl-2-oxovaleric acid | 0.060826 | C6H10O3 | 751 | mainlib | 172228 | 17.475 | 422.6 | 130.063 |
| 208 | 10-Heneicosene (c,t) | 0.060096 | C21H42 | 795 | mainlib | 304277 | 30.874 | 1334.1 | 294.3287 |
| 157 | Dodecane, 2-methyl- | 0.059211 | C13H28 | 851 | mainlib | 175724 | 17.83 | 1087.2 | 184.2191 |
| 68 | Pentane, 2,2,3-trimethyl- | 0.051978 | C8H18 | 750 | DATABASE | 127317 | 12.918 | 747.8 | 114.1409 |
| 69 | Oxirane, (1,1-dimethylbutyl)- | 0.051978 | C8H16O | 713 | mainlib | 127317 | 12.918 | 747.9 | 128.1201 |
| 88 | 1-dodecene, 2-ethyl- | 0.048648 | C14H28 | 848 | DATABASE | 153080 | 15.532 | 856.8 | 196.2191 |
| 153 | 7,9-Ditert-butyl-1-oxaspiro[4.5]deca-6,9-diene-2,8-dione | 0.048347 | C17H24O3 | 816 | DATABASE | 167721 | 17.018 | 1074.3 | 276.1725 |
| 16 | Benzene, 1-ethyl-2-methyl- | 0.046426 | C9H12 | 917 | replib | 149245 | 15.143 | 355.2 | 120.0939 |
| 172 | Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- | 0.042184 | C15H24O | 711 | DATABASE | 123999 | 12.582 | 1139.1 | 220.1827 |
| 62 | Cyclooctane, methyl- | 0.039741 | C9H18 | 836 | mainlib | 163673 | 16.607 | 721.3 | 126.1409 |
| 56 | Tridecane, 3-methyl- | 0.039401 | C14H30 | 903 | replib | 115368 | 11.706 | 694.1 | 198.2348 |
| 201 | 1-Iodo-2-methylundecane | 0.039214 | C12H25I | 763 | mainlib | 134660 | 13.663 | 1304.4 | 296.1001 |
| 15 | Benzene, 1,2,3-trimethyl- | 0.039062 | C9H12 | 921 | mainlib | 121204 | 12.298 | 346.4 | 120.0939 |
| 162 | Dibutyl phthalate | 0.038546 | C16H22O4 | 880 | replib | 196946 | 19.983 | 1102 | 278.1518 |
| 64 | 2,2-Dimethyl-3-heptanone | 0.037745 | C9H18O | 812 | mainlib | 135760 | 13.775 | 732.2 | 142.1358 |
| 183 | 1-Iodo-2-methylundecane | 0.035975 | C12H25I | 835 | mainlib | 105445 | 10.699 | 1219.2 | 296.1001 |
| 123 | trans-7-pentadecene | 0.035527 | C15H30 | 864 | DATABASE | 155583 | 15.786 | 994.2 | 210.2348 |
| 228 | 2H-Pyran-2-carboxylic acid, 6-butoxy-3,6-dihydro-, ethyl ester | 0.034927 | C12H20O4 | 707 | mainlib | 97356 | 9.8783 | 1470 | 228.1362 |
| 220 | Cyclotetradecane | 0.031861 | C14H28 | 861 | replib | 96365 | 9.7778 | 1428.8 | 196.2191 |
| 46 | Dodecane, 4-methyl- | 0.026528 | C13H28 | 823 | replib | 86790 | 8.8062 | 601.4 | 184.2191 |
| 182 | Sulfurous acid, hexyl pentadecyl ester | 0.02438 | C21H44O3S | 832 | mainlib | 108091 | 10.968 | 1207 | 376.3011 |
| 219 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.021863 | C24H38O4 | 895 | replib | 97389 | 9.8817 | 1403.9 | 390.277 |
| 203 | Octane, 3,4,5,6-tetramethyl- | 0.019123 | C12H26 | 806 | mainlib | 65495 | 6.6455 | 1311.1 | 170.2035 |
| 13 | Benzaldehyde | 0.018587 | C7H6O | 790 | DATABASE | 120583 | 12.235 | 342.5 | 106.0419 |
| 173 | 1-(2-Hydroxyethoxy)tridecane | 0.017798 | C15H32O2 | 780 | DATABASE | 67998 | 6.8994 | 1145.5 | 244.2402 |
| 42 | Azulene | 0.017175 | C10H8 | 708 | DATABASE |  | 83974 | 8.5205 | 549.5 |
| 195 | Thiocyanic acid, phenylmethyl ester | 0.016999 | C8H7NS | 752 | mainlib | 82627 | 8.3838 | 1281.5 | 149.0299 |
| 247 | 2,5-Piperazinedione, 3,6-bis(phenylmethyl)- | 0.016934 | C18H18N2O2 | 776 | mainlib | 68524 | 6.9529 | 1543.4 | 294.1368 |
| 141 | 1-(2-Thienyl)-1-propanone | 0.016247 | C7H8OS | 729 | mainlib | 73496 | 7.4573 | 1040.2 | 140.0296 |
| 12 | Benzene, 1-ethyl-2-methyl- | 0.01574 | C9H12 | 838 | DATABASE | 120583 | 12.235 | 342.2 | 120.0939 |
| 66 | Methyl 2-oxohexanoate | 0.014482 | C7H12O3 | 845 | DATABASE | 63150 | 6.4076 | 736.1 | 144.0786 |
| 73 | Sulfurous acid, hexyl heptyl ester | 0.013831 | C13H28O3S | 780 | mainlib | 76060 | 7.7175 | 757.8 | 264.1759 |
| 59 | 7-Tetradecene, (Z)- | 0.013595 | C14H28 | 884 | mainlib | 65272 | 6.6229 | 707.6 | 196.2191 |
| 118 | 3-Isopropyl-6-methyl-piperazine-2,5-dione | 0.013524 | C8H14N2O2 | 701 | DATABASE | 64762 | 6.5712 | 973.9 | 170.1055 |
| 45 | Simetryn | 0.013135 | C8H15N5S | 708 | KeTa\_PestHe V\_1\_00 | 81787 | 8.2986 | 565.5 | 213.10 |
| 217 | Sulfurous acid, dodecyl 2-propyl ester | 0.012187 | C15H32O3S | 825 | mainlib | 60986 | 6.188 | 1399.8 | 292.2072 |
| 102 | Decane, 2,5,9-trimethyl- | 0.011756 | C13H28 | 770 | mainlib | 66472 | 6.7446 | 916.2 | 184.2191 |
| 100 | 1-Octadecanol | 0.011461 | C18H38O | 814 | DATABASE | 90991 | 9.2325 | 909.2 | 270.2923 |
| 108 | Sulfurous acid, hexyl pentadecyl ester | 0.010468 | C21H44O3S | 807 | mainlib | 44043 | 4.4688 | 949.9 | 376.3011 |
| 20 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.010231 | C10H14 | 765 | mainlib | 52976 | 5.3752 | 392 | 134.1096 |
| 185 | Cyclopentane, 1,2,4-trimethyl-, (1à,2à,4á)- | 0.008763 | C8H16 | 720 | DATABASE | 47498 | 4.8194 | 1228.2 | 112.1252 |
| 155 | Decane, 2-methyl- | 0.008758 | C11H24 | 782 | mainlib | 44325 | 4.4975 | 1078.6 | 156.1878 |
| 202 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.007669 | C18H38O3S | 858 | mainlib | 54926 | 5.5731 | 1306.9 | 334.2542 |
| 174 | Sulfurous acid, hexyl pentadecyl ester | 0.007626 | C21H44O3S | 743 | mainlib | 45776 | 4.6447 | 1147.9 | 376.3011 |
| 249 | 1-Iodoundecane | 0.007534 | C11H23I | 828 | mainlib | 67725 | 6.8717 | 1608 | 282.0844 |
| 196 | Dodecyl acrylate | 0.003135 | C15H28O2 | 841 | replib | 27771 | 2.8178 | 1285 | 240.2089 |
| 198 | Oxalic acid, allyl octyl ester | 0.002517 | C13H22O4 | 784 | mainlib | 40625 | 4.122 | 1286.7 | 242.1518 |
| 197 | Cyclohexanone, 2-acetyl-2-(3-ethoxy-2-propenyl)-, (e)- | 0.002104 | C13H20O3 | 952 | DATABASE | 37202 | 3.7747 | 1286.3 | 224.1412 |
| 81 | Decane, 2,5,9-trimethyl- | 0.001165 | C13H28 | 799 | mainlib | 14643 | 1.4858 | 819.7 | 184.2191 |
| 178 | Cyclopentane, nitro- | 0.000213 | C5H9NO2 | 705 | DATABASE | 8129.5 | 0.82487 | 1165.5 | 115.0633 |
| 6 | Benzene, ethyl- | 0.000205 | C8H10 | 841 | DATABASE | 5024.9 | 0.50986 | 255.4 | 106.0783 |

**TABLE 12: *A. flavus* EKFA1 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact mass |
| 155 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 14.753 | C7H10N2O2 | 901 | mainlib | 2000478 | 208.35 | 994.6 | 154.0742 |
| 190 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 8.083 | C11H18N2O2 | 887 | mainlib | 1630186 | 169.79 | 1095.9 | 210.1368 |
| 194 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 4.1865 | C10H14N2O2 | 857 | DATABASE | 813154 | 84.692 | 1103.8 | 194.1055 |
| 226 | Hexanedioic acid, bis(2-ethylhexyl) ester | 1.0177 | C22H42O4 | 878 | Replib | 324739 | 33.822 | 1332.2 | 370.3083 |
| 157 | Octadecane | 0.94119 | C18H38 | 896 | DATABASE | 237384 | 24.724 | 1001.3 | 254.2974 |
| 223 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 0.80084 | C14H16N2O2 | 769 | Mainlib | 183303 | 19.091 | 1323.8 | 244.1212 |
| 198 | Heptadecane, 2-methyl- | 0.52037 | C18H38 | 769 | Replib | 158525 | 16.511 | 1123 | 254.2974 |
| 213 | Docosane | 0.24605 | C22H46 | 738 | DATABASE | 121478 | 12.652 | 1234 | 310.36 |
| 227 | 1-Iodo-2-methylundecane | 0.13942 | C12H25I | 859 | Mainlib | 77312 | 8.0522 | 1336.1 | 296.1001 |
| 128 | Decane, 6-ethyl-2-methyl- | 0.13667 | C13H28 | 862 | Mainlib | 60171 | 6.2669 | 785.9 | 184.2191 |
| 145 | Pentadecane | 0.10155 | C15H32 | 857 | DATABASE | 74073 | 7.7148 | 964.8 | 212.2504 |
| 91 | Pentanoic acid, 4-methyl-2-oxo-, methyl ester | 0.098182 | C7H12O3 | 728 | Mainlib | 56001 | 5.8326 | 426.7 | 144.0786 |
| 174 | Benzene, butoxy- | 0.095813 | C10H14O | 725 | Replib | 46954 | 4.8903 | 1048.2 | 150.1045 |
| 241 | Dodecane, 2-methyl- | 0.075954 | C13H28 | 802 | Mainlib | 53640 | 5.5867 | 1475.2 | 184.2191 |
| 232 | Heptadecane, 2,6,10,14-tetramethyl- | 0.068641 | C21H44 | 813 | Mainlib | 69725 | 7.262 | 1384.3 | 296.3443 |
| 220 | 2-Pentanol, 3-methylene- | 0.06752 | C6H12O | 715 | DATABASE | 39363 | 4.0998 | 1286 | 100.0888 |
| 244 | Nonadecane | 0.065686 | C19H40 | 757 | DATABASE | 52053 | 5.4214 | 1518 | 268.313 |
| 137 | 1-Heptadecanol | 0.060943 | C17H36O | 778 | DATABASE | 36879 | 3.841 | 861.7 | 256.2766 |
| 108 | Dehydromevalonic lactone | 0.058779 | C6H8O2 | 710 | Mainlib | 68893 | 7.1753 | 528.4 | 112.0524 |
| 209 | Undecane, 3,8-dimethyl- | 0.052162 | C13H28 | 837 | DATABASE | 38506 | 4.0105 | 1191.5 | 184.2191 |
| 29 | Benzene, 1,2-dimethyl- | 0.048888 | C8H10 | 809 | DATABASE | 39225 | 4.0854 | 261.1 | 106.0783 |
| 181 | 2-Bromo dodecane | 0.039512 | C12H25Br | 845 | Mainlib | 40589 | 4.2275 | 1070.4 | 248.114 |
| 197 | Oxalic acid, allyl octadecyl ester | 0.036445 | C23H42O4 | 719 | Mainlib | 23497 | 2.4472 | 1119.3 | 382.3083 |
| 53 | Bicyclo[1.1.1]pentane-1,3-dithiol | 0.03497 | C5H8S2 | 779 | DATABASE | 27547 | 2.8691 | 321 | 132.0067 |
| 126 | Pentane, 2,2-dimethyl- | 0.024708 | C7H16 | 721 | DATABASE | 22700 | 2.3642 | 753.6 | 100.1252 |
| 130 | Hexadecane | 0.024668 | C16H34 | 861 | Replib | 35082 | 3.6539 | 819.5 | 226.2661 |
| 215 | CIS-5,5-Dimethyl-6-heptyl-2-trichloromethyl-1,3-dioxan-4-one | 0.024268 | C14H23Cl3O3 | 773 | DATABASE | 29506 | 3.0731 | 1271.1 | 344.0713 |
| 236 | 1,2-Benzenedicarboxylic acid, bis(1-methylheptyl) ester | 0.023675 | C24H38O4 | 716 | DATABASE | 22428 | 2.3359 | 1403.8 | 390.277 |
| 208 | Dodecane, 1,1-difluoro- | 0.019048 | C12H24F2 | 731 | DATABASE | 34500 | 3.5933 | 1179.8 | 206.1846 |
| 132 | 1,2-Butanediol, 2-[2,2-bis(1-methylethyl)-1,3-dioxolan-4-yl]-3,3-dimethyl- | 0.011305 | C15H30O4 | 760 | DATABASE | 22074 | 2.2991 | 834.1 | 274.2144 |
| 86 | Benzene, 1-propynyl- | 0.008736 | C9H8 | 710 | Replib | 15097 | 1.5723 | 417.4 | 116.0626 |
| 28 | 1,2,5-Thiadiazolidine-2,5-dicarboxylic acid, 3-ethenyl-4-[[(phenylmethyl)thio]methyl]-, dimethyl ester, cis-(.+-.)- | 0.008206 | C16H20N2O4S2 | 713 | DATABASE | 15324 | 1.5961 | 259.9 | 368.0864 |
| 245 | Sulfurous acid, 2-propyl undecyl ester | 0.004069 | C14H30O3S | 807 | Mainlib | 8443.5 | 0.8794 | 1560.8 | 278.1916 |
| 221 | Sulfurous acid, 2-ethylhexyl isohexyl ester | 0.002841 | C14H30O3S | 820 | Mainlib | 6262.7 | 0.65227 | 1301.9 | 278.1916 |
| 217 | Benzene, [[1-(1-propenyloxy)propoxy]methyl]-, (e)- | 3.7E-05 | C13H18O2 | 790 | DATABASE | 163.19 | 0.016996 | 1281.6 | 206.1307 |

**TABLE 13: *Aspergillus* sp. EKFA2 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact mass |
| 67 | 2(1H)-pyrazinone, 1-hydroxy-6-(1-methylpropyl)-3-(2-methylpropyl)-, (+)- | 25.456 | C12H20N2O2 | 746 | DATABASE | 3303388 | 350.74 | 922.6 | 224.1525 |
| 75 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 10.385 | C7H10N2O2 | 900 | mainlib | 1359751 | 144.37 | 998 | 154.0742 |
| 4 | 2H-Tetrazole, 2-acetyl- | 1.5542 | C3H4N4O | 878 | DATABASE | 475093 | 50.444 | 205.6 | 112.0385 |
| 88 | 7,9-Ditert-butyl-1-oxaspiro[4.5]deca-6,9-diene-2,8-dione | 0.42252 | C17H24O3 | 789 | DATABASE | 171585 | 18.218 | 1074.5 | 276.1725 |
| 91 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 0.37655 | C11H18N2O2 | 793 | mainlib | 107534 | 11.418 | 1086.3 | 210.1368 |
| 52 | Phenol, 5-methyl-2-(1-methylethyl)- | 0.16683 | C10H14O | 815 | DATABASE | 104293 | 11.073 | 625.6 | 150.1045 |
| 95 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 0.073666 | C10H14N2O2 | 744 | DATABASE | 48084 | 5.1054 | 1105.7 | 194.1055 |
| 89 | Cyclohexan-2,2,3,3,4-d5-ol, 4-methyl-, (1s-trans)- | 0.039146 | C7H9D5O | 742 | DATABASE | 33670 | 3.5749 | 1079 | 119.1358 |
| 44 | Cyclobutane, 1,3-difluoro-1,3-dimethyl-, trans- | 0.035269 | C6H10F2 | 745 | DATABASE | 24082 | 2.5569 | 291.3 | 120.0751 |
| 87 | Disulfide, ethyl 1-methylpropyl | 6.37E-05 | C6H14S2 | 841 | DATABASE | 223.56 | 0,023737 | 1050.6 | 150.0537 |

**TABLE 14: *Aspergillus* sp. EKFA2 ethyl acetate crude extract.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 83 | Hexadecane | 28.19 | C16H34 | 930 | replib | 8422460 | 909.6 | 867.3 | 226.2661 |
| 55 | Tetradecane | 20.54 | C14H30 | 944 | replib | 6168440 | 666.17 | 717.8 | 198.2348 |
| 109 | Octadecane | 15.457 | C18H38 | 928 | replib | 4198817 | 453.46 | 1001.4 | 254.2974 |
| 139 | Eicosane | 5.8461 | C20H42 | 916 | replib | 1548847 | 167.27 | 1122.8 | 282.3287 |
| 152 | Heptacosane | 2.0971 | C27H56 | 902 | replib | 565602 | 61.083 | 1233.7 | 380.4382 |
| 22 | Benzene, 1,2,3-trimethyl- | 1.6884 | C9H12 | 932 | replib | 342894 | 37.031 | 370.1 | 120.0939 |
| 108 | 1-Nonadecene | 1.4062 | C19H38 | 927 | replib | 397076 | 42.883 | 996.9 | 266.2974 |
| 43 | Tridecane | 0.991 | C13H28 | 892 | DATABASE | 323753 | 34.964 | 551.3 | 184.2191 |
| 41 | Acetic acid, 2-ethylhexyl ester | 0.78642 | C10H20O2 | 917 | replib | 230509 | 24.894 | 503.1 | 172.1463 |
| 165 | Propiconazole | 0.77518 | C15H17Cl2N3O2 | 851 | Restek Pesticides 2010 Library | 246578 | 26.63 | 1324.8 | 341.0698 |
| 138 | 1-Docosene | 0.67966 | C22H44 | 821 | replib | 225252 | 24.326 | 1119.1 | 308.3443 |
| 84 | Cyclooctane, methyl- | 0.60958 | C9H18 | 817 | mainlib | 243564 | 26.304 | 869.8 | 126.1409 |
| 66 | Tridecane, 4-methyl- | 0.5937 | C14H30 | 844 | replib | 161559 | 17.448 | 762 | 198.2348 |
| 164 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.51559 | C15H17Cl2N3O2 | 838 | mainlib | 163461 | 17.653 | 1317.9 | 341.0698 |
| 54 | Cyclopropane, 1-ethyl-2-heptyl- | 0.37002 | C12H24 | 911 | mainlib | 126192 | 13.628 | 711.2 | 168.1878 |
| 26 | Benzene, 1-ethyl-3-methyl- | 0.36369 | C9H12 | 902 | DATABASE | 103593 | 11.188 | 395.6 | 120.0939 |
| 96 | Pentadecane | 0.36018 | C15H32 | 784 | DATABASE | 134594 | 14.536 | 935.5 | 212.2504 |
| 189 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.31249 | C24H42O4 | 707 | mainlib | 132884 | 14.351 | 1509.1 | 394.3083 |
| 166 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.2921 | C22H42O4 | 889 | DATABASE | 101602 | 10.973 | 1332 | 370.3083 |
| 90 | 2,3,5,8-Tetramethyldecane | 0.29077 | C14H30 | 836 | DATABASE | 101800 | 10.994 | 906.4 | 198.2348 |
| 103 | Hexane, 2,2,3,3-tetramethyl- | 0.26136 | C10H22 | 837 | mainlib | 96397 | 10.411 | 968.8 | 142.1722 |
| 154 | Cyproconazol, R\*,S\* / R\*,S\* same as cyproconazole | 0.23895 | C15H18ClN3O | 766 | KeTa\_PestHe V\_1\_00 | 96075 | 10.376 | 1261.5 | 291.1138 |
| 106 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.21753 | C7H10N2O2 | 819 | mainlib | 100080 | 10.808 | 990.5 | 154.0742 |
| 2 | Cyclopentane, 1-ethyl-3-methyl-, cis- | 0.20399 | C8H16 | 879 | mainlib | 99472 | 10.743 | 203.9 | 112.1252 |
| 56 | Cyclooctane, methyl- | 0.17935 | C9H18 | 810 | mainlib | 127536 | 13.773 | 720.9 | 126.1409 |
| 102 | Heptadecane, 2,6-dimethyl- | 0.17614 | C19H40 | 885 | mainlib | 76392 | 8.25 | 964.4 | 268.313 |
| 77 | Tridecane, 3-methyl- | 0.17574 | C14H30 | 853 | replib | 96682 | 10.441 | 845.7 | 198.2348 |
| 117 | Pentane, 2,3,3-trimethyl- | 0.17179 | C8H18 | 854 | DATABASE | 86171 | 9.3061 | 1036.8 | 114.1409 |
| 17 | Propanethioic acid, 2,2-dimethyl-, anhydrosulfide | 0.14498 | C10H18O2S | 858 | DATABASE | 61452 | 6.6366 | 344.8 | 202.1028 |
| 20 | Benzene, 1-ethyl-2-methyl- | 0.13797 | C9H12 | 882 | replib | 78071 | 8.4314 | 355.5 | 120.0939 |
| 105 | Undecane, 3,9-dimethyl- | 0.13464 | C13H28 | 814 | mainlib | 69259 | 7.4797 | 982.3 | 184.2191 |
| 23 | Nonane | 0.12332 | C9H20 | 795 | DATABASE | 107753 | 11.637 | 371.9 | 128.1565 |
| 19 | Benzene, 1,3,5-trimethyl- | 0.12308 | C9H12 | 894 | DATABASE | 56102 | 6.0588 | 346.7 | 120.0939 |
| 129 | Heptane, 2,3-dimethyl- | 0.11987 | C9H20 | 836 | DATABASE | 69904 | 7.5493 | 1093 | 128.1565 |
| 196 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.10279 | C24H42O4 | 710 | mainlib | 63339 | 6.8404 | 1532.6 | 394.3083 |
| 182 | Undecane, 2-methyl- | 0.10159 | C12H26 | 704 | DATABASE | 46034 | 4.9716 | 1477.4 | 170.2035 |
| 125 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-, (3s-trans)- | 0.087954 | C11H18N2O2 | 742 | DATABASE | 59503 | 6.4261 | 1082.3 | 210.1368 |
| 127 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.081291 | C18H38O3S | 808 | mainlib | 57041 | 6.1602 | 1088.6 | 334.2542 |
| 79 | 2-Undecene, 3-methyl-, (z)- | 0.080686 | C12H24 | 769 | DATABASE | 47723 | 5.1539 | 856.4 | 168.1878 |
| 74 | 7-Methylpentadecane | 0.074954 | C16H34 | 771 | DATABASE | 59721 | 6.4496 | 827.6 | 226.2661 |
| 11 | Benzene, 1,2-dimethyl- | 0.067887 | C8H10 | 891 | DATABASE | 50540 | 5.4582 | 262.5 | 106.0783 |
| 85 | 7-Tetradecene, (Z)- | 0.060196 | C14H28 | 811 | mainlib | 39937 | 4.3131 | 878.4 | 196.2191 |
| 27 | 1H-Indene, 2,3-dihydro- | 0.057554 | C9H10 | 861 | DATABASE | 34684 | 3.7457 | 409.5 | 118.0783 |
| 146 | Tetradecane, 1-iodo- | 0.052581 | C14H29I | 802 | mainlib | 44251 | 4.779 | 1199.8 | 324.1314 |
| 147 | Sulfurous acid, 2-ethylhexyl nonyl ester | 0.045547 | C17H36O3S | 754 | mainlib | 34111 | 3.6838 | 1202.1 | 320.2385 |
| 148 | Hexane, 2,2,3,3-tetramethyl- | 0.03977 | C10H22 | 769 | mainlib | 27024 | 2.9184 | 1206.4 | 142.1722 |
| 110 | Oxalic acid, allyl dodecyl ester | 0.039184 | C17H30O4 | 831 | mainlib | 35286 | 3.8108 | 1012.6 | 298.2144 |
| 33 | 3-[2',4'-Dimethylphenyl]-2,2-dimethylpropanal | 0.02948 | C13H18O | 713 | DATABASE | 33927 | 3,664 | 426.6 | 190.1358 |
| 39 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.02421 | C10H14 | 865 | DATABASE | 35281 | 3.8103 | 482.1 | 134.1096 |
| 149 | 2-Propyldecan-1-ol | 0.021245 | C13H28O | 804 | DATABASE | 20515 | 2.2156 | 1218.5 | 200.214 |
| 51 | Tridecane, 3-methyl- | 0.020408 | C14H30 | 860 | replib | 21761 | 2.3501 | 693.9 | 198.2348 |
| 113 | Syn-dimethyl [(e)-1-ethyl-2,6,6-trimethyl-3-oxo-4-heptenyl]malonate | 0.017204 | C17H28O5 | 731 | DATABASE | 25630 | 2.768 | 1025.4 | 312.1937 |
| 163 | Pentane, 3-ethyl-2,4-dimethyl- | 0.015063 | C9H20 | 828 | DATABASE | 14374 | 1.5523 | 1310.5 | 128.1565 |
| 34 | 2-Phenylpropanal | 0.009779 | C9H10O | 805 | DATABASE | 14370 | 1.5519 | 435.3 | 134.0732 |
| 59 | Propanethioic acid, 2,2-dimethyl-, anhydrosulfide | 0.008841 | C10H18O2S | 817 | DATABASE | 18139 | 1.959 | 736.8 | 202.1028 |
| 64 | Vinyl 2,2-dimethylpropanoate | 0.007596 | C8H14O2 | 721 | DATABASE | 17413 | 1.8806 | 753.4 | 142.0994 |
| 31 | Benzene, 1-methyl-4-propyl- | 0.00357 | C10H14 | 874 | DATABASE | 11193 | 1.2088 | 421.4 | 134.1096 |
| 65 | Disulfide, dipentyl | 0.002432 | C10H22S2 | 844 | DATABASE | 8324.2 | 0.89898 | 753.9 | 206.1163 |
| 12 | Methyllaurate | 0.001256 | C8H10 | 810 | DATABASE | 5408.4 | 0.58409 | 281.3 | 106.0783 |
| 131 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-, (3s-trans)- | 0.001109 | C11H18N2O2 | 794 | DATABASE | 3560.9 | 0.38456 | 1098.9 | 210.1368 |
| 38 | Dodecane, 1,1-difluoro- | 0.000339 | C12H24F2 | 864 | DATABASE | 1459.9 | 0.15766 | 462.4 | 206.1846 |
| 136 | 1-Octene, 3-ethyl- | 0.000138 | C10H20 | 802 | DATABASE | 594.71 | 0.064226 | 1115.4 | 140.1565 |

**TABLE 15: *Aspergillus* sp. EKFA2 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 164 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 16.797 | C11H18N2O2 | 883 | mainlib | 3405617 | 369.23 | 1096.9 | 210.1368 |
| 189 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 7.4436 | C14H16N2O2 | 849 | mainlib | 894431 | 96.971 | 1345.6 | 244.1212 |
| 133 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 4.5574 | C7H10N2O2 | 908 | mainlib | 912617 | 98.943 | 993.3 | 154.0742 |
| 167 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 2.0052 | C10H14N2O2 | 835 | DATABASE | 731526 | 79.31 | 1103.6 | 194.1055 |
| 186 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.86758 | C22H42O4 | 865 | replib | 189742 | 20.571 | 1331.5 | 370.3083 |
| 120 | Pentadecane | 0.33565 | C15H32 | 835 | DATABASE | 122647 | 13.297 | 935.5 | 212.2504 |
| 145 | 6-Amino-2-(methylamino)-4(3h)-pyrimidinone | 0.29775 | C5H8N4O | 730 | DATABASE | 152204 | 16.502 | 1027.3 | 140.0698 |
| 30 | Benzene, 1,2-dimethyl- | 0.23541 | C8H10 | 785 | DATABASE | 75400 | 8.1747 | 260.8 | 106.0783 |
| 124 | Hexadecane | 0.17149 | C16H34 | 781 | DATABASE | 59451 | 6.4455 | 964.5 | 226.2661 |
| 181 | Benzene, [(1-propenyloxy)methyl]- | 0.13948 | C10H12O | 731 | DATABASE | 62655 | 6.7928 | 1280.4 | 148.0888 |
| 198 | Eicosane | 0.11342 | C20H42 | 835 | DATABASE | 70401 | 7.6327 | 1430 | 282.3287 |
| 193 | Decane, 1-iodo- | 0.062005 | C10H21I | 745 | mainlib | 24750 | 2.6834 | 1383.5 | 268.0688 |
| 103 | Propanethioic acid, 2,2-dimethyl-, anhydrosulfide | 0.049587 | C10H18O2S | 906 | DATABASE | 41506 | 4.5 | 736.9 | 202.1028 |
| 108 | 2,3,5,8-Tetramethyldecane | 0.048429 | C14H30 | 743 | DATABASE | 39041 | 4.2327 | 785.5 | 198.2348 |
| 183 | 1-Iodoundecane | 0.029173 | C11H23I | 845 | mainlib | 22598 | 2.45 | 1301.5 | 282.0844 |
| 14 | Cyclopropanecarboxylic acid, 2-(1,1-dimethylethyl)-1,2-dimethyl-, methyl ester, cis- | 0.027338 | C11H20O2 | 886 | DATABASE | 20923 | 2.2684 | 227.9 | 184.1463 |
| 2 | Phosphonic acid, (2-oxo-1,3-propanediyl)bis-, tetramethyl ester | 0.025367 | C15H20O | 809 | DATABASE | 23738 | 2.5736 | 202.7 | 216.1514 |
| 200 | 1-Iodo-2-methylnonane | 0.023068 | C10H21I | 800 | mainlib | 22385 | 2.4269 | 1474.4 | 268.0688 |
| 111 | 2-Propyldecan-1-ol | 0.022436 | C13H28O | 814 | DATABASE | 14620 | 1.585 | 819.1 | 200.214 |
| 141 | Thiophene, 2-methyl-5-propyl- | 0.017635 | C8H12S | 701 | DATABASE | 18159 | 1.9688 | 1017 | 140.066 |
| 3 | 1,2,5-Thiadiazolidine-2,5-dicarboxylic acid, 3-ethenyl-4-[[(phenylmethyl)thio]methyl]-, dimethyl ester, trans-(.+-.)- | 0.005771 | C16H20N2O4S2 | 771 | DATABASE | 9612.7 | 1.0422 | 209.2 | 368.0864 |
| 195 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.005528 | C24H38O4 | 721 | DATABASE | 11727 | 1.2714 | 1402.8 | 390.277 |
| 37 | o-Xylene | 0.003732 | C8H10 | 815 |  | replib | 5727.8 | 0.62099 | 279.8 |
| 76 | Phosphonic acid, (2-oxo-1,3-propanediyl)bis-, tetramethyl ester | 0.001168 | C15H20O | 721 | DATABASE | 3320.2 | 0.35996 | 462.5 | 216.1514 |
| 44 | 1,1-Cyclopentanedicarboxylic acid, 3,4-bis(methylene)-, diethyl ester | 0.000904 | C13H18O4 | 727 | DATABASE | 2571.8 | 0.27883 | 307.2 | 238.1205 |
| 208 | bis-(octylphenyl)-amine | 0.000323 | C28H43N | 731 | DATABASE | 919 | 0.099635 | 1597.9 | 393.3396 |
| 202 | Dodecanamide | 0.000315 | C12H25NO | 722 | DATABASE | 895.44 | 0.097081 | 1515 | 199.1936 |

**TABLE 16: *A. niger* EKFF hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 110 | Octadecane | 27.727 | C18H38 | 924 | DATABASE | 50008804 | 5143.1 | 1003.3 | 254.2974 |
| 73 | Pentadecane | 24.638 | C15H32 | 932 | DATABASE | 49431712 | 5083.7 | 868.8 | 212.2504 |
| 180 | Pentacosane | 6.3156 | C25H52 | 910 | DATABASE | 15276212 | 1571.1 | 1235.2 | 352.4069 |
| 45 | Tetradecane | 4.8531 | C14H30 | 943 | replib | 12747863 | 1311 | 718.4 | 198.2348 |
| 203 | Heptacosane | 2.3865 | C27H56 | 914 | replib | 4872364 | 501.09 | 1337 | 380.4382 |
| 223 | Nonadecane, 2-methyl- | 1.0568 | C20H42 | 912 | mainlib | 2070909 | 212.98 | 1431.2 | 282.3287 |
| 109 | 1-Nonadecene | 0.81806 | C19H38 | 940 | replib | 1710613 | 175.93 | 997.6 | 266.2974 |
| 179 | 1-Docosene | 0.37188 | C22H44 | 947 | replib | 1005154 | 103.37 | 1231.8 | 308.3443 |
| 91 | Heptadecane | 0.25175 | C17H36 | 924 | DATABASE | 630228 | 64.815 | 936.1 | 240.2817 |
| 117 | Octadecane, 4-methyl- | 0.17053 | C19H40 | 874 | mainlib | 367447 | 37.79 | 1037.3 | 268.313 |
| 24 | Benzene, 1,2-dimethyl- | 0.1678 | C8H10 | 943 | DATABASE | 295738 | 30.415 | 260.5 | 106.0783 |
| 141 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.16709 | C16H22O4 | 905 | DATABASE | 296051 | 30.447 | 1102.3 | 278.1518 |
| 106 | Tridecane, 3-methyl- | 0.13924 | C14H30 | 862 | replib | 266828 | 27.442 | 982.8 | 198.2348 |
| 156 | Eicosane, 2-methyl- | 0.12959 | C21H44 | 873 | mainlib | 328542 | 33.789 | 1155.8 | 296.3443 |
| 132 | 7,9-Ditert-butyl-1-oxaspiro[4.5]deca-6,9-diene-2,8-dione | 0.11299 | C17H24O3 | 771 | DATABASE | 268933 | 27.658 | 1074.5 | 276.1725 |
| 208 | Sulfurous acid, 2-pentyl undecyl ester | 0.096576 | C16H34O3S | 842 | mainlib | 196137 | 20.171 | 1364 | 306.2229 |
| 102 | Tetradecane, 4-ethyl- | 0.090003 | C16H34 | 857 | mainlib | 230184 | 23.673 | 969.2 | 226.2661 |
| 169 | Eicosane | 0.086499 | C20H42 | 840 | DATABASE | 204980 | 21.081 | 1200.5 | 282.3287 |
| 170 | Undecane, 2,3-dimethyl- | 0.086499 | C13H28 | 811 | mainlib | 204980 | 21.081 | 1200.7 | 184.2191 |
| 46 | Cyclooctane, 1,4-dimethyl-, cis- | 0.085423 | C10H20 | 837 | mainlib | 203700 | 20.949 | 721.3 | 140.1565 |
| 107 | Benzene, (1-ethyldecyl)- | 0.084887 | C18H30 | 705 | DATABASE | 266828 | 27.442 | 983.3 | 246.2348 |
| 198 | Octadecane, 2-methyl- | 0.083983 | C19H40 | 857 | replib | 176950 | 18.198 | 1322.9 | 268.313 |
| 137 | Octadecane, 2,6-dimethyl- | 0.079495 | C20H42 | 857 | mainlib | 194436 | 19.996 | 1089.2 | 282.3287 |
| 171 | Undecane, 6-ethyl- | 0.068658 | C13H28 | 836 | replib | 148013 | 15.222 | 1202.7 | 184.2191 |
| 138 | 1-Iodo-2-methylundecane | 0.067365 | C12H25I | 854 | mainlib | 170689 | 17.554 | 1093.7 | 296.1001 |
| 61 | Pentadecane, 7-methyl- | 0.059124 | C16H34 | 854 | mainlib | 140873 | 14.488 | 828.1 | 226.2661 |
| 75 | Simetryn | 0.058741 | C8H15N5S | 714 | KeTa\_PestHe V\_1\_00 | 172769 | 17.768 | 878.9 | 213.1048 |
| 216 | 1,2-Benzenedicarboxylic acid, mono(2-ethylhexyl) ester | 0.053604 | C16H22O4 | 755 | mainlib | 167483 | 17.225 | 1404 | 278.1518 |
| 21 | Ethylbenzene | 0.049979 | C8H10 | 908 | mainlib | 135413 | 13.926 | 253.5 | 106.0783 |
| 140 | 2,6-di-butyl-2,5-cyclohexadiene-1,4-dione | 0.048954 | C14H20O2 | 721 | DATABASE | 192699 | 19.818 | 1098.8 | 220.1463 |
| 25 | Benzene, 1,3-dimethyl- | 0.04813 | C8H10 | 934 | DATABASE | 119205 | 12.259 | 279.5 | 106.0783 |
| 112 | 2-Ethyl-1-dodecanol | 0.044765 | C14H30O | 889 | mainlib | 135016 | 13.886 | 1013.1 | 214.2297 |
| 172 | Sulfurous acid, hexyl pentadecyl ester | 0.040231 | C21H44O3S | 787 | mainlib | 135453 | 13.931 | 1203 | 376.3011 |
| 226 | Tetracosane, 3-ethyl- | 0.039334 | C26H54 | 853 | DATABASE | 135299 | 13.915 | 1456.5 | 366.4226 |
| 218 | Nonadecane, 2-methyl- | 0.038705 | C20H42 | 832 | mainlib | 124271 | 12.781 | 1418.5 | 282.3287 |
| 195 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.035572 | C18H38O3S | 871 | mainlib | 116047 | 11.935 | 1307 | 334.2542 |
| 240 | 2-Bromo dodecane | 0.035557 | C12H25Br | 853 | mainlib | 120225 | 12.364 | 1574.7 | 248.114 |
| 211 | 1-Iodo-2-methylundecane | 0.032218 | C12H25I | 847 | mainlib | 89065 | 9.1598 | 1384.6 | 296.1001 |
| 23 | Octane, 3-methyl- | 0.023265 | C9H20 | 876 | DATABASE | 84159 | 8.6552 | 258.6 | 128.1565 |
| 69 | Dimethomorph (E) | 0.023178 | C21H22ClNO4 | 701 | KeTa\_PestHe V\_1\_00 | 80040 | 8.2316 | 853 | 387.1237 |
| 94 | Oxalic acid, allyl nonyl ester | 0.02264 | C14H24O4 | 809 | mainlib | 75765 | 7.7919 | 950.2 | 256.1675 |
| 217 | Sulfurous acid, hexyl tetradecyl ester | 0.019942 | C20H42O3S | 869 | mainlib | 86958 | 8.9431 | 1407.1 | 362.2855 |
| 205 | Nonane, 5-(2-methylpropyl)- | 0.019698 | C13H28 | 823 | mainlib | 102229 | 10.514 | 1355 | 184.2191 |
| 199 | Tetronic acid | 0.016763 | C4H4O3 | 715 | nist\_msms | 64274 | 6.6101 | 1329.2 | 100.016 |
| 111 | Benzene, (1-methylundecyl)- | 0.015249 | C18H30 | 815 | mainlib | 53847 | 5.5378 | 1009.7 | 246.2348 |
| 93 | Benzene, (1-methyldecyl)- | 0.013216 | C17H28 | 766 | DATABASE | 56902 | 5.852 | 941.7 | 232.2191 |
| 44 | 4-Dodecene, (e)- | 0.013171 | C12H24 | 890 | DATABASE | 50694 | 5.2135 | 713.7 | 168.1878 |
| 230 | Pentadecane, 7-methyl- | 0.012845 | C16H34 | 853 | mainlib | 64108 | 6.5931 | 1492.9 | 226.2661 |
| 167 | Heptane, 3-ethyl-5-methyl- | 0.012707 | C10H22 | 816 | mainlib | 68073 | 7.0009 | 1192.7 | 142.1722 |
| 122 | 5-Methyloctene-1 | 0.012528 | C9H18 | 744 | DATABASE | 95786 | 9.851 | 1047.2 | 126.1409 |
| 108 | 2-Undecene, 9-methyl-, (E)- | 0.011879 | C12H24 | 833 | mainlib | 50116 | 5.1541 | 992.9 | 168.1878 |
| 105 | Cyclohexane, octyl- | 0.011369 | C14H28 | 747 | DATABASE | 65038 | 6.6887 | 981.3 | 196.2191 |
| 38 | 1-Methylbutyl nitrite | 0.011004 | C5H11NO2 | 841 | DATABASE | 67968 | 6.99 | 676.9 | 117.079 |
| 42 | Decane, 2,5,9-trimethyl- | 0.010498 | C13H28 | 746 | DATABASE | 54214 | 5.5756 | 698 | 184.2191 |
| 158 | Acetyl valeryl | 0.010466 | C7H12O2 | 786 | replib | 59571 | 6.1265 | 1165.1 | 128.0837 |
| 181 | Tridecane, 6-methyl- | 0.010323 | C14H30 | 720 | DATABASE | 58436 | 6.0098 | 1243.2 | 198.2348 |
| 72 | 1,2-Benzenedicarboxylic acid, diethyl ester | 0.007204 | C12H14O4 | 818 | DATABASE | 60238 | 6.1951 | 864.3 | 222.0892 |
| 103 | Hexane, 3,3-dimethyl- | 0.007132 | C8H18 | 831 | DATABASE | 56097 | 5.7693 | 973.6 | 114.1409 |
| 224 | Sulfurous acid, 2-propyl undecyl ester | 0.006907 | C14H30O3S | 839 | mainlib | 35794 | 3.6812 | 1447.9 | 278.1916 |
| 204 | Octane, 2,4,6-trimethyl- | 0.006898 | C11H24 | 813 | DATABASE | 36144 | 3.7172 | 1343.9 | 156.1878 |
| 95 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.006264 | C18H38O3S | 849 | mainlib | 47081 | 4.842 | 953.6 | 334.2542 |
| 14 | Heptane, 3,5-dimethyl- | 0.005909 | C9H20 | 874 | DATABASE | 44176 | 4.5433 | 230.7 | 128.1565 |
| 90 | 3-Tetradecene, (z)- | 0.005829 | C14H28 | 777 | DATABASE | 31321 | 3.2212 | 931.4 | 196.2191 |
| 36 | Octane, 2,3,7-trimethyl- | 0.005824 | C11H24 | 733 | mainlib | 44895 | 4.6171 | 612.5 | 156.1878 |
| 57 | Phenol, 2,4-bis(1,1-dimethylethyl)- | 0.00539 | C14H22O | 773 | replib | 29074 | 2.9901 | 803.5 | 206.1671 |
| 80 | Benzene, (1-propyloctyl)- | 0.005035 | C17H28 | 753 | mainlib | 29540 | 3.038 | 899.8 | 232.2191 |
| 207 | Decane, 2,4-dimethyl- | 0.004831 | C12H26 | 846 | DATABASE | 30052 | 3.0907 | 1357.6 | 170.2035 |
| 88 | 2-Oxepanone, 7-methyl- | 0.004704 | C7H12O2 | 701 | mainlib | 34417 | 3.5395 | 922.1 | 128.0837 |
| 200 | Oxalic acid, 2-ethylhexyl hexyl ester | 0.004633 | C16H30O4 | 784 | mainlib | 43116 | 4.4342 | 1332 | 286.2144 |
| 92 | Nonane, 5-propyl- | 0.004083 | C12H26 | 755 | DATABASE | 26543 | 2.7298 | 940.7 | 170.2035 |
| 84 | Benzene, (1-ethylnonyl)- | 0.003576 | C17H28 | 759 | DATABASE | 37002 | 3.8054 | 915.4 | 232.2191 |
| 101 | Benzene, (1-propylhexyl)- | 0.003431 | C15H24 | 748 | DATABASE | 33936 | 3.4901 | 968.1 | 204.1878 |
| 166 | 2-Hydroxy-16-cyano-hexadecane | 0.001636 | C17H33NO | 787 | DATABASE | 15193 | 1.5625 | 1190.6 | 267.2562 |
| 82 | Cyclopentane, butyl- | 0.001286 | C9H18 | 800 | replib | 15091 | 1.552 | 909.5 | 126.1409 |
| 189 | 1-Octadecanol | 0.001256 | C18H38O | 807 | DATABASE | 13248 | 1.3625 | 1276.7 | 270.2923 |
| 77 | 2,2-Dimethyl-1-[3-(phenylmethoxy)-3-methylbutyl]oxirane | 0.000712 | C16H24O2 | 752 | DATABASE | 17871 | 1.838 | 889.5 | 248.1776 |
| 27 | Methyl 2-methylidene-4-phenyl-4-oxobutanoate | 0.000105 | C12H12O3 | 910 | DATABASE | 3625.4 | 0.37285 | 305.1 | 204.0786 |
| 29 | Benzenepropanoic acid, á-oxo-, ethyl ester | 9.32E-05 | C11H12O3 | 849 | DATABASE | 3212.7 | 0.33041 | 338 | 192.0786 |

**TABLE 17: *A. niger* EKFF ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 91 | Pentadecane | 25.585 | C15H32 | 936 | DATABASE | 55088211 | 5503.5 | 869.1 | 212.2504 |
| 126 | Octadecane | 18.227 | C18H38 | 922 | DATABASE | 48983436 | 4893.6 | 1003 | 254.2974 |
| 57 | Tetradecane | 18.019 | C14H30 | 942 | DATABASE | 51207539 | 5115.8 | 719.2 | 198.2348 |
| 163 | Eicosane | 6.427 | C20H42 | 896 | DATABASE | 22891991 | 2287 | 1124.2 | 282.3287 |
| 90 | Tetradecane, 2-methyl- | 5.8306 | C15H32 | 890 | DATABASE | 41060343 | 4102 | 867.9 | 212.2504 |
| 153 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 1.3687 | C11H18N2O2 | 887 | mainlib | 3070124 | 306.71 | 1095.3 | 210.1368 |
| 124 | 1-Nonadecene | 0.82509 | C19H38 | 940 | replib | 2561831 | 255.93 | 997.5 | 266.2974 |
| 39 | Dodecane | 0.80558 | C12H26 | 929 | DATABASE | 2762381 | 275.97 | 551.4 | 170.2035 |
| 206 | Propiconazole | 0.72447 | C15H17Cl2N3O2 | 871 | Restek Pesticides 2010 Library | 1856983 | 185.52 | 1326 | 341.0698 |
| 209 | Heptacosane | 0.60456 | C27H56 | 922 | replib | 1807262 | 180.55 | 1336.6 | 380.4382 |
| 99 | Hexadecane, 4-methyl- | 0.30022 | C17H36 | 903 | mainlib | 943077 | 94.216 | 906.8 | 240.2817 |
| 152 | Undecane, 2,4-dimethyl- | 0.28664 | C13H28 | 838 | replib | 1397302 | 139.59 | 1093.6 | 184.2191 |
| 207 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.28477 | C22H42O4 | 897 | DATABASE | 563257 | 56.271 | 1332.6 | 370.3083 |
| 190 | Cyproconazole | 0.27215 | C15H18ClN3O | 861 | Korean Pesticide | 657462 | 65.682 | 1264.6 | 291.1138 |
| 233 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.25282 | C24H42O4 | 739 | mainlib | 614755 | 61.416 | 1510.1 | 394.3083 |
| 15 | Benzene, 1,2,3-trimethyl- | 0.21768 | C9H12 | 940 | DATABASE | 635212 | 63.46 | 369.6 | 120.0939 |
| 218 | Octadecane, 2-methyl- | 0.21705 | C19H40 | 915 | mainlib | 646471 | 64.584 | 1430.9 | 268.313 |
| 92 | 1-Undecanol | 0.2024 | C11H24O | 792 | DATABASE | 1803656 | 180.19 | 870.8 | 172.1827 |
| 121 | Heptadecane, 3-methyl- | 0.14129 | C18H38 | 895 | replib | 434642 | 43.422 | 982.8 | 254.2974 |
| 168 | Eicosane, 2-methyl- | 0.13891 | C21H44 | 865 | mainlib | 431147 | 43.073 | 1155.7 | 296.3443 |
| 230 | Undecane, 2-methyl- | 0.13609 | C12H26 | 721 | replib | 474697 | 47.424 | 1489.1 | 170.2035 |
| 11 | 4-Heptanone, 2,6-dimethyl- | 0.069688 | C9H18O | 904 | DATABASE | 207110 | 20.691 | 343.7 | 142.1358 |
| 151 | Heptadecane, 2,6-dimethyl- | 0.068951 | C19H40 | 864 | mainlib | 262810 | 26.256 | 1089.2 | 268.313 |
| 199 | 1-Iodo-2-methylundecane | 0.066746 | C12H25I | 826 | mainlib | 211797 | 21.159 | 1304.3 | 296.1001 |
| 93 | 3-Hexadecene, (z)- | 0.065777 | C16H32 | 894 | DATABASE | 257865 | 25.761 | 878.9 | 224.2504 |
| 12 | Benzene, 1,2,3-trimethyl- | 0.06391 | C9H12 | 913 | DATABASE | 179841 | 17.967 | 346.5 | 120.0939 |
| 237 | Nonadecane, 2-methyl- | 0.062361 | C20H42 | 891 | mainlib | 256470 | 25.622 | 1518.4 | 282.3287 |
| 150 | Undecane, 2,3-dimethyl- | 0.049513 | C13H28 | 863 | mainlib | 186092 | 18.591 | 1087.5 | 184.2191 |
| 133 | 1-Undecene, 4-methyl- | 0.048331 | C12H24 | 839 | mainlib | 178353 | 17.818 | 1027.7 | 168.1878 |
| 215 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.044116 | C24H38O4 | 880 | replib | 170374 | 17.021 | 1404.2 | 390.277 |
| 40 | Benzene, 1-ethyl-4-(1-methylethyl)- | 0.039898 | C11H16 | 748 | DATABASE | 409495 | 40.91 | 552.5 | 148.1252 |
| 224 | Sulfurous acid, 2-pentyl undecyl ester | 0.039318 | C16H34O3S | 749 | mainlib | 189808 | 18.962 | 1456.3 | 306.2229 |
| 88 | 4-Decene, 8-methyl-, (E)- | 0.035339 | C11H22 | 855 | mainlib | 158529 | 15.838 | 857 | 154.1722 |
| 178 | Hexadecane, 3-methyl- | 0.034113 | C17H36 | 848 | mainlib | 144277 | 14.414 | 1219.3 | 240.2817 |
| 61 | 3-Tetradecene, (z)- | 0.031133 | C14H28 | 854 | DATABASE | 122475 | 12.236 | 729.7 | 196.2191 |
| 137 | 2,3,5,8-Tetramethyldecane | 0.031055 | C14H30 | 789 | DATABASE | 124804 | 12.468 | 1040.9 | 198.2348 |
| 213 | Sulfurous acid, 2-pentyl tridecyl ester | 0.029164 | C18H38O3S | 824 | mainlib | 129571 | 12.945 | 1364.1 | 334.2542 |
| 164 | 5-Octadecene, (e)- | 0.026057 | C18H36 | 865 | DATABASE | 99220 | 9.9123 | 1134.4 | 252.2817 |
| 203 | Decane, 3,8-dimethyl- | 0.025945 | C12H26 | 706 | mainlib | 204105 | 20.391 | 1323 | 170.2035 |
| 201 | Tetradecane, 4-ethyl- | 0.020554 | C16H34 | 775 | mainlib | 117869 | 11.775 | 1311.2 | 226.2661 |
| 78 | Phenol, 2,4-bis(1,1-dimethylethyl)- | 0.019911 | C14H22O | 838 | replib | 111049 | 11.094 | 803.4 | 206.1671 |
| 85 | 1-Iodo-2-methylundecane | 0.019786 | C12H25I | 727 | mainlib | 81365 | 8.1286 | 841.5 | 296.1001 |
| 179 | 2-Propyldecan-1-ol | 0.01608 | C13H28O | 836 | DATABASE | 83702 | 8.3621 | 1224.2 | 200.214 |
| 84 | Hexane, 3,3-dimethyl- | 0.012023 | C8H18 | 809 | DATABASE | 104722 | 10.462 | 836.4 | 114.1409 |
| 195 | 2-Propenoic acid, oxybis(methyl-2,1-ethanediyl) ester | 0.011772 | C15H28O2 | 717 | mainlib | 73843 | 7.3771 | 1285 | 240.2089 |
| 181 | 5-Undecene, 3-methyl-, (E)- | 0.011568 | C12H24 | 748 | mainlib | 73708 | 7.3637 | 1228.4 | 168.1878 |
| 29 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.010097 | C10H14 | 731 | mainlib | 60429 | 6.0371 | 452.1 | 134.1096 |
| 38 | Naphthalene | 0.009479 | C10H8 | 795 | DATABASE | 122042 | 12.192 | 549.8 | 128.0626 |
| 14 | 2-Heptanone, 4,6-dimethyl- | 0.00717 | C9H18O | 791 | mainlib | 39337 | 3.9299 | 359.5 | 142.1358 |
| 112 | Heptadecane, 2,6-dimethyl- | 0.006965 | C19H40 | 837 | mainlib | 61724 | 6.1664 | 953.5 | 268.313 |
| 18 | Benzeneacetaldehyde, à-methyl- | 0.002871 | C9H10O | 796 | DATABASE | 26829 | 2.6803 | 383.5 | 134.0732 |
| 217 | 2-Propyldecan-1-ol | 0.002414 | C13H28O | 851 | DATABASE | 40240 | 4.0201 | 1418.1 | 200.214 |
| 198 | 6-Oxabicyclo[3.1.0]hexan-2-ol, 2-ethyl-, (1à,2à,5à)- | 0.001789 | C7H12O2 | 840 | DATABASE | 27933 | 2.7906 | 1291 | 128.0837 |
| 249 | Oxirane, 2,2'-[oxybis(methylene)]bis- | 0.00095 | C6H10O3 | 833 | DATABASE | 16776 | 1.676 | 2068.8 | 130.063 |

**TABLE 18: *A. niger* EKFF DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 122 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 16.746 | C7H10N2O2 | 920 | mainlib | 1262087 | 131.97 | 992.4 | 154.0742 |
| 133 | 3-Isobutylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 14.065 | C11H18N2O2 | 884 | DATABASE | 1212931 | 126.83 | 1094.2 | 210.1368 |
| 137 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 7.3942 | C10H14N2O2 | 817 | DATABASE | 657818 | 68.787 | 1103.7 | 194.1055 |
| 166 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 2.9948 | C14H16N2O2 | 840 | mainlib | 289887 | 30.313 | 1345.6 | 244.1212 |
| 164 | Hexanedioic acid, bis(2-ethylhexyl) ester | 1.9383 | C22H42O4 | 888 | replib | 270733 | 28.31 | 1332.5 | 370.3083 |
| 134 | Undecane, 3,8-dimethyl- | 0.5557 | C13H28 | 823 | DATABASE | 149770 | 15.661 | 1096.1 | 184.2191 |
| 165 | 1-Iodo-2-methylundecane | 0.38724 | C12H25I | 778 | mainlib | 70617 | 7.3843 | 1336.1 | 296.1001 |
| 130 | Hexane, 3,3-dimethyl- | 0.36297 | C8H18 | 758 | replib | 69391 | 7.256 | 1075.5 | 114.1409 |
| 129 | Tetradecane, 1-iodo- | 0.34372 | C14H29I | 851 | mainlib | 76758 | 8.0264 | 1070.5 | 324.1314 |
| 119 | Hexadecane | 0.26887 | C16H34 | 862 | replib | 67561 | 7.0647 | 965.4 | 226.2661 |
| 111 | Decane, 2,4-dimethyl- | 0.16878 | C12H26 | 818 | DATABASE | 51679 | 5.404 | 786.7 | 170.2035 |
| 177 | Eicosane | 0.11563 | C20H42 | 843 | DATABASE | 34728 | 3.6314 | 1518.3 | 282.3287 |
| 145 | Hexadecane | 0.07149 | C16H34 | 857 | replib | 41898 | 4.3812 | 1214.5 | 226.2661 |
| 174 | Octane, 2,7-dimethyl- | 0.068581 | C10H22 | 842 | DATABASE | 40193 | 4.2029 | 1475.3 | 142.1722 |
| 139 | Pentadecane | 0.045834 | C15H32 | 808 | DATABASE | 21932 | 2.2933 | 1123.4 | 212.2504 |
| 143 | Heptane, 2,5,5-trimethyl- | 0.036194 | C10H22 | 845 | mainlib | 20549 | 2.1488 | 1191.8 | 142.1722 |
| 125 | 1-Heptanol | 0.032201 | C7H16O | 703 | DATABASE | 19359 | 2.0243 | 1004.1 | 116.1201 |
| 178 | Docosane | 0.026152 | C22H46 | 766 | DATABASE | 18754 | 1.9611 | 1560.9 | 310.36 |
| 147 | 1-Iodoundecane | 0.007 | C11H23I | 824 | mainlib | 8081.9 | 0.8451 | 1234.1 | 282.0844 |
| 114 | Undecane, 5-methyl- | 0.005799 | C12H26 | 867 | DATABASE | 5805.1 | 0.60703 | 834.9 | 170.2035 |
| 26 | 1,1-Cyclopentanedicarboxylic acid, 3,4-bis(methylene)-, diethyl ester | 0.003832 | C13H18O4 | 831 | DATABASE | 4389.6 | 0.45902 | 273.7 | 238.1205 |
| 74 | Thiirene, methylphenyl-, 1,1-dioxide | 0.00371 | C9H8O2S | 811 | DATABASE | 7110 | 0.74348 | 417.4 | 180.0245 |
| 58 | 1,2,5-Thiadiazolidine-2,5-dicarboxylic acid, 3-ethenyl-4-[[(phenylmethyl)thio]methyl]-, dimethyl ester, trans-(.+-.)- | 0.00143 | C16H20N2O4S2 | 781 | DATABASE | 2741.1 | 0.28663 | 358.6 | 368.0864 |

**TABLE 19:** ***A. niger* EKBE hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 97 | Octadecane | 18.879 | C18H38 | 938 | DATABASE | 84089188 | 8216.2 | 1004.7 | 254.2974 |
| 65 | Hexadecane | 17.598 | C16H34 | 937 | replib | 84640819 | 8270.1 | 870 | 226.2661 |
| 129 | Eicosane | 13.616 | C20H42 | 764 | mainlib | 69335848 | 6774.7 | 1126 | 282.3287 |
| 163 | Heneicosane | 6.2392 | C21H44 | 905 | replib | 47246562 | 4616.4 | 1236.8 | 296.3443 |
| 32 | Tetradecane | 5.851 | C14H30 | 940 | DATABASE | 54149880 | 5290.9 | 719.2 | 198.2348 |
| 64 | Tetradecane, 2-methyl- | 3.2771 | C15H32 | 893 | DATABASE | 55220760 | 5395.5 | 868.5 | 212.2504 |
| 188 | Heptacosane | 1.8906 | C27H56 | 909 | replib | 15852776 | 1549 | 1338.3 | 380.4382 |
| 95 | 1-Nonadecene | 0.5251 | C19H38 | 928 | replib | 3682021 | 359.77 | 998.4 | 266.2974 |
| 127 | 1-Docosene | 0.4567 | C22H44 | 943 | replib | 3755478 | 366.94 | 1120.9 | 308.3443 |
| 225 | Octadecane, 2-methyl- | 0.32709 | C19H40 | 912 | mainlib | 1907552 | 186.38 | 1519.3 | 268.313 |
| 131 | 2,6-di-butyl-2,5-cyclohexadiene-1,4-dione | 0.27834 | C14H20O2 | 735 | DATABASE | 2175547 | 212.57 | 1141 | 220.1463 |
| 162 | 1-Docosene | 0.21539 | C22H44 | 945 | replib | 2215187 | 216.44 | 1232.7 | 308.3443 |
| 123 | Eicosane, 2-methyl- | 0.16763 | C21H44 | 876 | mainlib | 925696 | 90.448 | 1107.2 | 296.3443 |
| 112 | Nonadecane | 0.15731 | C19H40 | 910 | replib | 1108018 | 108.26 | 1064.4 | 268.313 |
| 233 | Eicosane, 2-methyl- | 0.15235 | C21H44 | 901 | mainlib | 842146 | 82.285 | 1609.1 | 296.3443 |
| 2 | Octane | 0.15176 | C8H18 | 938 | DATABASE | 1419685 | 138.72 | 206 | 114.1409 |
| 248 | Sulfurous acid, dodecyl pentyl ester | 0.14863 | C17H36O3S | 753 | mainlib | 1535194 | 150 | 1881.3 | 320.2385 |
| 72 | Hexadecane, 4-methyl- | 0.13006 | C17H36 | 901 | mainlib | 1029758 | 100.62 | 907.4 | 240.2817 |
| 103 | Octadecane, 4-methyl- | 0.11938 | C19H40 | 904 | mainlib | 945875 | 92.42 | 1037.7 | 268.313 |
| 89 | Heptadecane, 2,6-dimethyl- | 0.10235 | C19H40 | 889 | mainlib | 621047 | 60.682 | 965.3 | 268.313 |
| 114 | 7,9-ditert-butyl-1-oxaspiro[4.5]deca-6,9-diene-2,8-dione | 0.090845 | C17H24O3 | 893 | DATABASE | 669391 | 65.405 | 1075.8 | 276.1725 |
| 118 | Heptadecane, 2,6-dimethyl- | 0.082456 | C19H40 | 893 | mainlib | 534190 | 52.195 | 1089.8 | 268.313 |
| 93 | Heptadecane, 3-methyl- | 0.07844 | C18H38 | 885 | replib | 648654 | 63.379 | 983.4 | 254.2974 |
| 122 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.069805 | C16H22O4 | 871 | DATABASE | 439344 | 42.928 | 1103.5 | 278.1518 |
| 90 | Tetradecane, 4-ethyl- | 0.064659 | C16H34 | 882 | mainlib | 509282 | 49.761 | 969.8 | 226.2661 |
| 241 | Stigmastan-3,5-diene | 0.064444 | C29H48 | 709 | mainlib | 272966 | 26.671 | 1678.4 | 396.3756 |
| 16 | BENZENE, 1,3-DIMETHYL- | 0.060345 | C8H10 | 952 | DATABASE | 394521 | 38.548 | 260.1 | 106.0783 |
| 59 | Tetradecane, 1-iodo- | 0.059691 | C14H29I | 852 | mainlib | 526794 | 51.472 | 846.6 | 324.1314 |
| 149 | Undecane, 2,3-dimethyl- | 0.057794 | C13H28 | 870 | mainlib | 443603 | 43.344 | 1201.4 | 184.2191 |
| 151 | Decane, 2-methyl- | 0.054202 | C11H24 | 786 | mainlib | 378942 | 37.026 | 1203.3 | 156.1878 |
| 117 | Undecane, 2,3-dimethyl- | 0.048879 | C13H28 | 859 | mainlib | 433256 | 42.333 | 1088.2 | 184.2191 |
| 153 | Sulfurous acid, hexyl pentadecyl ester | 0.048203 | C21H44O3S | 841 | mainlib | 405984 | 39.668 | 1207.8 | 376.3011 |
| 120 | Octadecane, 2-methyl- | 0.046164 | C19H40 | 857 | replib | 424776 | 41.504 | 1094.3 | 268.313 |
| 70 | Tetradecane | 0.043187 | C14H30 | 883 | DATABASE | 333078 | 32.545 | 898 | 198.2348 |
| 179 | Tridecane, 5-propyl- | 0.042646 | C16H34 | 844 | mainlib | 396541 | 38.745 | 1307.9 | 226.2661 |
| 23 | Tridecane | 0.042332 | C13H28 | 932 | DATABASE | 368100 | 35.967 | 636.7 | 184.2191 |
| 193 | Sulfurous acid, 2-pentyl tridecyl ester | 0.039588 | C18H38O3S | 856 | mainlib | 432563 | 42.265 | 1365 | 334.2542 |
| 54 | Pentadecane, 5-methyl- | 0.039145 | C16H34 | 870 | DATABASE | 334059 | 32.64 | 832.3 | 226.2661 |
| 152 | Pentadecane | 0.038885 | C15H32 | 812 | DATABASE | 406227 | 39.692 | 1203.7 | 212.2504 |
| 217 | Undecane, 2,3-dimethyl- | 0.036951 | C13H28 | 833 | mainlib | 343894 | 33.601 | 1491.5 | 184.2191 |
| 126 | 1-Butanone, 1-(5-acetyl-2-hydroxyphenyl)-3-methyl- | 0.036833 | C13H16O3 | 742 | DATABASE | 1332582 | 130.2 | 1119.9 | 220.1099 |
| 199 | Dodecane, 2-methyl- | 0.035874 | C13H28 | 849 | mainlib | 322343 | 31.496 | 1401.7 | 184.2191 |
| 180 | Sulfurous acid, hexyl tridecyl ester | 0.035846 | C19H40O3S | 823 | mainlib | 273974 | 26.77 | 1312 | 348.2698 |
| 99 | 2-Hexyl-1-octanol | 0.034478 | C14H30O | 859 | mainlib | 353226 | 34.513 | 1013.8 | 214.2297 |
| 101 | Tridecane, 3-methyl- | 0.03264 | C14H30 | 804 | replib | 208324 | 20.355 | 1028 | 198.2348 |
| 30 | 1-Dodecene | 0.03222 | C12H24 | 902 | DATABASE | 269859 | 26.368 | 711.7 | 168.1878 |
| 204 | Nonadecane, 2-methyl- | 0.029188 | C20H42 | 854 | mainlib | 228937 | 22.369 | 1419.1 | 282.3287 |
| 150 | Octane, 3-ethyl- | 0.026466 | C10H22 | 765 | DATABASE | 409560 | 40.018 | 1203.1 | 142.1722 |
| 67 | 3-Tetradecene, (Z)- | 0.025945 | C14H28 | 848 | mainlib | 269565 | 26.339 | 879.5 | 196.2191 |
| 212 | Tetracosane, 3-ethyl- | 0.023967 | C26H54 | 873 | DATABASE | 230238 | 22.496 | 1457 | 366.4226 |
| 21 | Dodecane | 0.023833 | C12H26 | 954 | DATABASE | 225673 | 22.05 | 550.9 | 170.2035 |
| 177 | Hexadecane, 4-methyl- | 0.023611 | C17H36 | 843 | mainlib | 322264 | 31.488 | 1304.5 | 240.2817 |
| 12 | Octane, 2-methyl- | 0.022438 | C9H20 | 805 | mainlib | 190044 | 18.569 | 252.8 | 128.1565 |
| 13 | Ethylbenzene | 0.022438 | C8H10 | 932 | mainlib | 190044 | 18.569 | 253.2 | 106.0783 |
| 94 | 2,4,6-Cyclooctatrien-1-one, 8-methyl- | 0.020911 | C9H10O | 722 | DATABASE | 467287 | 45.658 | 984 | 134.0732 |
| 200 | Dodecane, 2,6,10-trimethyl- | 0.020145 | C15H32 | 858 | mainlib | 219157 | 21.414 | 1404.1 | 212.2504 |
| 197 | Nonadecane, 2-methyl- | 0.020143 | C20H42 | 824 | mainlib | 206559 | 20.183 | 1385.2 | 282.3287 |
| 178 | Nonadecane | 0.019743 | C19H40 | 872 | replib | 429060 | 41.923 | 1305.3 | 268.313 |
| 17 | p-Xylene | 0.019362 | C8H10 | 913 | replib | 164683 | 16.091 | 279.1 | 106.0783 |
| 202 | Sulfurous acid, hexyl tetradecyl ester | 0.01924 | C20H42O3S | 872 | mainlib | 141457 | 13.822 | 1407.7 | 362.2855 |
| 218 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.018178 | C18H38O3S | 861 | mainlib | 245089 | 23.947 | 1493.2 | 334.2542 |
| 229 | Sulfurous acid, pentyl tetradecyl ester | 0.017768 | C19H40O3S | 827 | mainlib | 204625 | 19.994 | 1543.1 | 348.2698 |
| 221 | 1-Iodo-2-methylundecane | 0.017365 | C12H25I | 816 | mainlib | 218142 | 21.314 | 1507.6 | 296.1001 |
| 242 | Sulfurous acid, butyl dodecyl ester | 0.016466 | C16H34O3S | 823 | mainlib | 207051 | 20.231 | 1679.3 | 306.2229 |
| 165 | 2,3-Dimethyldecane | 0.01613 | C12H26 | 787 | mainlib | 152249 | 14.876 | 1255.3 | 170.2035 |
| 166 | Dihexylsulfide | 0.01613 | C12H26S | 763 | DATABASE | 152249 | 14.876 | 1255.5 | 202.1755 |
| 243 | Nonadecane, 2-methyl- | 0.016126 | C20H42 | 873 | mainlib | 286336 | 27.978 | 1723.9 | 282.3287 |
| 219 | Sulfurous acid, hexyl pentadecyl ester | 0.01604 | C21H44O3S | 828 | mainlib | 162548 | 15.882 | 1497.1 | 376.3011 |
| 27 | Tridecane, 3-methyl- | 0.014206 | C14H30 | 897 | replib | 144459 | 14.115 | 694.3 | 198.2348 |
| 214 | Sulfurous acid, 2-propyl tridecyl ester | 0.011952 | C16H34O3S | 851 | mainlib | 144655 | 14.134 | 1475.8 | 306.2229 |
| 61 | 1-Undecene | 0.011838 | C11H22 | 853 | DATABASE | 167458 | 16.362 | 857.8 | 154.1722 |
| 113 | Tetracosane | 0.011665 | C24H50 | 803 | DATABASE | 125578 | 12.27 | 1070.8 | 338.3913 |
| 174 | Sulfurous acid, dodecyl 2-propyl ester | 0.011622 | C15H32O3S | 812 | mainlib | 104372 | 10.198 | 1291.3 | 292.2072 |
| 145 | Oxalic acid, allyl hexadecyl ester | 0.011472 | C21H38O4 | 826 | mainlib | 91971 | 8.9864 | 1185 | 354.277 |
| 198 | Tridecane, 3-methyl- | 0.0103 | C14H30 | 847 | replib | 125095 | 12.223 | 1387.8 | 198.2348 |
| 201 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.010104 | C24H38O4 | 871 | replib | 180227 | 17.61 | 1405.8 | 390.277 |
| 75 | Tetradecane, 1-iodo- | 0.009793 | C14H29I | 801 | mainlib | 126082 | 12.319 | 916.7 | 324.1314 |
| 140 | Isooctanol | 0.009772 | C8H18O | 769 | DATABASE | 136822 | 13.369 | 1166.1 | 130.1358 |
| 125 | 1-Octene, 3-ethyl- | 0.009461 | C10H20 | 740 | DATABASE | 126795 | 12.389 | 1116.9 | 140.1565 |
| 28 | Dodecane, 2,6,10-trimethyl- | 0.009427 | C15H32 | 846 | DATABASE | 93089 | 9.0956 | 698.1 | 212.2504 |
| 73 | Cyclopentane, butyl- | 0.009287 | C9H18 | 775 | mainlib | 183685 | 17.948 | 909.9 | 126.1409 |
| 220 | Sulfurous acid, pentadecyl 2-propyl ester | 0.009006 | C18H38O3S | 839 | mainlib | 121188 | 11.841 | 1504.9 | 334.2542 |
| 18 | Nonane | 0.007529 | C9H20 | 934 | DATABASE | 95624 | 9.3433 | 281.2 | 128.1565 |
| 228 | Undecane, 2,4-dimethyl- | 0.007468 | C13H28 | 767 | DATABASE | 130026 | 12.705 | 1534.4 | 184.2191 |
| 115 | Sulfurous acid, 2-ethylhexyl nonyl ester | 0.007437 | C17H36O3S | 867 | mainlib | 117328 | 11.464 | 1079 | 320.2385 |
| 82 | 2,6-Dimethylheptadecane | 0.006942 | C19H40 | 810 | DATABASE | 90704 | 8.8626 | 953.9 | 268.313 |
| 209 | Undecane, 2-methyl- | 0.006728 | C12H26 | 789 | DATABASE | 90198 | 8.8131 | 1448.1 | 170.2035 |
| 31 | 1-Dodecene | 0.006691 | C12H24 | 811 | replib | 101080 | 9.8764 | 713.8 | 168.1878 |
| 47 | Tetradecane | 0.00666 | C14H30 | 829 | DATABASE | 102793 | 10.044 | 802.7 | 198.2348 |
| 189 | Cyclooctane, 1,4-dimethyl-, trans- | 0.005661 | C10H20 | 744 | DATABASE | 68696 | 6.7122 | 1348.4 | 140.1565 |
| 159 | 1-Heptene, 5-methyl- | 0.005558 | C8H16 | 829 | mainlib | 81761 | 7.9888 | 1229.4 | 112.1252 |
| 78 | 3-Tetradecene, (z)- | 0.00536 | C14H28 | 891 | DATABASE | 66796 | 6.5265 | 931.8 | 196.2191 |
| 110 | Heptane, 2,2,3,3,5,6,6-heptamethyl- | 0.005178 | C14H30 | 754 | replib | 80100 | 7.8265 | 1059.5 | 198.2348 |
| 42 | Tridecane, 3-methyl- | 0.005027 | C14H30 | 857 | replib | 69449 | 6.7858 | 767 | 198.2348 |
| 50 | Tridecane | 0.004694 | C13H28 | 821 | mainlib | 95211 | 9.303 | 820.1 | 184.2191 |
| 15 | Octane, 3-methyl- | 0.004278 | C9H20 | 861 | DATABASE | 81606 | 7.9736 | 258.2 | 128.1565 |
| 108 | Oxalic acid, allyl hexadecyl ester | 0.004227 | C21H38O4 | 808 | mainlib | 78809 | 7.7004 | 1049.7 | 354.277 |
| 7 | Heptane, 2,5-dimethyl- | 0.00413 | C9H20 | 899 | DATABASE | 64941 | 6.3453 | 230.4 | 128.1565 |
| 38 | Nonane, 5-propyl- | 0.004125 | C12H26 | 877 | DATABASE | 58407 | 5.7069 | 754.5 | 170.2035 |
| 80 | Benzene, (1-methyldecyl)- | 0.004041 | C17H28 | 736 | DATABASE | 76541 | 7.4788 | 942.3 | 232.2191 |
| 43 | Tetradecane, 1-iodo- | 0.00389 | C14H29I | 758 | mainlib | 86852 | 8.4862 | 772.5 | 324.1314 |
| 69 | Benzene, (1-butylheptyl)- | 0.003717 | C17H28 | 793 | mainlib | 54417 | 5.317 | 892.6 | 232.2191 |
| 56 | 1-Iodoundecane | 0.002898 | C11H23I | 729 | mainlib | 53311 | 5.2089 | 841.8 | 282.0844 |
| 92 | Heptane, 3,4-dimethyl- | 0.002729 | C9H20 | 801 | replib | 65988 | 6.4476 | 979.4 | 128.1565 |
| 84 | Heptane, 2,3,5-trimethyl- | 0.002575 | C10H22 | 758 | DATABASE | 54532 | 5.3282 | 958.5 | 142.1722 |
| 24 | Octane, 2,3,7-trimethyl- | 0.002218 | C11H24 | 755 | DATABASE | 50759 | 4.9596 | 677 | 156.1878 |
| 9 | Cyclohexane, 1,1,3-trimethyl- | 0.002206 | C9H18 | 785 | DATABASE | 41181 | 4.0237 | 236.9 | 126.1409 |
| 147 | Diisoamylene | 0.002195 | C10H20 | 756 | mainlib | 52932 | 5.1719 | 1191.6 | 140.1565 |
| 10 | Heptane, 2,3-dimethyl- | 0.002161 | C9H20 | 850 | DATABASE | 39296 | 3.8395 | 246.4 | 128.1565 |
| 196 | 5-Methyloctene-1 | 0.002153 | C9H18 | 799 | DATABASE | 40230 | 3.9309 | 1374 | 126.1409 |
| 3 | Cyclohexane, 1,2-dimethyl-, cis- | 0.001994 | C8H16 | 774 | DATABASE | 61086 | 5.9686 | 210.1 | 112.1252 |
| 14 | Propanoic acid, 2-hydroxy-2-methyl-, methyl ester | 0.001793 | C5H10O3 | 794 | DATABASE | 46805 | 4.5732 | 257.6 | 118.063 |
| 109 | Dodecane, 2-methyl- | 0.001745 | C13H28 | 705 | DATABASE | 25050 | 2.4476 | 1053.7 | 184.2191 |
| 63 | 1,2-Benzenedicarboxylic acid, diethyl ester | 0.001661 | C12H14O4 | 746 | DATABASE | 95072 | 9.2894 | 865.1 | 222.0892 |
| 49 | Heptane, 3-ethyl-5-methyl- | 0.001612 | C10H22 | 851 | mainlib | 38501 | 3.7619 | 816.4 | 142.1722 |
| 74 | Benzene, (1-nitropropyl)- | 0.001579 | C9H11NO2 | 783 | mainlib | 54222 | 5.298 | 916 | 165.079 |
| 236 | Undecane, 2,8-dimethyl- | 0.001414 | C13H28 | 811 | mainlib | 38167 | 3.7293 | 1638.3 | 184.2191 |
| 39 | 1-Hexadecanol | 0.001256 | C16H16O2 | 801 | DATABASE | 41805 | 4.0848 | 759.5 | 240.115 |
| 6 | Heptane, 2,6-dimethyl- | 0.001207 | C9H20 | 894 | DATABASE | 29767 | 2.9084 | 225.6 | 128.1565 |
| 35 | 1,5-Dimethylnaphthalene | 0.000959 | C12H12 | 801 | DATABASE | 31188 | 3.0473 | 746.1 | 156.0939 |
| 45 | Dodecane | 0.000948 | C12H26 | 832 | DATABASE | 21664 | 2.1168 | 786 | 170.2035 |
| 26 | 1-Iodoundecane | 0.000876 | C11H23I | 868 | mainlib | 30396 | 2.9699 | 688.8 | 282.0844 |
| 4 | Cyclohexane, 1,4-dimethyl- | 0.000851 | C8H16 | 853 | replib | 25418 | 2.4836 | 214.2 | 112.1252 |
| 237 | Benzeneacetaldehyde, à-methyl- | 0.000454 | C9H10O | 703 | DATABASE | 17215 | 1.6821 | 1649.3 | 134.0732 |
| 22 | Octane, 1-iodo- | 0.000258 | C8H17I | 751 | DATABASE | 14525 | 1.4192 | 612.5 | 240.0375 |
| 184 | L-Prolyl-glycine | 0.000103 | C7H12N2O3 | 770 | nist\_msms | 6403.4 | 0.62566 | 1332.8 | 172.0848 |

**TABLE 20: *A. niger* EKBE ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 81 | Pentadecane | 32.21 | C15H32 | 929 | DATABASE | 20042751 | 2135.8 | 867.5 | 212.2504 |
| 50 | Tetradecane | 17.248 | C14H30 | 942 | replib | 11227761 | 1196.5 | 717.9 | 198.2348 |
| 115 | Octadecane | 16.822 | C18H38 | 927 | replib | 9552934 | 1018 | 1001.6 | 254.2974 |
| 150 | Eicosane | 6.1067 | C20H42 | 920 | replib |  | 367.79 | 1122.9 | 282.3287 |
| 140 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 1.3854 | C11H18N2O2 | 867 | mainlib | 643656 | 68.589 | 1092.8 | 210.1368 |
| 82 | 1-Tetradecanol | 1.1042 | C14H30O | 709 | DATABASE | 786576 | 83.819 | 869.6 | 214.2297 |
| 114 | 1-Nonadecene | 1.0976 | C19H38 | 932 | replib | 658920 | 70.216 | 996.7 | 266.2974 |
| 190 | Propiconazole | 0.83094 | C15H17Cl2N3O2 | 868 | Restek Pesticides 2010 Library | 377932 | 40.273 | 1324.8 | 341.0698 |
| 148 | 3-Octadecene, (E)- | 0.55784 | C18H36 | 881 | mainlib | 349965 | 37.293 | 1119.1 | 252.2817 |
| 193 | Octadecane, 2-methyl- | 0.48408 | C19H40 | 894 | mainlib | 447896 | 47.729 | 1335.5 | 268.313 |
| 89 | Hexadecane, 4-methyl- | 0.48057 | C17H36 | 884 | mainlib | 258157 | 27.51 | 906.3 | 240.2817 |
| 51 | Cyclooctane, methyl- | 0.35621 | C9H18 | 817 | replib | 215433 | 22.957 | 720.7 | 126.1409 |
| 38 | Tridecane | 0.32992 | C13H28 | 913 | DATABASE | 228968 | 24.399 | 551.1 | 184.2191 |
| 229 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.2572 | C24H42O4 | 721 | mainlib | 162657 | 17.333 | 1521.1 | 394.3083 |
| 122 | Octadecane, 4-methyl- | 0.2563 | C19H40 | 868 | mainlib | 169231 | 18.034 | 1036.6 | 268.313 |
| 169 | 1-Nonadecene | 0.25026 | C19H38 | 845 | replib | 188292 | 20.065 | 1230.7 | 266.2974 |
| 191 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.23719 | C22H42O4 | 886 | DATABASE | 172912 | 18.426 | 1331.7 | 370.3083 |
| 48 | 3-Tetradecene, (z)- | 0.23673 | C14H28 | 916 | DATABASE | 160040 | 17.054 | 711.1 | 196.2191 |
| 76 | Tridecane, 3-methyl- | 0.23264 | C14H30 | 846 | replib | 126599 | 13.491 | 845.6 | 198.2348 |
| 225 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.22094 | C24H42O4 | 721 | mainlib | 172153 | 18.345 | 1509.1 | 394.3083 |
| 37 | Acetic acid, octyl ester | 0.21915 | C10H20O2 | 904 | DATABASE | 131585 | 14.022 | 502.9 | 172.1463 |
| 175 | Cyproconazol, R\*,S\* / R\*,S\* | 0.20706 | C15H18ClN3O | 814 | KeTa\_PestHe V\_1\_00 | 192321 | 20.494 | 1263.2 | 291.1138 |
| 105 | 2-(Dibromomethyl)tetrahydropyran | 0.19092 | C6H10Br2O | 846 | DATABASE | 122263 | 13.029 | 963.8 | 255.9098 |
| 107 | Tetradecane, 4-ethyl- | 0.17935 | C16H34 | 741 | DATABASE | 127685 | 13.606 | 968.5 | 226.2661 |
| 58 | Tridecane, 3-methyl- | 0.17135 | C14H30 | 870 | replib | 161117 | 17.169 | 761.8 | 198.2348 |
| 112 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.12114 | C7H10N2O2 | 875 | mainlib | 79049 | 8.4236 | 989.7 | 154.0742 |
| 40 | Dodecane | 0.11434 | C12H26 | 915 | DATABASE | 101023 | 10.765 | 636.3 | 170.2035 |
| 189 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 0.11283 | C14H16N2O2 | 728 | DATABASE | 101020 | 10.765 | 1322.7 | 244.1212 |
| 72 | Pentadecane, 5-methyl- | 0.11018 | C16H34 | 747 | DATABASE | 98871 | 10.536 | 831.4 | 226.2661 |
| 231 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.1087 | C24H42O4 | 723 | mainlib | 107743 | 11.481 | 1532.6 | 394.3083 |
| 83 | 1-Pentadecene | 0.10636 | C15H30 | 860 | DATABASE | 66788 | 7.117 | 878.2 | 210.2348 |
| 23 | Benzene, 1-ethyl-3-methyl- | 0.097558 | C9H12 | 921 | DATABASE | 85903 | 9.1539 | 395.8 | 120.0939 |
| 145 | Tridecane, 3-methyl- | 0.095856 | C14H30 | 823 | replib | 71803 | 7.6515 | 1105.7 | 198.2348 |
| 192 | 1-Docosene | 0.091808 | C22H44 | 858 | replib | 125231 | 13.345 | 1333 | 308.3443 |
| 228 | Nonadecane, 2-methyl- | 0.084046 | C20H42 | 779 | mainlib | 77523 | 8.261 | 1517.4 | 282.3287 |
| 15 | 4-Heptanone, 2,6-dimethyl- | 0.067731 | C9H18O | 930 | DATABASE | 90662 | 9.6611 | 345 | 142.1358 |
| 139 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.064008 | C18H38O3S | 861 | mainlib | 71082 | 7.5746 | 1088.4 | 334.2542 |
| 71 | Pentadecane, 7-methyl- | 0.06012 | C16H34 | 865 | mainlib | 73496 | 7.8319 | 827.5 | 226.2661 |
| 198 | Undecane, 3,8-dimethyl- | 0.058597 | C13H28 | 787 | mainlib | 55539 | 5.9183 | 1363 | 184.2191 |
| 138 | Sulfurous acid, 2-ethylhexyl hexyl ester | 0.040117 | C14H30O3S | 816 | mainlib | 69103 | 7.3638 | 1086.9 | 278.1916 |
| 86 | Dodecane, 2-methyl- | 0.040001 | C13H28 | 869 | mainlib | 43455 | 4.6306 | 897 | 184.2191 |
| 157 | PENTADECANE | 0.03991 | C15H32 | 814 | DATABASE | 41365 | 4.4079 | 1179.2 | 212.2504 |
| 201 | Sulfurous acid, dodecyl 2-propyl ester | 0.039067 | C15H32O3S | 740 | mainlib | 50627 | 5.395 | 1398.9 | 292.2072 |
| 113 | 2-Ethyl-1-decene # | 0.032599 | C12H24 | 772 | DATABASE | 64319 | 6.8539 | 992.2 | 168.1878 |
| 4 | Cyclopentane, 1-ethyl-2-methyl- | 0.029332 | C8H16 | 770 | DATABASE | 31489 | 3.3555 | 205.6 | 112.1252 |
| 65 | Phenol, 3,5-bis(1,1-dimethylethyl)- | 0.027576 | C14H22O | 705 | replib | 41462 | 4.4183 | 802.9 | 206.1671 |
| 164 | Dodecane, 5-methyl- | 0.026667 | C13H28 | 847 | DATABASE | 41231 | 4.3937 | 1206.2 | 184.2191 |
| 147 | Cyclobutane, 1,1,2,3,3-pentamethyl- | 0.026551 | C9H18 | 771 | mainlib | 28077 | 2.992 | 1115.3 | 126.1409 |
| 55 | Nonane, 5-propyl- | 0.025784 | C12H26 | 806 | DATABASE | 47377 | 5.0486 | 753.8 | 170.2035 |
| 100 | Oxalic acid, allyl decyl ester | 0.020291 | C15H26O4 | 835 | mainlib | 40746 | 4.342 | 949.5 | 270.1831 |
| 78 | Octane, 3-methyl-6-methylene- | 0.018113 | C10H20 | 811 | mainlib | 44243 | 4.7146 | 856.4 | 140.1565 |
| 17 | Benzene, 1-ethyl-4-methyl- | 0.01501 | C9H12 | 886 | replib | 28748 | 3.0634 | 355.5 | 120.0939 |
| 117 | Oxalic acid, allyl dodecyl ester | 0.014697 | C17H30O4 | 859 | mainlib | 45712 | 4.8712 | 1012.3 | 298.2144 |
| 28 | Benzene, 2-ethyl-1,4-dimethyl- | 0.012268 | C10H14 | 875 | replib | 19003 | 2.025 | 426.6 | 134.1096 |
| 173 | 1-Iodotetradecane | 0.011853 | C14H29I | 751 | DATABASE | 28451 | 3.0318 | 1253.7 | 324.1314 |
| 101 | Docosane | 0.011005 | C22H46 | 760 | DATABASE | 23088 | 2.4603 | 952.8 | 310.36 |
| 180 | Benzene, [(1-propenyloxy)methyl]- | 0.010948 | C10H12O | 880 | DATABASE | 23607 | 2.5156 | 1280.6 | 148.0888 |
| 153 | Dodecane, 2,6,10-trimethyl- | 0.00942 | C15H32 | 790 | DATABASE | 18407 | 1.9615 | 1145.2 | 212.2504 |
| 184 | Sulfurous acid, 2-propyl undecyl ester | 0.009201 | C14H30O3S | 829 | mainlib | 22719 | 2.421 | 1303.7 | 278.1916 |
| 26 | Benzene, 1,4-diethyl- | 0.008575 | C10H14 | 789 | DATABASE | 24679 | 2.6299 | 418.1 | 134.1096 |
| 41 | 1-Methylbutyl nitrite | 0.004409 | C5H11NO2 | 705 | DATABASE | 17436 | 1.858 | 654 | 117.079 |
| 27 | Benzene, (1-methylpropyl)- | 0.003464 | C10H14 | 705 | DATABASE | 19229 | 2.0491 | 421.3 | 134.1096 |
| 133 | 2-Octyldodecan-1-ol | 0.002211 | C20H42O | 800 | DATABASE | 8060.7 | 0.85896 | 1075.3 | 298.3236 |
| 96 | 2-Propyldecan-1-ol | 0.002049 | C13H28O | 773 | DATABASE | 11183 | 1.1917 | 921.7 | 200.214 |
| 29 | 1-Propanone, 2-(2-nitrocyclopentyl)-1-phenyl- | 0.001752 | C14H17NO3 | 743 | DATABASE | 10287 | 1.0962 | 435.1 | 247.1208 |
| 33 | Decane | 0.001126 | C10H22 | 865 | DATABASE |  | 1.065 | 462.1 | 142.1722 |
| 74 | 3,4-Hexanedione, 2,2,5-trimethyl- | 0.000419 | C9H16O2 | 815 | mainlib | 3720 | 0.39641 | 840.6 | 156.115 |
| 30 | 1,3,8-p-Menthatriene | 0.000402 | C10H14 | 729 | mainlib | 3569.4 | 0.38037 | 444.1 | 134.1096 |
| 165 | 2-Propyldecan-1-ol | 2.61E-05 | C13H28O | 830 | DATABASE | 231.44 | 0.024662 | 1218.6 | 200.214 |

**TABLE 21: *A. niger* EKBE DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 126 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 13.939 | C7H10N2O2 | 910 | mainlib | 1844899 | 201.37 | 994.8 | 154.0742 |
| 142 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 11.256 | C11H18N2O2 | 892 | mainlib | 1944344 | 212.23 | 1094.6 | 210.1368 |
| 147 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 6.0669 | C10H14N2O2 | 792 | DATABASE | 1153850 | 125.94 | 1103.4 | 194.1055 |
| 179 | Hexanedioic acid, bis(2-ethylhexyl) ester | 1.5065 | C22H42O4 | 898 | DATABASE | 374105 | 40.834 | 1331.6 | 370.3083 |
| 181 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 0.88774 | C14H16N2O2 | 828 | mainlib | 253424 | 27.662 | 1344.7 | 244.1212 |
| 144 | (R,R)-3,8-dimethyldecane | 0.8272 | C12H26 | 774 | DATABASE | 606905 | 66.245 | 1095.6 | 170.2035 |
| 176 | Undecane, 3,8-dimethyl- | 0.27797 | C13H28 | 831 | mainlib | 172468 | 18.825 | 1322.2 | 184.2191 |
| 191 | Hexadecane | 0.25033 | C16H34 | 872 | replib | 100559 | 10.976 | 1429.8 | 226.2661 |
| 157 | Nonadecane, 2-methyl- | 0.19386 | C20H42 | 799 | mainlib | 80506 | 8.7874 | 1214.1 | 282.3287 |
| 135 | Eicosane | 0.18835 | C20H42 | 857 | DATABASE | 148354 | 16.193 | 1070.1 | 282.3287 |
| 118 | Undecane, 3,8-dimethyl- | 0.13113 | C13H28 | 865 | mainlib | 99290 | 10.838 | 965 | 184.2191 |
| 128 | Undecane, 3-methyl- | 0.11727 | C12H26 | 731 | replib | 78412 | 8.5588 | 1001.4 | 170.2035 |
| 24 | Methyllaurate | 0.11709 | C8H10 | 743 | DATABASE | 51092 | 5.5768 | 253.9 | 106.0783 |
| 28 | Benzene, 1,2-dimethyl- | 0.089916 | C8H10 | 827 | DATABASE | 48188 | 5.2598 | 260.8 | 106.0783 |
| 162 | 1-Iodo-2-methylnonane | 0.085195 | C10H21I | 763 | mainlib | 57339 | 6.2586 | 1233.4 | 268.0688 |
| 119 | Undecane, 5-methyl- | 0.061232 | C12H26 | 724 | DATABASE | 40412 | 4.411 | 968 | 170.2035 |
| 180 | Pentadecane | 0.057815 | C15H32 | 843 | DATABASE | 62696 | 6.8434 | 1335.4 | 212.2504 |
| 199 | 1-Iodo-2-methylundecane | 0.038214 | C12H25I | 866 | mainlib | 33029 | 3.6052 | 1517.3 | 296.1001 |
| 30 | Phosphonic acid, (2-oxo-1,3-propanediyl)bis-, tetramethyl ester | 0.035183 | C15H20O | 849 | DATABASE | 40183 | 4.386 | 266.8 | 216.1514 |
| 186 | Docosane | 0.030818 | C22H46 | 780 | DATABASE | 43118 | 4.7064 | 1402.6 | 310.36 |
| 187 | Phenacetin | 0.027435 | C10H13NO2 | 788 | nist\_msms | 20481 | 2.2355 | 1403.2 | 179.0946 |
| 154 | Dodecane, 1,1-difluoro- | 0.025649 | C12H24F2 | 821 | DATABASE | 26891 | 2.9352 | 1179.2 | 206.1846 |
| 205 | Docosane | 0.021366 | C22H46 | 757 | DATABASE | 31447 | 3.4325 | 1659.3 | 310.36 |
| 22 | 1,2,5-Thiadiazolidine-2,5-dicarboxylic acid, 3-ethenyl-4-[[(phenylmethyl)thio]methyl]-, dimethyl ester, trans-(.+-.)- | 0.018064 | C16H20N2O4S2 | 772 | DATABASE | 15583 | 1.7009 | 251.7 | 368.0864 |
| 133 | Disulfide, ethyl 1-methylpropyl | 0.013452 | C6H14S2 | 753 | DATABASE | 19016 | 2.0756 | 1044.8 | 150.0537 |
| 156 | 2-Butenal | 0.009312 | C4H6O | 792 | DATABASE | 23488 | 2.5638 | 1197.8 | 70.0419 |
| 188 | Hexane, 3,3,4,4-tetraethyl- | 0.001456 | C14H30 | 730 | DATABASE | 5966.3 | 0.65123 | 1417.1 | 198.2348 |
| 185 | Phenylacetic acid | 0.000636 | C8H8O2 | 970 | nist\_msms | 2605.8 | 0.28443 | 1394 | 136.0524 |

**TABLE 22: *Kocuria* sp. EKF1 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 45 | Octadecane | 10.674 | C18H38 | 942 | DATABASE | 57252326 | 8636.6 | 1007.1 | 254.2974 |
| 46 | 1-Undecanol | 10.345 | C11H24O | 802 | DATABASE | 56503557 | 8523.6 | 1008 | 172.1827 |
| 68 | Eicosane | 10.146 | C20H42 | 931 | replib | 52387443 | 7902.7 | 1128.2 | 282.3287 |
| 21 | Hexadecane | 9.761 | C16H34 | 935 | DATABASE | 56901700 | 8583.7 | 872.1 | 226.2661 |
| 22 | Nonadecane | 9.6832 | C19H40 | 858 | replib | 56725120 | 8557.1 | 872.8 | 268.313 |
| 84 | Tetracosane | 8.1123 | C24H50 | 858 | DATABASE | 44784363 | 6755.8 | 1239.7 | 338.3913 |
| 82 | E-2-Octadecadecen-1-ol | 8.08 | C18H36O | 681 | mainlib | 44750955 | 6750.7 | 1237.9 | 268.2766 |
| 83 | Heneicosane | 7.9615 | C21H44 | 925 | replib | 44628297 | 6732.2 | 1238.4 | 296.3443 |
| 13 | Tetradecane | 3.6837 | C14H30 | 951 | replib | 47568020 | 7175.7 | 719.8 | 198.2348 |
| 66 | Hexadecane, 2,6,10,14-tetramethyl- | 1.7195 | C20H42 | 734 | DATABASE | 40646180 | 6131.5 | 1125.7 | 282.3287 |
| 69 | Tetradecane, 2-methyl- | 1.3933 | C15H32 | 786 | DATABASE | 21926451 | 3307.6 | 1130.9 | 212.2504 |
| 47 | Tridecane, 2-methyl- | 1.2381 | C14H30 | 885 | DATABASE | 26868514 | 4053.2 | 1008.6 | 198.2348 |
| 23 | 7-Hexadecene, (z)- | 1.1768 | C16H32 | 863 | DATABASE | 29371803 | 4430.8 | 873.2 | 224.2504 |
| 65 | Oxalic acid, heptyl propyl ester | 0.70624 | C12H22O4 | 818 | mainlib | 27660609 | 4172.6 | 1124.9 | 230.1518 |
| 64 | 1-Docosene | 0.49603 | C22H44 | 938 | replib | 11425123 | 1723.5 | 1121.8 | 308.3443 |
| 95 | Oxalic acid, allyl nonyl ester | 0.48513 | C14H24O4 | 833 | mainlib | 22488441 | 3392.4 | 1338.5 | 256.1675 |
| 43 | 1-Nonadecene | 0.44272 | C19H38 | 944 | replib | 6732625 | 1015.6 | 999.1 | 266.2974 |
| 56 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.25786 | C17H24O3 | 933 | replib | 3353786 | 505.92 | 1078.1 | 276.1725 |
| 94 | 1-Docosene | 0.16483 | C22H44 | 939 | replib | 2650614 | 399.85 | 1335.9 | 308.3443 |
| 39 | Heptadecane, 3-methyl- | 0.1224 | C18H38 | 904 | replib | 1591462 | 240.07 | 983.8 | 254.2974 |
| 40 | Benzene, (1-ethyldecyl)- | 0.1224 | C18H30 | 866 | replib | 1591462 | 240.07 | 984.4 | 246.2348 |
| 10 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.12 | C10H18O | 936 | DATABASE | 2340398 | 353.05 | 404.8 | 154.1358 |
| 72 | Eicosane, 2-methyl- | 0.11716 | C21H44 | 871 | mainlib | 1848285 | 278.82 | 1157 | 296.3443 |
| 51 | Octadecane, 4-methyl- | 0.11412 | C19H40 | 923 | mainlib | 1827694 | 275.71 | 1038.4 | 268.313 |
| 9 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.087585 | C10H14 | 952 | mainlib | 1755079 | 264.76 | 396.3 | 134.1096 |
| 73 | Triacontane | 0.080377 | C30H62 | 906 | DATABASE | 1211657 | 182.78 | 1181 | 422.4852 |
| 33 | Benzene, (1-methyldecyl)- | 0.056671 | C17H28 | 902 | DATABASE | 715487 | 107.93 | 942.7 | 232.2191 |
| 5 | p-Xylene | 0.055399 | C8H10 | 956 | replib | 848370 | 127.98 | 260.2 | 106.0783 |
| 19 | Pentadecane, 3-methyl- | 0.053282 | C16H34 | 892 | mainlib | 932191 | 140.62 | 846.9 | 226.2661 |
| 74 | Pentacosane | 0.052529 | C25H52 | 866 | DATABASE | 925290 | 139.58 | 1201.8 | 352.4069 |
| 59 | Heptadecane, 2,3-dimethyl- | 0.05021 | C19H40 | 866 | mainlib | 862979 | 130.18 | 1094.7 | 268.313 |
| 61 | Dibutyl phthalate | 0.033351 | C16H22O4 | 916 | mainlib | 678080 | 102.29 | 1104 | 278.1518 |
| 60 | 2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)- | 0.031375 | C14H20O2 | 773 | DATABASE | 607969 | 91.713 | 1101.1 | 220.1463 |
| 91 | Heneicosane, 5-methyl- | 0.029702 | C22H46 | 816 | mainlib | 593914 | 89.593 | 1312.4 | 310.36 |
| 85 | Triacontane | 0.029477 | C30H62 | 875 | DATABASE | 513713 | 77.494 | 1255.9 | 422.4852 |
| 29 | Benzene, (1-propyloctyl)- | 0.028013 | C17H28 | 879 | mainlib | 336898 | 50.821 | 900.8 | 232.2191 |
| 7 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.027748 | C10H16 | 915 | mainlib | 464743 | 70.107 | 306.6 | 136.1252 |
| 31 | Benzene, (1-ethylnonyl)- | 0.025077 | C17H28 | 892 | DATABASE | 409578 | 61.785 | 916.5 | 232.2191 |
| 97 | 1-Iodo-2-methylundecane | 0.023295 | C12H25I | 864 | mainlib | 281349 | 42.442 | 1355.9 | 296.1001 |
| 35 | Benzene, (1-butyloctyl)- | 0.021391 | C18H30 | 896 | DATABASE | 305724 | 46.119 | 960.2 | 246.2348 |
| 70 | 4,6-di-tert-Butyl-m-cresol | 0.019602 | C15H24O | 738 | mainlib | 338956 | 51.132 | 1141 | 220.1827 |
| 24 | 2-Tridecene, (E)- | 0.017703 | C13H26 | 898 | mainlib | 412398 | 62.211 | 880.1 | 182.2035 |
| 37 | Benzene, (1-propylnonyl)- | 0.016906 | C18H30 | 865 | DATABASE | 587761 | 88.664 | 968.9 | 246.2348 |
| 6 | Benzene, 1,3-dimethyl- | 0.016681 | C8H10 | 941 | replib | 322009 | 48.575 | 279.3 | 106.0783 |
| 34 | Benzene, (1-pentylheptyl)- | 0.016 | C18H30 | 830 | mainlib | 271535 | 40.961 | 957 | 246.2348 |
| 27 | Benzene, (1-butylheptyl)- | 0.014314 | C17H28 | 897 | mainlib | 269319 | 40.627 | 893.3 | 232.2191 |
| 52 | Phthalic acid, 2-cyclohexylethyl butyl ester | 0.010523 | C20H28O4 | 653 | mainlib | 209958 | 31.672 | 1045.7 | 332.1988 |
| 42 | Octane, 3-methyl-6-methylene- | 0.008785 | C10H20 | 820 | mainlib | 144363 | 21.777 | 994 | 140.1565 |
| 8 | Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- | 0.008708 | C10H16 | 925 | DATABASE | 172162 | 25.971 | 314.7 | 136.1252 |
| 79 | Undecane, 3-methylene- | 0.008431 | C12H24 | 837 | mainlib | 163635 | 24.684 | 1229.7 | 168.1878 |
| 4 | Octane, 3-methyl- | 0.008265 | C9H20 | 890 | DATABASE | 181622 | 27.398 | 258.1 | 128.1565 |
| 26 | Benzene, (1-pentylhexyl)- | 0.005502 | C17H28 | 859 | DATABASE | 108087 | 16.305 | 890.8 | 232.2191 |
| 48 | Benzene, (1-methylundecyl)- | 0.000313 | C18H30 | 840 | DATABASE | 26724 | 4.0313 | 1011.6 | 246.2348 |

**TABLE 23: *Kocuria* sp. EKF1 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 22 | Octadecane | 14.039 | C18H38 | 937 | replib | 34605010 | 5391.1 | 1002.9 | 254.2974 |
| 15 | Hexadecane | 7.3184 | C16H34 | 935 | replib | 24229886 | 3774.7 | 867.9 | 226.2661 |
| 36 | Heneicosane | 5.9901 | C21H44 | 917 | replib | 19604886 | 3054.2 | 1124.4 | 296.3443 |
| 30 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 4.5292 | C11H18N2O2 | 891 | mainlib | 5810455 | 905.2 | 1100.5 | 210.1368 |
| 38 | Triacontane | 4.3802 | C30H62 | 922 | DATABASE | 5227465 | 814.38 | 1202.4 | 422.4852 |
| 29 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 3.4892 | C12H22N2O2 | 796 | mainlib | 5144667 | 801.48 | 1100.1 | 226.1681 |
| 50 | Heptacosane | 2.2043 | C27H56 | 922 | replib | 3741180 | 582.83 | 1407.7 | 380.4382 |
| 20 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 1.4387 | C7H10N2O2 | 830 | mainlib | 2063247 | 321.43 | 996.5 | 154.0742 |
| 46 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 1.1596 | C14H16N2O2 | 844 | mainlib | 1806954 | 281.5 | 1328.7 | 244.1212 |
| 45 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 1.1248 | C15H17Cl2N3O2 | 872 | mainlib | 1789593 | 278.8 | 1327.4 | 341.0698 |
| 28 | Docosane | 1.0666 | C22H46 | 672 | DATABASE | 1873005 | 291.79 | 1087.8 | 310.36 |
| 21 | 1-Nonadecene | 1.0518 | C19H38 | 860 | replib | 1798747 | 280.22 | 997.6 | 266.2974 |
| 2 | Octane | 0.70091 | C8H18 | 826 | DATABASE | 780452 | 121.59 | 207.6 |  |
| 26 | 5,8-Tridecadione | 0.6358 | C13H24O2 | 684 | mainlib | 911529 | 142.01 | 1046.2 | 212.1776 |
| 11 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.6 | C10H18O | 928 | DATABASE | 1864580 | 290.48 | 404.8 | 154.1358 |
| 1 | 2(3H)-furanone, dihydro-3,5-dimethyl- | 0.51069 | C6H10O2 | 730 | DATABASE | 785574 | 122.38 | 205.5 | 114.0681 |
| 8 | Benzene, 1,2,4-trimethyl- | 0.50269 | C9H12 | 939 | mainlib | 1362539 | 212.27 | 369.2 | 120.0939 |
| 10 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.50164 | C10H14 | 945 | mainlib | 1093234 | 170.31 | 396.6 | 134.1096 |
| 60 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.42263 | C24H42O4 | 767 | mainlib | 643227 | 100.21 | 1523 | 394.3083 |
| 18 | dl-Alanyl-l-leucine | 0.4098 | C9H18N2O3 | 876 | mainlib | 507343 | 79.038 | 977 | 202.1317 |
| 65 | Heptacosane | 0.39983 | C27H56 | 913 | replib | 539263 | 84.011 | 1669.4 | 380.4382 |
| 39 | 3-Benzyl-6-methyl-2,5-piperazinedione # | 0.39844 | C12H14N2O2 | 838 | DATABASE | 764649 | 119.12 | 1230.9 | 218.1055 |
| 37 | Eicosane, 2-methyl- | 0.36627 | C21H44 | 861 | mainlib | 582773 | 90.789 | 1156.1 | 296.3443 |
| 44 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.36157 | C15H17Cl2N3O2 | 882 | mainlib | 806281 | 125.61 | 1320.5 | 341.0698 |
| 51 | Octadecane, 2-methyl- | 0.35647 | C19H40 | 905 | mainlib | 613026 | 95.502 | 1431.5 | 268.313 |
| 55 | Undecane, 2-methyl- | 0.34564 | C12H26 | 715 | replib | 672594 | 104.78 | 1499.9 | 170.2035 |
| 53 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.24708 | C24H42O4 | 714 | mainlib | 336598 | 52.438 | 1489.8 | 394.3083 |
| 54 | Eicosane, 2-methyl- | 0.23948 | C21H44 | 865 | mainlib | 492545 | 76.733 | 1497.2 | 296.3443 |
| 43 | 3-Benzyl-6-isopropyl-2,5-piperazinedione # | 0.2008 | C14H18N2O2 | 739 | DATABASE | 342634 | 53.378 | 1287.9 | 246.1368 |
| 17 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 0.19917 | C7H12N2O | 663 | mainlib | 368597 | 57.423 | 960.9 | 140.095 |
| 47 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.18512 | C22H42O4 | 912 | DATABASE | 393622 | 61.322 | 1333.5 | 370.3083 |
| 24 | Octadecane, 4-methyl- | 0.16602 | C19H40 | 911 | mainlib | 496355 | 77.326 | 1037.5 | 268.313 |
| 31 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.15242 | C16H22O4 | 729 | DATABASE | 879591 | 137.03 | 1103.4 | 278.1518 |
| 14 | Tetradecane | 0.15148 | C14H30 | 933 | DATABASE | 450375 | 70.163 | 717.9 | 198.2348 |
| 16 | Nonadecane | 0.11603 | C19H40 | 896 | replib | 367009 | 57.176 | 936.1 | 268.313 |
| 3 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.10239 | C10H16 | 920 | mainlib | 323205 | 50.352 | 307.5 | 136.1252 |
| 7 | Benzene, 1-ethyl-2-methyl- | 0.081436 | C9H12 | 932 | replib | 232981 | 36.296 | 354.8 | 120.0939 |
| 62 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.075494 | C26H48O4 | 790 | mainlib | 216551 | 33.736 | 1534.3 | 424.3553 |
| 5 | Benzene, 1-ethyl-4-methyl- | 0.067934 | C9H12 | 914 | replib | 191216 | 29.789 | 341.5 | 120.0939 |

**TABLE 24: *Kocuria* sp. EKF1 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 1 | 2(3H)-furanone, dihydro-3,5-dimethyl- | 22.621 | C6H10O2 | 724 | DATABASE | 903380 | 146.79 | 204.7 | 114.0681 |
| 12 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 16.146 | C10H18O | 934 | DATABASE | 1668458 | 271.1 | 404.5 | 154.1358 |
| 9 | Benzene, 1,2,3-trimethyl- | 15.386 | C9H12 | 941 | replib | 1171651 | 190.38 | 369.1 | 120.0939 |
| 11 | Benzene, 1-methyl-2-(1-methylethyl)- | 13.641 | C10H14 | 942 | mainlib | 830774 | 134.99 | 396.7 | 134.1096 |
| 15 | Hexadecane | 4.917 | C16H34 | 877 | replib | 321642 | 52.262 | 868.4 | 226.2661 |
| 7 | Benzene, 1,2,3-trimethyl- | 3.4812 | C9H12 | 922 | replib | 311183 | 50.563 | 345.9 | 120.0939 |
| 3 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 2.8749 | C10H16 | 927 | mainlib | 315379 | 51.245 | 307.5 | 136.1252 |
| 4 | 1R-à-Pinene | 2.3559 | C10H16 | 734 | replib | 198770 | 32.297 | 315.5 | 136.1252 |
| 2 | Benzene, 1,3-dimethyl- | 1.3981 | C8H10 | 954 | mainlib | 128081 | 20.811 | 261.8 | 106.0783 |

**TABLE 25: *M. luteus* EKF2 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 21 | Nonadecane | 17.487 | C19H40 | 911 | replib | 49346570 | 7600.5 | 1002.6 | 268.313 |
| 22 | Octadecane | 17.428 | C18H38 | 732 | mainlib | 49308657 | 7594.7 | 1002.9 | 254.2974 |
| 15 | Hexadecane | 15.559 | C16H34 | 951 | DATABASE | 50259061 | 7741.1 | 868.3 | 226.2661 |
| 28 | 1-Iodo-2-methylundecane | 13.389 | C12H25I | 855 | mainlib | 46039397 | 7091.1 | 1124.7 | 296.1001 |
| 27 | Eicosane | 13.153 | C20H42 | 936 | mainlib | 45938673 | 7075.6 | 1124.4 | 282.3287 |
| 33 | Heneicosane | 6.2881 | C21H44 | 931 | replib | 31756049 | 4891.2 | 1235.1 | 296.3443 |
| 12 | Tetradecane | 6.1541 | C14H30 | 955 | replib | 37463996 | 5770.3 | 717.8 | 198.2348 |
| 35 | Triacontane | 1.9378 | C30H62 | 911 | DATABASE | 11740100 | 1808.2 | 1336.7 | 422.4852 |
| 1 | Octane | 0.45541 | C8H18 | 935 | DATABASE | 3592525 | 553.33 | 207 | 114.1409 |
| 9 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.27981 | C10H18O | 939 | DATABASE | 1919129 | 295.59 | 404.1 | 154.1358 |
| 29 | 2,5-di-tert-Butyl-1,4-benzoquinone | 0.26052 | C14H20O2 | 788 | replib | 1537596 | 236.83 | 1138.7 | 220.1463 |
| 32 | 1-Docosene | 0.23796 | C22H44 | 955 | replib | 1417385 | 218.31 | 1231 | 308.3443 |
| 8 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.1885 | C10H14 | 954 | mainlib | 1233920 | 190.05 | 395.9 | 134.1096 |
| 24 | Nonadecane | 0.14732 | C19H40 | 914 | replib | 787336 | 121.27 | 1063 | 268.313 |
| 19 | Heptadecane, 2,6-dimethyl- | 0.1183 | C19H40 | 904 | mainlib | 556413 | 85.7 | 964.2 | 268.313 |
| 17 | Hexadecane, 4-methyl- | 0.11408 | C17H36 | 899 | mainlib | 586683 | 90.363 | 906.1 | 240.2817 |
| 4 | p-Xylene | 0.10065 | C8H10 | 957 | replib | 488843 | 75.293 | 260.9 | 106.0783 |
| 31 | Eicosane, 2-methyl- | 0.084254 | C21H44 | 769 | mainlib | 505564 | 77.868 | 1155.1 | 296.3443 |
| 6 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.043873 | C10H16 | 915 | mainlib | 312434 | 48.122 | 307 | 136.1252 |
| 3 | Ethylbenzene | 0.043378 | C8H10 | 847 | replib | 227026 | 34.967 | 254 | 106.0783 |
| 25 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.02674 | C16H22O4 | 912 | DATABASE | 123962 | 19.093 | 1101.5 | 278.1518 |

**TABLE 26: *M. luteus* EKF2 ethyl acetate extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact mass |
| 69 | Hexadecane | 7.4861 | C16H34 | 939 | DATABASE | 45006942 | 6563.4 | 868.6 | 226.2661 |
| 79 | Nonadecane | 6.1593 | C19H40 | 852 | replib | 41277306 | 6019.5 | 1002.2 | 268.313 |
| 80 | Octadecane | 6.1208 | C18H38 | 933 | replib | 41219265 | 6011 | 1002.5 | 254.2974 |
| 64 | Tetradecane | 5.6892 | C14H30 | 951 | replib | 43751968 | 6380.4 | 718.8 | 198.2348 |
| 23 | (2R\*,3R\*)-2,4-dimethyl-1,3-diphenyl-4-nitro-1-pentanone | 5.1917 | C18H19NO3 | 713 | DATABASE | 37348906 | 5446.6 | 371.2 | 297.1365 |
| 22 | Benzene, 1,2,3-trimethyl- | 5.1914 | C9H12 | 917 | DATABASE | 37348029 | 5446.5 | 370.6 | 120.0939 |
| 21 | Decane | 5.1649 | C10H22 | 873 | DATABASE | 37264139 | 5434.2 | 370.1 | 142.1722 |
| 56 | 2,4-Dimethylstyrene | 3.8314 | C10H12 | 773 | mainlib | 44483477 | 6487 | 503.7 | 132.0939 |
| 94 | Heneicosane | 2.7335 | C21H44 | 931 | replib | 29209918 | 4259.7 | 1123.7 | 296.3443 |
| 88 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 2.5095 | C12H22N2O2 | 792 | mainlib | 17761380 | 2590.1 | 1098.5 | 226.1681 |
| 14 | 1,3,5-Cycloheptatriene, 7,7-dimethyl- | 2.3741 | C9H12 | 804 | mainlib | 31294230 | 4563.6 | 338.3 | 120.0939 |
| 15 | Benzene, 1-ethyl-2-methyl- | 2.3722 | C9H12 | 929 | DATABASE | 31284875 | 4562.3 | 338.8 | 120.0939 |
| 60 | Dodecane | 1.7465 | C12H26 | 936 | mainlib | 26534152 | 3869.5 | 550.9 | 170.2035 |
| 40 | Benzene, (2-methylpropyl)- | 1.624 | C10H14 | 855 | replib | 18868602 | 2751.6 | 425.3 | 134.1096 |
| 20 | Benzene, (1-methyldodecyl)- | 1.1291 | C19H32 | 747 | mainlib | 31314800 | 4566.6 | 369 | 260.2504 |
| 35 | Benzene, 2-propenyl- | 0.94465 | C9H10 | 925 | replib | 13569239 | 1978.8 | 408.5 | 118.0783 |
| 104 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 0.76912 | C14H16N2O2 | 844 | DATABASE | 5494084 | 801.2 | 1349 | 244.1212 |
| 81 | Cyclopentanol, 1-[1-(4-morpholinyl)ethyl]- | 0.76854 | C11H21NO2 | 662 | DATABASE | 8706743 | 1269.7 | 1004.7 | 199.1572 |
| 100 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.43435 | C15H17Cl2N3O2 | 878 | mainlib | 3571506 | 520.83 | 1326 | 341.0698 |
| 7 | p-Xylene | 0.37421 | C8H10 | 958 | replib | 4055709 | 591.44 | 261.6 | 106.0783 |
| 85 | 3,6-Diisopropylpiperazin-2,5-dione | 0.34264 | C10H18N2O2 | 652 | mainlib | 1839986 | 268.33 | 1044.5 | 198.1368 |
| 84 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 0.34019 | C11H18N2O2 | 753 | mainlib | 1836600 | 267.83 | 1043.2 | 210.1368 |
| 8 | 1-Pentanol, 2,2-dimethyl- | 0.32891 | C7H16O | 772 | DATABASE | 4858724 | 708.55 | 273.7 | 116.1201 |
| 76 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.29288 | C7H10N2O2 | 868 | mainlib | 1683438 | 245.5 | 994.6 | 154.0742 |
| 37 | Benzene, 1-propynyl- | 0.29231 | C9H8 | 927 | DATABASE | 4121625 | 601.06 | 417.4 | 116.0626 |
| 65 | 7-Tetradecene, (Z)- | 0.28719 | C14H28 | 843 | replib | 3852534 | 561.82 | 721 | 196.2191 |
| 34 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.2704 | C10H18O | 922 | DATABASE | 4069857 | 593.51 | 404.7 | 154.1358 |
| 73 | dl-Alanyl-l-leucine | 0.20306 | C9H18N2O3 | 829 | mainlib | 1132316 | 165.13 | 975.9 | 202.1317 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 0.11641 | C6H17N3 | 752 | DATABASE | 694854 | 101.33 | 202.7 | 131.1422 |
| 2 | Cyclopentane, 1-ethyl-3-methyl-, cis- | 0.11462 | C8H16 | 780 | mainlib | 681891 | 99.44 | 203.7 | 112.1252 |
| 51 | Benzene, 1,2,3,4-tetramethyl- | 0.10833 | C10H14 | 927 | mainlib | 1445677 | 210.82 | 481.1 | 134.1096 |
| 72 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 0.10789 | C7H12N2O | 673 | mainlib | 919170 | 134.04 | 958.4 | 140.095 |
| 6 | Ethylbenzene | 0.10736 | C8H10 | 957 | replib | 1582900 | 230.83 | 254.8 | 106.0783 |
| 99 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.10533 | C15H17Cl2N3O2 | 886 | mainlib | 1146604 | 167.21 | 1319.1 | 341.0698 |
| 3 | Butanoic acid, 3-methyl- | 0.1043 | C5H10O2 | 797 | DATABASE | 781567 | 113.98 | 235.5 | 102.0681 |
| 4 | 2-Propanol, 1-propoxy- | 0.10316 | C6H14O2 | 879 | DATABASE | 778123 | 113.47 | 236.5 | 118.0994 |
| 9 | Benzene, 1,3-dimethyl- | 0.10231 | C8H10 | 950 | replib | 1438478 | 209.77 | 280.5 | 106.0783 |
| 114 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.099725 | C26H48O4 | 794 | mainlib | 600799 | 87.615 | 1521.8 | 424.3553 |
| 71 | Hexadecane | 0.097113 | C16H34 | 926 | replib | 1101368 | 160.61 | 935.4 | 226.2661 |
| 70 | Hexadecane, 4-methyl- | 0.090432 | C17H36 | 923 | mainlib | 1190454 | 173.6 | 906.3 | 240.2817 |
| 24 | Benzene, 2-propenyl- | 0.08388 | C9H10 | 906 | replib | 763372 | 111.32 | 374.5 | 118.0783 |
| 17 | 3-Pentanone, 2,2,4,4-tetramethyl- | 0.082886 | C9H18O | 927 | DATABASE | 1708202 | 249.11 | 343.2 | 142.1358 |
| 102 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.079401 | C22H42O4 | 906 | replib | 650272 | 94.829 | 1332.2 | 370.3083 |
| 106 | Octadecane, 2-methyl- | 0.079369 | C19H40 | 911 | mainlib | 709098 | 103.41 | 1430.2 | 268.313 |
| 109 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.078554 | C24H42O4 | 770 | mainlib | 579701 | 84.538 | 1489 | 394.3083 |
| 62 | Tridecane | 0.074604 | C13H28 | 935 | DATABASE | 1088812 | 158.78 | 636 | 184.2191 |
| 66 | Tetradecane, 4-methyl- | 0.072743 | C15H32 | 901 | mainlib | 971774 | 141.71 | 761.8 | 212.2504 |
| 96 | 2,5-Piperazinedione, 3-(phenylmethyl)- | 0.063937 | C11H12N2O2 | 812 | mainlib | 331041 | 48.276 | 1248.4 | 204.0899 |
| 111 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.063097 | C24H42O4 | 756 | mainlib | 453076 | 66.072 | 1502.4 | 394.3083 |
| 83 | Octadecane, 4-methyl- | 0.063033 | C19H40 | 919 | mainlib | 844484 | 123.15 | 1036.7 | 268.313 |
| 112 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.060025 | C26H48O4 | 763 | mainlib | 632223 | 92.197 | 1509.5 | 424.3553 |
| 25 | Pyrazine, trimethyl- | 0.05695 | C7H10N2 | 828 | replib | 472286 | 68.874 | 377.2 | 122.0844 |
| 10 | Nonane | 0.052187 | C9H20 | 910 | DATABASE | 870563 | 126.95 | 282.2 |  |
| 32 | Benzene, 2-propenyl- | 0.050831 | C9H10 | 876 | replib | 602968 | 87.931 | 399.1 | 118.0783 |
| 110 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.049842 | C24H42O4 | 741 | mainlib | 433434 | 63.208 | 1498.5 | 394.3083 |
| 75 | Heptadecane, 3-methyl- | 0.04975 | C18H38 | 856 | replib | 704190 | 102.69 | 982.2 | 254.2974 |
| 33 | Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- | 0.035903 | C10H16 | 904 | replib | 454652 | 66.302 | 401 | 136.1252 |
| 12 | 1,3-Cyclohexadiene, 2-methyl-5-(1-methylethyl)- | 0.029581 | C10H16 | 910 | DATABASE | 368903 | 53.797 | 307.5 | 136.1252 |
| 57 | Benzene, 1-methyl-4-(2-propenyl)- | 0.028276 | C10H12 | 920 | mainlib | 422231 | 61.574 | 512.5 | 132.0939 |
| 59 | Azulene | 0.026581 | C10H8 | 929 | DATABASE | 881759 | 128.59 | 549.2 |  |
| 105 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.024748 | C24H38O4 | 830 | replib | 257772 | 37.591 | 1403.6 | 390.277 |
| 90 | Dibutyl phthalate | 0.021931 | C16H22O4 | 898 | mainlib | 735072 | 107.2 | 1102.2 | 278.1518 |
| 47 | Benzene, 1-butenyl-, (E)- | 0.014557 | C10H12 | 893 | mainlib | 200017 | 29.169 | 454.5 | 132.0939 |
| 78 | (Z)-2-Fluoro-3-methyl-2,6-heptadienal | 3.14E-05 | C8H11FO | 831 | DATABASE | 3281.4 | 0.47853 | 999.2 | 142.0794 |

**TABLE 27: *M. luteus* EKF2 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 28 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 15.586 | C12H22N2O2 | 70 | mainlib | 23775133 | 3633.1 | 1101.2 | 226.1681 |
| 30 | 5H,10H-Dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 5.2266 | C10H14N2O2 | 737 | DATABASE | 10638547 | 1625.7 | 1104.7 | 194.1055 |
| 38 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 4.5764 | C14H16N2O2 | 845 | DATABASE | 7729671 | 1181.2 | 1349.5 | 244.1212 |
| 25 | 3,6-Diisopropylpiperazin-2,5-dione | 3.5121 | C10H18N2O2 | 688 | mainlib | 5922408 | 905.02 | 1046.7 | 198.1368 |
| 21 | Methyl (3s\*,4s\*)-2,3,4,5-tetrahydro-4-methyl-1,5-dioxo-1h-benz[c]azepine-3-carboxylate | 3.35 | C13H13NO4 | 689 | DATABASE | 3483848 | 532.38 | 1001.1 | 247.0845 |
| 15 | 1-Dodecanol | 1.4863 | C12H26O | 683 | DATABASE | 2352906 | 359.55 | 961.1 | 186.1984 |
| 17 | dl-Alanyl-l-leucine | 0.75441 | C9H18N2O3 | 879 | mainlib | 933815 | 142.7 | 980 | 202.1317 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 0.72004 | C6H17N3 | 838 | DATABASE | 768688 | 117.47 | 203.1 | 131.1422 |
| 11 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.42982 | C10H18O | 932 | DATABASE | 1529083 | 233.66 | 404.5 | 154.1358 |
| 22 | Cycloglycylserine | 0.40152 | C5H8N2O3 | 717 | DATABASE | 989768 | 151.25 | 1001.9 | 144.0535 |
| 10 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.33214 | C10H14 | 942 | mainlib | 790212 | 120.75 | 396.7 | 134.1096 |
| 35 | 3-Benzyl-6-isopropyl-2,5-piperazinedione # | 0.26587 | C14H18N2O2 | 777 | DATABASE | 574198 | 87.745 | 1286.1 | 246.1368 |
| 33 | 3-Benzyl-6-methyl-2,5-piperazinedione # | 0.25246 | C12H14N2O2 | 864 | DATABASE | 439204 | 67.116 | 1228.9 | 218.1055 |
| 16 | 3-Dodecene, (E)- | 0.24947 | C12H24 | 677 | mainlib | 736845 | 112.6 | 977.6 | 168.1878 |
| 14 | Hexadecane | 0.11349 | C16H34 | 932 | replib | 410158 | 62.677 | 867.1 | 226.2661 |
| 37 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.10805 | C22H42O4 | 918 | DATABASE | 345337 | 52.772 | 1332.5 | 370.3083 |
| 3 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.067995 | C10H16 | 913 | DATABASE | 267617 | 40.895 | 307.6 | 136.1252 |
| 7 | Benzene, 1-ethyl-2-methyl- | 0.062937 | C9H12 | 915 | DATABASE | 182980 | 27.962 | 354.8 | 120.0939 |

**TABLE 28: *S. hominis* EKF3 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 33 | Octadecane | 9.7716 | C18H38 | 950 | replib | 53892541 | 13330 | 1005.4 | 254.2974 |
| 52 | Eicosane | 9.1786 | C20H42 | 931 | replib | 50241095 | 12427 | 1126.7 | 282.3287 |
| 20 | Hexadecane | 9.1451 | C16H34 | 947 | DATABASE | 54770890 | 13548 | 870.6 | 226.2661 |
| 21 | Pentadecane | 9.0465 | C15H32 | 763 | DATABASE | 54528738 | 13488 | 871.3 | 212.2504 |
| 62 | Docosane | 7.4244 | C22H46 | 860 | replib | 43095610 | 10660 | 1236.5 | 310.36 |
| 10 | Tetradecane | 5.0797 | C14H30 | 931 | DATABASE | 49186984 | 12166 | 719.2 | 198.2348 |
| 70 | Eicosane, 2-methyl- | 3.659 | C21H44 | 835 | DATABASE | 37393453 | 9249.3 | 1338 | 296.3443 |
| 69 | Heneicosane | 3.5811 | C21H44 | 921 | replib | 37307863 | 9228.1 | 1337.8 | 296.3443 |
| 50 | Nonadecane | 1.4873 | C19H40 | 910 | replib | 38690720 | 9570.1 | 1123.8 | 268.313 |
| 74 | Triacontane | 1.3773 | C30H62 | 922 | DATABASE | 21812883 | 5395.4 | 1431.5 | 422.4852 |
| 34 | Cyclotetradecane | 1.263 | C14H28 | 829 | mainlib | 29187877 | 7219.6 | 1006.4 | 196.2191 |
| 49 | 1-Docosene | 0.96524 | C22H44 | 954 | replib | 17865692 | 4419.1 | 1120.1 | 308.3443 |
| 22 | Cyclooctane, methyl- | 0.90832 | C9H18 | 825 | mainlib | 22974391 | 5682.7 | 871.8 | 126.1409 |
| 19 | 1-Hexadecene | 0.69605 | C16H32 | 931 | replib | 11822445 | 2924.3 | 861.9 | 224.2504 |
| 77 | Sulfurous acid, octadecyl pentyl ester | 0.67246 | C23H48O3S | 760 | mainlib | 10715800 | 2650.5 | 1882.9 | 404.3324 |
| 53 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.56928 | C17H24O3 | 784 | replib | 13869747 | 3430.7 | 1140.1 | 276.1725 |
| 11 | 7-Tetradecene, (Z)- | 0.19993 | C14H28 | 817 | replib | 5228874 | 1293.4 | 721.2 | 196.2191 |
| 27 | Heptadecane, 2,6-dimethyl- | 0.17033 | C19H40 | 900 | mainlib | 2533639 | 626.69 | 964.5 | 268.313 |
| 24 | Hexadecane, 4-methyl- | 0.14404 | C17H36 | 924 | mainlib | 2751084 | 680.48 | 906.3 | 240.2817 |
| 8 | Tridecane | 0.12391 | C13H28 | 932 | DATABASE | 2541336 | 628.6 | 636 | 184.2191 |
| 29 | Heptadecane, 3-methyl- | 0.12149 | C18H38 | 889 | replib | 1936288 | 478.94 | 982.4 | 254.2974 |
| 72 | 1,2-Benzenedicarboxylic acid, mono(2-ethylhexyl) ester | 0.081616 | C16H22O4 | 856 | mainlib | 886275 | 219.22 | 1403.6 | 278.1518 |
| 18 | Pentadecane, 3-methyl- | 0.077283 | C16H34 | 889 | DATABASE | 1559422 | 385.72 | 845.6 | 226.2661 |
| 12 | Tetradecane, 4-methyl- | 0.076496 | C15H32 | 883 | mainlib | 1461987 | 361.62 | 761.7 | 212.2504 |
| 58 | Eicosane, 2,4-dimethyl- | 0.067454 | C22H46 | 880 | mainlib | 967416 | 239.29 | 1206.6 | 310.36 |
| 3 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.062551 | C10H14 | 949 | mainlib | 1211733 | 299.72 | 395.7 | 134.1096 |
| 44 | Decane, 2,3,5,8-tetramethyl- | 0.061565 | C14H30 | 864 | mainlib | 815370 | 201.68 | 1095.6 | 198.2348 |
| 4 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.052862 | C10H18O | 923 | DATABASE | 1089654 | 269.53 | 403.9 | 154.1358 |
| 41 | Undecane, 2,3-dimethyl- | 0.051222 | C13H28 | 860 | mainlib | 1045533 | 258.61 | 1087.1 | 184.2191 |
| 15 | 1-Iodo-2-methylundecane | 0.048833 | C12H25I | 892 | mainlib | 845625 | 209.17 | 818.9 | 296.1001 |
| 36 | 1-Docosene | 0.04064 | C22H44 | 889 | replib | 769970 | 190.45 | 1013.1 | 308.3443 |
| 45 | Dibutyl phthalate | 0.040534 | C16H22O4 | 921 | mainlib | 572604 | 141.63 | 1101.5 | 278.1518 |
| 2 | p-Xylene | 0.031911 | C8H10 | 915 | replib | 492310 | 121.77 | 260 |  |
| 26 | Benzene, (1-methyldecyl)- | 0.031144 | C17H28 | 889 | mainlib | 349560 | 86.464 | 941.1 | 232.2191 |
| 38 | Phthalic acid, butyl undecyl ester | 0.026692 | C23H36O4 | 765 | mainlib | 383178 | 94.779 | 1043.2 | 376.2614 |
| 63 | Hexadecane, 5-butyl- | 0.025009 | C20H42 | 870 | mainlib | 455286 | 112.61 | 1254.1 | 282.3287 |
| 47 | 1-Octene, 3-ethyl- | 0.013346 | C10H20 | 820 | DATABASE | 233309 | 57.709 | 1115.7 | 140.1565 |
| 48 | 2,5-di-tert-Butyl-1,4-benzoquinone | 0.013346 | C14H20O2 | 696 | replib | 233309 | 57.709 | 1116.9 | 220.1463 |

**TABLE 29: *S. hominis* EKF3 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 19 | Hexadecane | 23.044 | C16H34 | 938 | replib | 44037908 | 6481.5 | 868 | 226.2661 |
| 28 | Octadecane | 18.919 | C18H38 | 929 | replib | 40894588 | 6018.9 | 1002.2 | 254.2974 |
| 14 | Tetradecane | 11.344 | C14H30 | 953 | replib | 35855671 | 5277.3 | 717.9 | 198.2348 |
| 39 | Heneicosane | 8.9275 | C21H44 | 921 | replib | 27006751 | 3974.9 | 1123.4 | 296.3443 |
| 33 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 6.6055 | C12H22N2O2 | 701 | mainlib | 12862187 | 1893.1 | 1096.7 | 226.1681 |
| 41 | Triacontane | 2.1208 | C30H62 | 922 | DATABASE | 7604456 | 1119.2 | 1234.1 | 422.4852 |
| 50 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 1.8181 | C14H16N2O2 | 849 | DATABASE | 4016124 | 591.1 | 1347.9 | 244.1212 |
| 36 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 1.4044 | C11H18N2O2 | 885 | mainlib | 2890070 | 425.36 | 1102.9 | 210.1368 |
| 46 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 1.2237 | C15H17Cl2N3O2 | 876 | mainlib | 2918145 | 429.5 | 1325.4 | 341.0698 |
| 27 | 1-Nonadecene | 1.1958 | C19H38 | 912 | replib | 4168577 | 613.53 | 996.8 | 266.2974 |
| 35 | Dibutyl phthalate | 0.96218 | C16H22O4 | 800 | mainlib | 2413295 | 355.19 | 1101.9 | 278.1518 |
| 18 | 1-Hexadecene | 0.90061 | C16H32 | 915 | replib | 2706569 | 398.36 | 861.5 | 224.2504 |
| 26 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.78429 | C7H10N2O2 | 917 | mainlib | 1384339 | 203.75 | 992.8 | 154.0742 |
| 11 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.55977 | C10H18O | 932 | DATABASE | 1754518 | 258.23 | 404.5 | 154.1358 |
| 10 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.44639 | C10H14 | 940 | mainlib | 949263 | 139.71 | 397 | 134.1096 |
| 8 | Benzene, 1,2,4-trimethyl- | 0.44334 | C9H12 | 945 | mainlib | 1183373 | 174.17 | 369.3 | 120.0939 |
| 23 | dl-Alanyl-l-leucine | 0.3195 | C9H18N2O3 | 832 | mainlib | 612201 | 90.104 | 972.8 | 202.1317 |
| 22 | Cyclododecane | 0.27135 | C12H24 | 689 | DATABASE | 603583 | 88.836 | 957.8 | 168.1878 |
| 20 | Hexadecane, 4-methyl- | 0.2523 | C17H36 | 905 | mainlib | 911037 | 134.09 | 906.2 | 240.2817 |
| 48 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.24988 | C22H42O4 | 911 | DATABASE | 569619 | 83.837 | 1331.9 | 370.3083 |
| 55 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.2331 | C24H42O4 | 771 | mainlib | 490959 | 72.26 | 1502.2 | 394.3083 |
| 40 | 2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)- | 0.20517 | C12H14N2O2 | 843 | replib | 397770 | 58.544 | 1227.3 | 218.1055 |
| 56 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.19338 | C26H48O4 | 772 | mainlib | 533918 | 78.583 | 1509.5 | 424.3553 |
| 30 | Octadecane, 4-methyl- | 0.18354 | C19H40 | 905 | mainlib | 705552 | 103.84 | 1036.6 | 268.313 |
| 15 | Tetradecane, 4-methyl- | 0.147 | C15H32 | 886 | mainlib | 559569 | 82.358 | 761.7 | 212.2504 |
| 6 | Benzene, 1,2,3-trimethyl- | 0.12243 | C9H12 | 910 | replib | 300830 | 44.276 | 346 | 120.0939 |
| 25 | Heptadecane, 3-methyl- | 0.095027 | C18H38 | 856 | replib | 359496 | 52.911 | 982.1 | 254.2974 |
| 7 | Benzene, 1-ethyl-4-methyl- | 0.091813 | C9H12 | 914 | replib | 251107 | 36.958 | 354.8 | 120.0939 |
| 3 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.086641 | C10H16 | 919 | mainlib | 318289 | 46.846 | 307.6 | 136.1252 |
| 4 | Benzene, 1-ethyl-2-methyl- | 0.069754 | C9H12 | 941 | DATABASE | 247225 | 36.387 | 338.7 | 120.0939 |
| 51 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.049627 | C24H38O4 | 900 | replib | 140269 | 20.645 | 1403.6 | 390.277 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 0.001633 | C6H17N3 | 790 | DATABASE | 43207 | 6.3593 | 203.1 | 131.1422 |

**TABLE 30: *S. hominis* EKF3 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 12 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 19.769 | C12H22N2O2 | 738 | mainlib | 21715897 | 3389.6 | 1098.8 | 226.1681 |
| 8 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 12.408 | C11H18N2O2 | 734 | mainlib | 13985442 | 2183 | 1028.1 | 210.1368 |
| 15 | Hydroperoxide, heptyl | 7.0421 | C7H16O2 | 709 | mainlib | 10826025 | 1689.8 | 1104.2 | 132.115 |
| 14 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 6.8547 | C10H14N2O2 | 808 | DATABASE | 10652193 | 1662.7 | 1104 | 194.1055 |
| 7 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 3.591 | C7H10N2O2 | 889 | mainlib | 4425469 | 690.77 | 996.6 | 154.0742 |
| 19 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 2.0383 | C14H16N2O2 | 832 | mainlib | 3051117 | 476.25 | 1326.7 | 244.1212 |
| 3 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 1.3421 | C7H12N2O | 678 | mainlib | 1638548 | 255.76 | 959.3 | 140.095 |
| 4 | dl-Alanyl-l-leucine | 0.65149 | C9H18N2O3 | 833 | mainlib | 702218 | 109.61 | 975.4 | 202.1317 |
| 18 | 3-Benzyl-6-isopropyl-2,5-piperazinedione # | 0.20786 | C14H18N2O2 | 727 | DATABASE | 359995 | 56.192 | 1284.7 | 246.1368 |
| 17 | 3-Benzyl-6-methyl-2,5-piperazinedione | 0.17177 | C12H14N2O2 | 852 | DATABASE | 279317 | 43.599 | 1227.4 | 218.1055 |
| 2 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.16392 | C10H18O | 927 | DATABASE | 371852 | 58.042 | 404.2 | 154.1358 |
| 20 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.16261 | C22H42O4 | 755 | DATABASE | 296010 | 46.204 | 1331.7 | 370.3083 |
| 1 | 4-Penten-2-ol | 0.12537 | C5H10O | 807 | DATABASE | 291098 | 45.438 | 216.7 | 86.0732 |

**TABLE 31: *Bacillus sp.* EKF4 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 32 | Octadecane | 15.782 | C18H38 | 949 | replib | 52475741 | 7479 | 1004.5 | 254.2974 |
| 50 | Eicosane | 14.706 | C20H42 | 925 | replib | 48640086 | 6932.3 | 1126.2 | 282.3287 |
| 14 | Hexadecane | 12.748 | C16H34 | 943 | replib | 51137787 | 7288.3 | 869.2 | 226.2661 |
| 61 | Oxalic acid, allyl dodecyl ester | 10.052 | C17H30O4 | 853 | mainlib | 42592184 | 6070.4 | 1237.1 | 298.2144 |
| 60 | Pentacosane | 9.8639 | C25H52 | 921 | DATABASE | 42477411 | 6054 | 1236.3 | 352.4069 |
| 69 | Heptacosane | 4.2789 | C27H56 | 933 | replib | 30740661 | 4381.3 | 1337.6 | 380.4382 |
| 49 | Heneicosane | 3.7305 | C21H44 | 907 | replib | 42316498 | 6031.1 | 1124.4 | 296.3443 |
| 15 | Butyl 2,4-dimethyl-2-nitro-4-pentenoate | 2.1803 | C11H19NO4 | 675 | DATABASE | 23158802 | 3300.7 | 870.8 | 229.1314 |
| 16 | 7-Hexadecene, (z)- | 1.9013 | C16H32 | 706 | DATABASE | 21146042 | 3013.8 | 871 | 224.2504 |
| 76 | Triacontane | 1.6261 | C30H62 | 922 | DATABASE | 18856132 | 2687.4 | 1431.1 | 422.4852 |
| 31 | 1-Nonadecene | 1.2725 | C19H38 | 948 | replib | 13953600 | 1988.7 | 997.4 | 266.2974 |
| 48 | 1-Docosene | 0.8575 | C22H44 | 956 | replib | 10509913 | 1497.9 | 1120.1 | 308.3443 |
| 10 | Tetradecane | 0.57963 | C14H30 | 945 | replib | 8082061 | 1151.9 | 717.4 | 198.2348 |
| 40 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.46256 | C17H24O3 | 934 | replib | 5787416 | 824.84 | 1075.3 | 276.1725 |
| 39 | Nonadecane | 0.2327 | C19H40 | 928 | replib | 2319764 | 330.62 | 1063.4 | 268.313 |
| 1 | Octane | 0.17274 | C8H18 | 949 | DATABASE | 2384411 | 339.83 | 206 | 114.1409 |
| 52 | Eicosane, 2-methyl- | 0.16525 | C21H44 | 877 | mainlib | 1568194 | 223.5 | 1155.4 | 296.3443 |
| 36 | Octadecane, 4-methyl- | 0.16154 | C19H40 | 926 | mainlib | 1778294 | 253.45 | 1036.8 | 268.313 |
| 20 | Hexadecane, 4-methyl- | 0.14337 | C17H36 | 915 | mainlib | 1639161 | 233.62 | 906.3 | 240.2817 |
| 29 | Heptadecane, 3-methyl- | 0.14226 | C18H38 | 910 | replib | 1447923 | 206.36 | 982.3 | 254.2974 |
| 30 | Benzene, (1-ethyldecyl)- | 0.14226 | C18H30 | 890 | replib | 1447923 | 206.36 | 982.8 | 246.2348 |
| 53 | Triacontane | 0.13492 | C30H62 | 908 | DATABASE | 1261043 | 179.73 | 1179.4 | 422.4852 |
| 42 | Octadecane, 2,6-dimethyl- | 0.12576 | C20H42 | 890 | mainlib | 1090594 | 155.43 | 1088.8 | 282.3287 |
| 28 | Tetradecane, 4-ethyl- | 0.12161 | C16H34 | 869 | mainlib | 1054741 | 150.32 | 968.7 | 226.2661 |
| 55 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.11455 | C18H38O3S | 867 | mainlib | 888860 | 126.68 | 1202.3 | 334.2542 |
| 7 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.10854 | C10H18O | 932 | DATABASE | 1235028 | 176.02 | 403.9 | 154.1358 |
| 74 | Phthalic acid, cyclohexyl 2-pentyl ester | 0.10288 | C19H26O4 | 716 | mainlib | 704734 | 100.44 | 1403.5 | 318.1831 |
| 6 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.10055 | C10H14 | 950 | mainlib | 1084295 | 154.54 | 395.7 | 134.1096 |
| 35 | 2,3-Dimethyldecane | 0.067466 | C12H26 | 770 | mainlib | 449942 | 64.127 | 1027 | 170.2035 |
| 38 | 2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)- | 0.066631 | C14H20O2 | 748 | mainlib | 565300 | 80.568 | 1045.8 | 220.1463 |
| 41 | Undecane, 2,3-dimethyl- | 0.064457 | C13H28 | 865 | mainlib | 770491 | 109.81 | 1087 | 184.2191 |
| 23 | Benzene, (1-methyldecyl)- | 0.062112 | C17H28 | 908 | DATABASE | 513882 | 73.24 | 941.1 | 232.2191 |
| 3 | p-Xylene | 0.06195 | C8H10 | 956 | replib | 580097 | 82.677 | 260 | 106.0783 |
| 45 | 1,2-Benzenedicarboxylic acid, bis(2-methoxyethyl) ester | 0.057261 | C14H18O6 | 933 | DATABASE | 574494 | 81.879 | 1101.6 | 282.1103 |
| 34 | 1-Decanol, 2-hexyl- | 0.047454 | C16H34O | 896 | replib | 580057 | 82.671 | 1012.9 | 242.261 |
| 21 | Benzene, (1-ethylnonyl)- | 0.041411 | C17H28 | 858 | DATABASE | 317961 | 45.317 | 914.9 | 232.2191 |
| 70 | Docosane, 11-decyl- | 0.03965 | C32H66 | 833 | DATABASE | 345999 | 49.313 | 1354.3 | 450.5165 |
| 17 | 7-Hexadecene, (z)- | 0.031712 | C16H32 | 880 | DATABASE | 436615 | 62.228 | 878.5 | 224.2504 |
| 25 | Benzene, (1-butyloctyl)- | 0.030839 | C18H30 | 843 | replib | 270345 | 38.53 | 958.5 | 246.2348 |
| 37 | Phthalic acid, butyl undecyl ester | 0.029379 | C23H36O4 | 806 | mainlib | 275654 | 39.287 | 1043.2 | 376.2614 |
| 2 | Ethylbenzene | 0.023994 | C8H10 | 897 | replib | 262812 | 37.457 | 253.1 | 106.0783 |
| 5 | 1,3-Cyclohexadiene, 2-methyl-5-(1-methylethyl)- | 0.021634 | C10H16 | 780 | DATABASE | 283608 | 40.421 | 306.5 | 136.1252 |
| 19 | Benzene, (1-propyloctyl)- | 0.018533 | C17H28 | 897 | DATABASE | 220863 | 31.478 | 899.1 | 232.2191 |
| 24 | Benzene, (1-pentylheptyl)- | 0.018463 | C18H30 | 774 | DATABASE | 228513 | 32.568 | 955.4 | 246.2348 |
| 47 | Tridecane, 3-methylene- | 0.016741 | C14H28 | 848 | mainlib | 172441 | 24.577 | 1115.7 | 196.2191 |
| 27 | Benzene, (1-propylnonyl)- | 0.013243 | C18H30 | 901 | replib | 314032 | 44.757 | 967.3 | 246.2348 |

**TABLE 32: *Bacillus sp.* EKF4 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 69 | Hexadecane | 7.4861 | C16H34 | 939 | DATABASE | 45006942 | 6563.4 | 868.6 | 226.2661 |
| 79 | Nonadecane | 6.1593 | C19H40 | 852 | replib | 41277306 | 6019.5 | 1002.2 | 268.313 |
| 80 | Octadecane | 6.1208 | C18H38 | 933 | replib | 41219265 | 6011 | 1002.5 | 254.2974 |
| 64 | Tetradecane | 5.6892 | C14H30 | 951 | replib | 43751968 | 6380.4 | 718.8 | 198.2348 |
| 23 | (2R\*,3R\*)-2,4-dimethyl-1,3-diphenyl-4-nitro-1-pentanone | 5.1917 | C18H19NO3 | 713 | DATABASE | 37348906 | 5446.6 | 371.2 | 297.1365 |
| 22 | Benzene, 1,2,3-trimethyl- | 5.1914 | C9H12 | 917 | DATABASE | 37348029 | 5446.5 | 370.6 | 120.0939 |
| 21 | Decane | 5.1649 | C10H22 | 873 | DATABASE | 37264139 | 5434.2 | 370.1 | 142.1722 |
| 56 | 2,4-Dimethylstyrene | 3.8314 | C10H12 | 773 | mainlib | 44483477 | 6487 | 503.7 | 132.0939 |
| 94 | Heneicosane | 2.7335 | C21H44 | 931 | replib | 29209918 | 4259.7 | 1123.7 | 296.3443 |
| 88 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 2.5095 | C12H22N2O2 | 792 | mainlib | 17761380 | 2590.1 | 1098.5 | 226.1681 |
| 60 | Dodecane | 1.7465 | C12H26 | 936 | mainlib | 26534152 | 3869.5 | 550.9 | 170.2035 |
| 40 | Benzene, (2-methylpropyl)- | 1.624 | C10H14 | 855 | replib | 18868602 | 2751.6 | 425.3 | 134.1096 |
| 20 | Benzene, (1-methyldodecyl)- | 1.1291 | C19H32 | 747 | mainlib | 31314800 | 4566.6 | 369 | 260.2504 |
| 35 | Benzene, 2-propenyl- | 0.94465 | C9H10 | 925 | replib | 13569239 | 1978.8 | 408.5 | 118.0783 |
| 81 | Cyclopentanol, 1-[1-(4-morpholinyl)ethyl]- | 0.76854 | C11H21NO2 | 662 | DATABASE | 8706743 | 1269.7 | 1004.7 | 199.1572 |
| 82 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 0.74607 | C11H18N2O2 | 746 | mainlib | 5715589 | 833.5 | 1027 | 210.1368 |
| 49 | Undecane | 0.59609 | C11H24 | 929 | DATABASE | 11006870 | 1605.1 | 461.2 | 156.1878 |
| 46 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.56144 | C10H14 | 922 | mainlib | 9226384 | 1345.5 | 451.5 | 134.1096 |
| 101 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 0.536 | C14H16N2O2 | 792 | DATABASE | 3813517 | 556.13 | 1326.3 | 244.1212 |
| 100 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.43435 | C15H17Cl2N3O2 | 878 | mainlib | 3571506 | 520.83 | 1326 | 341.0698 |
| 7 | p-Xylene | 0.37421 | C8H10 | 958 | replib | 4055709 | 591.44 | 261.6 | 106.0783 |
| 85 | 3,6-Diisopropylpiperazin-2,5-dione | 0.34264 | C10H18N2O2 | 652 | mainlib | 1839986 | 268.33 | 1044.5 | 198.1368 |
| 8 | 1-Pentanol, 2,2-dimethyl- | 0.32891 | C7H16O | 772 | DATABASE | 4858724 | 708.55 | 273.7 | 116.1201 |
| 76 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.29288 | C7H10N2O2 | 868 | mainlib | 1683438 | 245.5 | 994.6 | 154.0742 |
| 37 | Benzene, 1-propynyl- | 0.29231 | C9H8 | 927 | DATABASE | 4121625 | 601.06 | 417.4 | 116.0626 |
| 65 | 7-Tetradecene, (Z)- | 0.28719 | C14H28 | 843 | replib | 3852534 | 561.82 | 721 | 196.2191 |
| 34 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.2704 | C10H18O | 922 | DATABASE | 4069857 | 593.51 | 404.7 | 154.1358 |
| 13 | Benzene, propyl- | 0.23562 | C9H12 | 946 | replib | 3429841 | 500.17 | 332.1 | 120.0939 |
| 73 | dl-Alanyl-l-leucine | 0.20306 | C9H18N2O3 | 829 | mainlib | 1132316 | 165.13 | 975.9 | 202.1317 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 0.11641 | C6H17N3 | 752 | DATABASE | 694854 | 101.33 | 202.7 | 131.1422 |
| 2 | Cyclopentane, 1-ethyl-3-methyl-, cis- | 0.11462 | C8H16 | 780 | mainlib | 681891 | 99.44 | 203.7 | 112.1252 |
| 72 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 0.10789 | C7H12N2O | 673 | mainlib | 919170 | 134.04 | 958.4 | 140.095 |
| 6 | Ethylbenzene | 0.10736 | C8H10 | 957 | replib | 1582900 | 230.83 | 254.8 | 106.0783 |
| 3 | Butanoic acid, 3-methyl- | 0.1043 | C5H10O2 | 797 | DATABASE | 781567 | 113.98 | 235.5 | 102.0681 |
| 4 | 2-Propanol, 1-propoxy- | 0.10316 | C6H14O2 | 879 | DATABASE | 778123 | 113.47 | 236.5 | 118.0994 |
| 9 | Benzene, 1,3-dimethyl- | 0.10231 | C8H10 | 950 | replib | 1438478 | 209.77 | 280.5 | 106.0783 |
| 114 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.099725 | C26H48O4 | 794 | mainlib | 600799 | 87.615 | 1521.8 | 424.3553 |
| 71 | Hexadecane | 0.097113 | C16H34 | 926 | replib | 1101368 | 160.61 | 935.4 | 226.2661 |
| 70 | Hexadecane, 4-methyl- | 0.090432 | C17H36 | 923 | mainlib | 1190454 | 173.6 | 906.3 | 240.2817 |
| 24 | Benzene, 2-propenyl- | 0.08388 | C9H10 | 906 | replib | 763372 | 111.32 | 374.5 | 118.0783 |
| 17 | 3-Pentanone, 2,2,4,4-tetramethyl- | 0.082886 | C9H18O | 927 | DATABASE | 1708202 | 249.11 | 343.2 | 142.1358 |
| 102 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.079401 | C22H42O4 | 906 | replib | 650272 | 94.829 | 1332.2 | 370.3083 |
| 106 | Octadecane, 2-methyl- | 0.079369 | C19H40 | 911 | mainlib | 709098 | 103.41 | 1430.2 | 268.313 |
| 109 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.078554 | C24H42O4 | 770 | mainlib | 579701 | 84.538 | 1489 | 394.3083 |
| 42 | 1,2-Diethylbenzene | 0.078292 | C10H14 | 831 | DATABASE | 946696 | 138.06 | 427.8 | 134.1096 |
| 66 | Tetradecane, 4-methyl- | 0.072743 | C15H32 | 901 | mainlib | 971774 | 141.71 | 761.8 | 212.2504 |
| 96 | 2,5-Piperazinedione, 3-(phenylmethyl)- | 0.063937 | C11H12N2O2 | 812 | mainlib | 331041 | 48.276 | 1248.4 | 204.0899 |
| 83 | Octadecane, 4-methyl- | 0.063033 | C19H40 | 919 | mainlib | 844484 | 123.15 | 1036.7 | 268.313 |
| 25 | Pyrazine, trimethyl- | 0.05695 | C7H10N2 | 828 | replib | 472286 | 68.874 | 377.2 | 122.0844 |
| 50 | Benzene, 2-ethyl-1,4-dimethyl- | 0.055249 | C10H14 | 928 | replib | 778965 | 113.6 | 470 | 134.1096 |
| 108 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.053382 | C24H42O4 | 737 | mainlib | 487073 | 71.03 | 1477.4 | 394.3083 |
| 32 | Benzene, 2-propenyl- | 0.050831 | C9H10 | 876 | replib | 602968 | 87.931 | 399.1 | 118.0783 |
| 33 | Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- | 0.035903 | C10H16 | 904 | replib | 454652 | 66.302 | 401 | 136.1252 |
| 12 | 1,3-Cyclohexadiene, 2-methyl-5-(1-methylethyl)- | 0.029581 | C10H16 | 910 | DATABASE | 368903 | 53.797 | 307.5 | 136.1252 |
| 57 | Benzene, 1-methyl-4-(2-propenyl)- | 0.028276 | C10H12 | 920 | mainlib | 422231 | 61.574 | 512.5 | 132.0939 |
| 59 | Azulene | 0.026581 | C10H8 | 929 | DATABASE | 881759 | 128.59 | 549.2 | 128.0626 |
| 105 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.024748 | C24H38O4 | 830 | replib | 257772 | 37.591 | 1403.6 | 390.277 |
| 90 | Dibutyl phthalate | 0.021931 | C16H22O4 | 898 | mainlib | 735072 | 107.2 | 1102.2 | 278.1518 |

**TABLE 33: *Bacillus sp.* EKF4 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 9 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 11.268 | C7H10N2O2 | 914 | mainlib | 9370126 | 1432.7 | 999.2 | 154.0742 |
| 10 | Benzene, m-diethoxy- | 10.857 | C10H14O2 | 714 | DATABASE | 9252291 | 1414.7 | 999.3 | 166.0994 |
| 14 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 3.0453 | C11H18N2O2 | 827 | mainlib | 5321427 | 813.68 | 1085.1 | 210.1368 |
| 5 | 1-Dodecanol | 1.8085 | C12H26O | 682 | DATABASE | 2052038 | 313.77 | 959.5 | 186.1984 |
| 22 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(phenylmethyl)- | 0.80534 | C14H16N2O2 | 766 | mainlib | 860454 | 131.57 | 1325.4 | 244.1212 |
| 23 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.38983 | C22H42O4 | 921 | DATABASE | 782191 | 119.6 | 1331.9 | 370.3083 |
| 6 | Pyrrolidine, 2,5-dimethyl-1-nitroso- | 0.36591 | C6H12N2O | 655 | mainlib | 351271 | 53.711 | 975.9 | 128.095 |
| 7 | dl-Alanyl-l-leucine | 0.26284 | C9H18N2O3 | 778 | mainlib | 231886 | 35.457 | 981.5 | 202.1317 |
| 3 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.22402 | C10H18O | 925 | DATABASE | 508631 | 77.773 | 404.2 | 154.1358 |
| 20 | Pyrimido[1,2-a]azepine, 2,3,4,6,7,8,9,10-octahydro- | 0.1857 | C9H16N2 | 696 | replib | 255884 | 39.126 | 1128.9 | 152.1313 |
| 17 | 1,2-Benzenedicarboxylic acid, dibutyl ester | 0.15415 | C16H22O4 | 845 | DATABASE | 1494234 | 228.48 | 1102 | 278.1518 |
| 2 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.12442 | C10H14 | 807 | mainlib | 294638 | 45.052 | 395.9 | 134.1096 |

**TABLE 34:** ***S. saprophyticus* EKB1 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 38 | Octadecane | 14.773 | C18H38 | 950 | DATABASE | 55124121 | 7963.6 | 1005.3 | 254.2974 |
| 57 | Eicosane | 14.037 | C20H42 | 930 | replib | 51076772 | 7378.9 | 1126.6 | 282.3287 |
| 17 | Hexadecane | 12.442 | C16H34 | 950 | DATABASE | 53239682 | 7691.4 | 870 | 226.2661 |
| 69 | Heneicosane | 11.463 | C21H44 | 940 | replib | 44282905 | 6397.4 | 1236.8 | 296.3443 |
| 80 | 1-Iodo-2-methylundecane | 5.497 | C12H25I | 861 | mainlib | 37461406 | 5411.9 | 1338.1 | 296.1001 |
| 56 | 1-Dodecanol, 2-methyl-, (S)- | 3.2794 | C13H28O | 782 | mainlib | 41483380 | 5993 | 1124.2 | 200.214 |
| 68 | Nonadecane | 2.4405 | C19H40 | 880 | replib | 37596364 | 5431.4 | 1235.2 | 268.313 |
| 89 | Triacontane | 2.1901 | C30H62 | 924 | DATABASE | 23426146 | 3384.3 | 1431.6 | 422.4852 |
| 39 | 7-Tetradecene, (Z)- | 1.9807 | C14H28 | 820 | replib | 30452035 | 4399.3 | 1006.3 | 196.2191 |
| 36 | 1-Nonadecene | 1.6636 | C19H38 | 946 | replib | 19461271 | 2811.5 | 997.4 | 266.2974 |
| 19 | Cyclohexane, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R\*,R\*)-(ñ)- | 1.5232 | C16H30 | 691 | mainlib | 21371242 | 3087.4 | 871.3 | 222.2348 |
| 55 | 1-Docosene | 1.4623 | C22H44 | 957 | replib | 17635318 | 2547.7 | 1120.1 | 308.3443 |
| 10 | Tetradecane | 0.99628 | C14H30 | 945 | replib | 14859926 | 2146.8 | 717.4 | 198.2348 |
| 47 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.77745 | C17H24O3 | 928 | replib | 10581028 | 1528.6 | 1075.5 | 276.1725 |
| 92 | Heptacosane | 0.62603 | C27H56 | 923 | replib | 5343809 | 772 | 1518.4 | 380.4382 |
| 43 | Octadecane, 4-methyl- | 0.20591 | C19H40 | 926 | mainlib | 2542322 | 367.28 | 1036.8 | 268.313 |
| 60 | Eicosane, 2-methyl- | 0.19791 | C21H44 | 896 | mainlib | 2061464 | 297.81 | 1155.4 | 296.3443 |
| 33 | Heptadecane, 3-methyl- | 0.19503 | C18H38 | 907 | replib | 2153234 | 311.07 | 982.2 | 254.2974 |
| 34 | Benzene, (1-ethyldecyl)- | 0.19503 | C18H30 | 874 | replib | 2153234 | 311.07 | 982.7 | 246.2348 |
| 24 | Hexadecane, 4-methyl- | 0.19284 | C17H36 | 918 | mainlib | 2639103 | 381.26 | 906.2 | 240.2817 |
| 1 | Octane | 0.19006 | C8H18 | 950 | DATABASE | 3129478 | 452.11 | 205.9 | 114.1409 |
| 30 | Heptadecane, 2,6-dimethyl- | 0.18551 | C19H40 | 905 | mainlib | 1688244 | 243.9 | 964.2 | 268.313 |
| 12 | Pentadecane | 0.14935 | C15H32 | 926 | DATABASE | 2135621 | 308.53 | 793.8 | 212.2504 |
| 49 | Octadecane, 2,6-dimethyl- | 0.14296 | C20H42 | 899 | mainlib | 1578323 | 228.02 | 1088.6 | 282.3287 |
| 63 | Sulfurous acid, decyl 2-ethylhexyl ester | 0.12827 | C18H38O3S | 864 | mainlib | 1216018 | 175.67 | 1202.3 | 334.2542 |
| 85 | 1,2-Benzenedicarboxylic acid, mono(2-ethylhexyl) ester | 0.11586 | C16H22O4 | 826 | mainlib | 884400 | 127.77 | 1403.7 | 278.1518 |
| 77 | Hexadecane, 3-methyl- | 0.10365 | C17H36 | 873 | mainlib | 824015 | 119.04 | 1322.4 | 240.2817 |
| 7 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.10175 | C10H18O | 933 | DATABASE | 1400190 | 202.28 | 403.8 | 154.1358 |
| 27 | Benzene, (1-methyldecyl)- | 0.094402 | C17H28 | 904 | DATABASE | 852638 | 123.18 | 941.1 | 232.2191 |
| 6 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.093506 | C10H14 | 949 | mainlib | 1222465 | 176.61 | 395.6 | 134.1096 |
| 48 | Tridecane, 3-methyl- | 0.088445 | C14H30 | 875 | replib | 1203965 | 173.93 | 1087 | 198.2348 |
| 3 | p-Xylene | 0.083164 | C8H10 | 958 | replib | 801825 | 115.84 | 260 | 106.0783 |
| 45 | 2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)- | 0.079142 | C14H20O2 | 761 | mainlib | 795614 | 114.94 | 1045.6 | 220.1463 |
| 52 | Dibutyl phthalate | 0.076083 | C16H22O4 | 930 | mainlib | 780286 | 112.73 | 1101.5 | 278.1518 |
| 42 | 2,3-Dimethyldecane | 0.075555 | C12H26 | 868 | mainlib | 562931 | 81.325 | 1027 | 170.2035 |
| 87 | Docosane, 11-decyl- | 0.072436 | C32H66 | 854 | DATABASE | 612150 | 88.435 | 1417.9 | 450.5165 |
| 76 | Sulfurous acid, hexyl pentadecyl ester | 0.049024 | C21H44O3S | 864 | mainlib | 635566 | 91.818 | 1310.7 | 376.3011 |
| 59 | 2,3-Dimethyldecane | 0.047593 | C12H26 | 847 | mainlib | 569137 | 82.221 | 1145.6 | 170.2035 |
| 20 | 7-Hexadecene, (z)- | 0.038065 | C16H32 | 922 | DATABASE | 567725 | 82.017 | 878.5 | 224.2504 |
| 25 | Benzene, (1-ethylnonyl)- | 0.038 | C17H28 | 889 | DATABASE | 421453 | 60.886 | 914.7 | 232.2191 |
| 44 | Phthalic acid, butyl undecyl ester | 0.035599 | C23H36O4 | 779 | mainlib | 389846 | 56.32 | 1043.1 | 376.2614 |
| 2 | Ethylbenzene | 0.034848 | C8H10 | 897 | replib | 382736 | 55.293 | 253.1 | 106.0783 |
| 58 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.034397 | C17H24O3 | 763 | replib | 490381 | 70.844 | 1138.5 | 276.1725 |
| 23 | Benzene, (1-propyloctyl)- | 0.028705 | C17H28 | 869 | DATABASE | 374233 | 54.064 | 899.1 | 232.2191 |
| 5 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.026666 | C10H16 | 892 | DATABASE | 321425 | 46.435 | 306.4 | 136.1252 |
| 31 | Benzene, (1-propylnonyl)- | 0.025229 | C18H30 | 896 | replib | 565619 | 81.713 | 967.2 | 246.2348 |
| 54 | Tridecane, 3-methylene- | 0.019207 | C14H28 | 836 | mainlib | 230749 | 33.336 | 1115.7 | 196.2191 |
| 66 | Undecane, 3-methylene- | 0.018202 | C12H24 | 838 | mainlib | 253346 | 36.6 | 1228 | 168.1878 |
| 35 | Octane, 3-methyl-6-methylene- | 0.014971 | C10H20 | 687 | DATABASE | 250959 | 36.255 | 992.4 | 140.1565 |
| 40 | Benzene, (1-methylundecyl)- | 0.000621 | C18H30 | 878 | DATABASE | 33555 | 4.8476 | 1009.5 | 246.2348 |

**TABLE 35: *S. saprophyticus* EKB1 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 22 | Octadecane | 31.611 | C18H38 | 928 | replib | 39432848 | 5882 | 1002.1 | 254.2974 |
| 15 | Hexadecane | 21.484 | C16H34 | 943 | replib | 34914729 | 5208.1 | 867.4 | 226.2661 |
| 31 | Heneicosane | 15.934 | C21H44 | 923 | Replib | 27525307 | 4105.8 | 1123.4 | 296.3443 |
| 34 | Triacontane | 3.7567 | C30H62 | 917 | DATABASE | 8519424 | 1270.8 | 1234.2 | 422.4852 |
| 37 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 1.4791 | C14H16N2O2 | 819 | DATABASE | 1864378 | 278.1 | 1324.3 | 244.1212 |
| 21 | 1-Nonadecene | 1.4675 | C19H38 | 939 | Replib | 2754360 | 410.86 | 996.6 | 266.2974 |
| 38 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 1.2682 | C15H17Cl2N3O2 | 875 | mainlib | 1792291 | 267.35 | 1325.3 | 341.0698 |
| 20 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 1.2637 | C7H10N2O2 | 914 | mainlib | 1383460 | 206.36 | 991.8 | 154.0742 |
| 10 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.83215 | C10H18O | 933 | DATABASE | 1765803 | 263.4 | 404.4 | 154.1358 |
| 23 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 0.77105 | C11H18N2O2 | 738 | mainlib | 1175663 | 175.37 | 1024.1 | 210.1368 |
| 7 | Benzene, 1,2,4-trimethyl- | 0.73142 | C9H12 | 947 | mainlib | 1188728 | 177.32 | 369.1 | 120.0939 |
| 30 | 1-Docosene | 0.70393 | C22H44 | 947 | replib | 1495381 | 223.06 | 1119.1 | 308.3443 |
| 9 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.6817 | C10H14 | 937 | mainlib | 753929 | 112.46 | 396.7 | 134.1096 |
| 36 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.57208 | C15H17Cl2N3O2 | 886 | mainlib | 1085926 | 161.98 | 1318.4 | 341.0698 |
| 39 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.51563 | C22H42O4 | 891 | DATABASE | 605949 | 90.387 | 1331.8 | 370.3083 |
| 46 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.50716 | C24H42O4 | 756 | mainlib | 518246 | 77.305 | 1488.7 | 394.3083 |
| 14 | 7-Hexadecene, (Z)- | 0.47374 | C16H32 | 917 | mainlib | 856879 | 127.82 | 861.2 | 224.2504 |
| 43 | Octadecane, 2-methyl- | 0.42198 | C19H40 | 908 | mainlib | 778867 | 116.18 | 1430.2 | 268.313 |
| 52 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.3715 | C26H48O4 | 726 | mainlib | 463644 | 69.16 | 1521.8 | 424.3553 |
| 32 | Eicosane, 2-methyl- | 0.3593 | C21H44 | 883 | mainlib | 518599 | 77.357 | 1154.9 | 296.3443 |
| 24 | Octadecane, 4-methyl- | 0.34944 | C19H40 | 894 | mainlib | 651386 | 97.165 | 1036.5 | 268.313 |
| 13 | Tetradecane | 0.31011 | C14H30 | 932 | replib | 645001 | 96.212 | 717.3 | 198.2348 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 0.30335 | C6H17N3 | 851 | DATABASE | 507305 | 75.673 | 202.2 | 131.1422 |
| 18 | 1-Dodecanol | 0.22473 | C12H26O | 693 | DATABASE | 310395 | 46.3 | 957.3 | 186.1984 |
| 5 | Benzene, 1,2,3-trimethyl- | 0.20804 | C9H12 | 939 | replib | 319949 | 47.725 | 345.9 | 120.0939 |
| 2 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.12641 | C10H16 | 915 | mainlib | 287647 | 42.907 | 307.5 | 136.1252 |
| 28 | Dibutyl phthalate | 0.097059 | C16H22O4 | 901 | mainlib | 430298 | 64.186 | 1101.5 | 278.1518 |
| 42 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.083442 | C24H38O4 | 922 | replib | 182349 | 27.2 | 1403.4 | 390.277 |

**TABLE 36: *S. saprophyticus* EKB1 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 21 | Docosane | 25.066 | C22H46 | 705 | DATABASE | 10678403 | 1619.1 | 1095.8 | 310.36 |
| 22 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 25.066 | C11H18N2O2 | 887 | mainlib | 10678403 | 1619.1 | 1096.9 | 210.1368 |
| 16 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 8.5071 | C7H10N2O2 | 914 | mainlib | 2877585 | 436.3 | 994.8 | 154.0742 |
| 24 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 5.5095 | C10H14N2O2 | 815 | DATABASE | 2625860 | 398.14 | 1103.8 | 194.1055 |
| 28 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 4.8572 | C14H16N2O2 | 852 | DATABASE | 1985415 | 301.03 | 1347 | 244.1212 |
| 15 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 2.1767 | C7H12N2O | 681 | mainlib | 954483 | 144.72 | 958.5 | 140.095 |
| 11 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 2.1705 | C10H18O | 930 | DATABASE | 1581017 | 239.72 | 404.5 | 154.1358 |
| 8 | Benzene, 1,2,3-trimethyl- | 2.0655 | C9H12 | 937 | DATABASE | 1110612 | 168.39 | 369.2 | 120.0939 |
| 10 | Benzene, 1-methyl-2-(1-methylethyl)- | 1.799 | C10H14 | 936 | mainlib | 671494 | 101.81 | 396.8 | 134.1096 |
| 17 | Nonadecane | 0.8387 | C19H40 | 879 | replib | 487241 | 73.876 | 1001 | 268.313 |
| 27 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.68944 | C22H42O4 | 909 | DATABASE | 457220 | 69.324 | 1331.9 | 370.3083 |
| 25 | Eicosane | 0.53094 | C20H42 | 903 | replib | 313959 | 47.603 | 1122.5 | 282.3287 |
| 3 | 1,3-Cyclohexadiene, 2-methyl-5-(1-methylethyl)- | 0.31796 | C10H16 | 915 | DATABASE | 283209 | 42.941 | 307.5 | 136.1252 |
| 2 | p-Xylene | 0.2348 | C8H10 | 937 | replib | 118617 | 17.985 | 261.8 | 106.0783 |

**TABLE 37:** ***B. conglomeratum* EKB2 hexane crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 51 | Octadecane | 9.5005 | C18H38 | 947 | replib | 62625987 | 34420 | 1007.5 | 254.2974 |
| 29 | Hexadecane | 8.5922 | C16H34 | 950 | DATABASE | 63744608 | 35035 | 873.1 | 226.2661 |
| 72 | Eicosane | 7.399 | C20H42 | 943 | replib | 58500191 | 32152 | 1128.4 | 282.3287 |
| 52 | E-7-Octadecene | 6.3166 | C18H36 | 796 | mainlib | 53031554 | 29147 | 1008.2 | 252.2817 |
| 88 | Heneicosane | 5.2801 | C21H44 | 929 | replib | 53207867 | 29244 | 1238.2 | 296.3443 |
| 27 | Benzene, (1-methylnonyl)- | 4.7712 | C16H26 | 835 | mainlib | 57929746 | 31839 | 870.4 | 218.2035 |
| 14 | Tetradecane | 4.5182 | C14H30 | 937 | replib | 56203769 | 30890 | 719.7 | 198.2348 |
| 49 | 7-Tetradecene, (Z)- | 1.95 | C14H28 | 831 | replib | 28356049 | 15585 | 998.5 | 196.2191 |
| 25 | Diethyl Phthalate | 0.91883 | C12H14O4 | 668 | replib | 16841238 | 9256.1 | 863.1 | 222.0892 |
| 68 | 1-Docosene | 0.60446 | C22H44 | 957 | replib | 10690024 | 5875.3 | 1121 | 308.3443 |
| 74 | 2,5-di-tert-Butyl-1,4-benzoquinone | 0.44703 | C14H20O2 | 793 | replib | 10769405 | 5919 | 1140.8 | 220.1463 |
| 76 | Eicosane, 2-methyl- | 0.22313 | C21H44 | 901 | mainlib | 4870189 | 2676.7 | 1155.6 | 296.3443 |
| 56 | Octadecane, 4-methyl- | 0.19595 | C19H40 | 921 | mainlib | 5298162 | 2911.9 | 1037 | 268.313 |
| 123 | Docosane | 0.14191 | C22H46 | 794 | DATABASE | 1873490 | 1029.7 | 1722.6 | 310.36 |
| 45 | Heptadecane, 3-methyl- | 0.12793 | C18H38 | 918 | replib | 3239007 | 1780.2 | 982.5 | 254.2974 |
| 46 | Benzene, (1-ethyldecyl)- | 0.12793 | C18H30 | 766 | replib | 3239007 | 1780.2 | 982.7 | 246.2348 |
| 44 | Tetradecane, 4-ethyl- | 0.11993 | C16H34 | 885 | mainlib | 2661509 | 1462.8 | 968.7 | 226.2661 |
| 1 | Octane | 0.11626 | C8H18 | 944 | DATABASE | 4685441 | 2575.2 | 206.9 | 114.1409 |
| 104 | Nonadecane, 2-methyl- | 0.11524 | C20H42 | 849 | mainlib | 2513317 | 1381.3 | 1363.8 | 282.3287 |
| 106 | Sulfurous acid, 2-ethylhexyl nonyl ester | 0.10033 | C17H36O3S | 864 | mainlib | 1836317 | 1009.3 | 1402.8 | 320.2385 |
| 65 | Eicosane, 2-methyl- | 0.099746 | C21H44 | 909 | mainlib | 2453704 | 1348.6 | 1106.3 | 296.3443 |
| 55 | 2,3-Dimethyldecane | 0.077954 | C12H26 | 869 | mainlib | 1271491 | 698.82 | 1027.2 | 170.2035 |
| 20 | Pentadecane, 5-methyl- | 0.077831 | C16H34 | 893 | DATABASE | 1935449 | 1063.7 | 831.3 | 226.2661 |
| 79 | Hexadecane, 4-methyl- | 0.077473 | C17H36 | 863 | mainlib | 2060446 | 1132.4 | 1200.3 | 240.2817 |
| 61 | Undecane, 2,3-dimethyl- | 0.064101 | C13H28 | 864 | mainlib | 1968756 | 1082 | 1087.1 | 184.2191 |
| 53 | 1-Decanol, 2-hexyl- | 0.056487 | C16H34O | 893 | mainlib | 1592582 | 875.3 | 1013.9 | 242.261 |
| 113 | Tetracosane, 3-ethyl- | 0.052051 | C26H54 | 884 | DATABASE | 1193775 | 656.11 | 1456 | 366.4226 |
| 64 | Dibutyl phthalate | 0.04649 | C16H22O4 | 924 | mainlib | 1173894 | 645.18 | 1101.5 | 278.1518 |
| 116 | Undecane, 2,3-dimethyl- | 0.041854 | C13H28 | 844 | mainlib | 1406493 | 773.02 | 1490 | 184.2191 |
| 8 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.038844 | C10H18O | 939 | DATABASE | 1137171 | 625 | 404.1 | 154.1358 |
| 4 | p-Xylene | 0.037636 | C8H10 | 955 | replib | 867895 | 477 | 260.8 | 106.0783 |
| 39 | Benzene, (1-methyldecyl)- | 0.035547 | C17H28 | 892 | DATABASE | 691183 | 379.88 | 941 | 232.2191 |
| 58 | Cyclopentane, decyl- | 0.035458 | C15H30 | 829 | DATABASE | 818912 | 450.08 | 1043.7 | 210.2348 |
| 7 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.034936 | C10H14 | 955 | mainlib | 1057213 | 581.05 | 395.8 | 134.1096 |
| 23 | 4,9-Dioxacyclodeca-1,6-diene | 0.034822 | C8H12O2 | 734 | DATABASE | 756506 | 415.78 | 856.6 | 140.0837 |
| 89 | Heptadecane, 2,3-dimethyl- | 0.032944 | C19H40 | 878 | mainlib | 863664 | 474.68 | 1254.3 | 268.313 |
| 112 | Eicosane, 7-hexyl- | 0.023528 | C26H54 | 862 | mainlib | 687618 | 377.92 | 1447 | 366.4226 |
| 37 | Benzene, (1-ethylnonyl)- | 0.02143 | C17H28 | 872 | DATABASE | 488355 | 268.4 | 914.9 | 232.2191 |
| 18 | Phenol, 2,4-bis(1,1-dimethylethyl)- | 0.020307 | C14H22O | 824 | mainlib | 448477 | 246.49 | 802.5 | 206.1671 |
| 35 | Benzene, (1-propyloctyl)- | 0.01859 | C17H28 | 852 | mainlib | 551419 | 303.07 | 899.4 | 232.2191 |
| 3 | Ethylbenzene | 0.016986 | C8H10 | 938 | mainlib | 391032 | 214.92 | 253.9 | 106.0783 |
| 73 | 10-Heneicosene (c,t) | 0.016361 | C21H42 | 851 | mainlib | 657695 | 361.48 | 1135.2 | 294.3287 |
| 5 | Benzene, 1,3-dimethyl- | 0.012528 | C8H10 | 947 | replib | 332101 | 182.53 | 279.7 | 106.0783 |
| 48 | Heptane, 3-ethyl-5-methylene- | 0.009981 | C10H20 | 788 | mainlib | 202976 | 111.56 | 993.1 | 140.1565 |
| 83 | Tridecane, 3-methylene- | 0.009755 | C14H28 | 819 | mainlib | 311772 | 171.35 | 1228.2 | 196.2191 |
| 43 | Benzene, (1-propylnonyl)- | 0.00903 | C18H30 | 788 | DATABASE | 647911 | 356.1 | 967.3 | 246.2348 |
| 6 | à-Phellandrene | 0.007678 | C10H16 | 806 | replib | 238983 | 131.35 | 306.9 | 136.1252 |
| 97 | 2-Undecene, 9-methyl-, (Z)- | 0.006818 | C12H24 | 817 | mainlib | 286750 | 157.6 | 1331.3 | 168.1878 |
| 98 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.006818 | C22H42O4 | 827 | replib | 286750 | 157.6 | 1331.7 | 370.3083 |
| 33 | Benzene, (1-butylheptyl)- | 0.00657 | C17H28 | 901 | mainlib | 214654 | 117.98 | 892 | 232.2191 |
| 54 | Isopropyl tetradecanoate | 0.005584 | C17H34O2 | 814 | DATABASE | 413957 | 227.51 | 1015.9 | 270.2559 |
| 21 | Benzene, (1-ethyloctyl)- | 0.003541 | C16H26 | 843 | DATABASE | 210636 | 115.77 | 842.8 | 218.2035 |

**TABLE 38: *B. conglomeratum* EKB2 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 58 | Hexadecane | 9.5163 | C16H34 | 943 | replib | 43892257 | 6667.1 | 867.6 | 226.2661 |
| 18 | 2-Phenylpropanal | 7.9274 | C9H10O | 804 | DATABASE | 36965163 | 5614.9 | 370.1 | 134.0732 |
| 17 | Benzene, 1,3,5-trimethyl- | 7.8709 | C9H12 | 899 | DATABASE | 36858917 | 5598.8 | 369.7 | 120.0939 |
| 54 | Tetradecane | 7.5094 | C14H30 | 956 | replib | 42580027 | 6467.8 | 717.9 | 198.2348 |
| 66 | Octadecane | 7.2605 | C18H38 | 937 | replib | 39918442 | 6063.5 | 1001.7 | 254.2974 |
| 46 | 2,4-Dimethylstyrene | 4.9014 | C10H12 | 761 | mainlib | 37081735 | 5632.6 | 503.2 | 132.0939 |
| 45 | 3-Methylheptyl acetate | 4.8908 | C10H20O2 | 853 | mainlib | 37070114 | 5630.9 | 502.4 | 172.1463 |
| 44 | 2-Ethylhexyl acetate | 4.8862 | C10H20O2 | 739 | DATABASE | 37065078 | 5630.1 | 502.2 | 172.1463 |
| 76 | Heneicosane | 3.5525 | C21H44 | 920 | replib | 25437916 | 3864 | 1123 | 296.3443 |
| 11 | Benzaldehyde, 4-(4-methylbenzyloxy)- | 2.8773 | C15H14O2 | 698 | mainlib | 25338533 | 3848.9 | 338 | 226.0994 |
| 71 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 2.5778 | C11H18N2O2 | 900 | mainlib | 11734529 | 1782.4 | 1096.7 | 210.1368 |
| 70 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 2.3816 | C12H22N2O2 | 777 | mainlib | 11407813 | 1732.8 | 1096.3 | 226.1681 |
| 50 | Dodecane | 1.8621 | C12H26 | 934 | DATABASE | 17194614 | 2611.8 | 550.6 | 170.2035 |
| 30 | Benzene, 1-methyl-4-propyl- | 1.4266 | C10H14 | 885 | replib | 10509353 | 1596.3 | 424.6 | 134.1096 |
| 83 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 0.74132 | C14H16N2O2 | 857 | DATABASE | 2973055 | 451.6 | 1347.4 | 244.1212 |
| 78 | Triacontane | 0.72027 | C30H62 | 919 | DATABASE | 5446615 | 827.33 | 1233.8 | 422.4852 |
| 26 | Benzene, 2-propenyl- | 0.67948 | C9H10 | 932 | replib | 6059679 | 920.45 | 408.1 | 118.0783 |
| 39 | Undecane | 0.50953 | C11H24 | 922 | replib | 4874941 | 740.49 | 460.8 | 156.1878 |
| 5 | p-Xylene | 0.45782 | C8H10 | 958 | replib | 2821709 | 428.61 | 261.4 | 106.0783 |
| 80 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 0.45185 | C15H17Cl2N3O2 | 695 | mainlib | 2143778 | 325.63 | 1325.1 | 341.0698 |
| 65 | 1-Nonadecene | 0.41333 | C19H38 | 923 | replib | 2917023 | 443.09 | 996.4 | 266.2974 |
| 28 | Benzene,1-ethynyl-2-methyl- | 0.29932 | C9H8 | 929 | mainlib | 2009377 | 305.22 | 417.1 | 116.0626 |
| 10 | Benzene, propyl- | 0.27541 | C9H12 | 947 | replib | 2120729 | 322.13 | 331.8 | 120.0939 |
| 64 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.26851 | C7H10N2O2 | 909 | mainlib | 969078 | 147.2 | 992.4 | 154.0742 |
| 25 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.24792 | C10H18O | 931 | DATABASE | 1931611 | 293.41 | 404.4 | 154.1358 |
| 1 | 1-Propanamine, N,2-dimethyl-N-nitroso- | 0.18959 | C5H12N2O | 698 | mainlib | 549123 | 83.41 | 203.3 | 116.095 |
| 6 | 1-Pentanol, 2,2-dimethyl- | 0.17081 | C7H16O | 774 | DATABASE | 1203149 | 182.76 | 273.4 | 116.1201 |
| 75 | 1-Docosene | 0.14813 | C22H44 | 944 | replib | 1097493 | 166.71 | 1118.9 | 308.3443 |
| 21 | Benzene, 1,4-dichloro- | 0.14507 | C6H4Cl2 | 913 | DATABASE | 1058058 | 160.72 | 389.4 | 145.969 |
| 4 | Ethylbenzene | 0.14283 | C8H10 | 955 | mainlib | 1111249 | 168.8 | 254.5 | 106.0783 |
| 7 | p-Xylene | 0.12248 | C8H10 | 946 | replib | 896275 | 136.14 | 280.2 | 106.0783 |
| 56 | Pentadecane | 0.11554 | C15H32 | 932 | DATABASE | 975947 | 148.24 | 793.5 | 212.2504 |
| 61 | Hexahydropyrrolizin-3-one | 0.11548 | C7H11NO | 671 | mainlib | 520682 | 79.09 | 957.7 | 125.0841 |
| 59 | Hexadecane, 4-methyl- | 0.099036 | C17H36 | 924 | mainlib | 773677 | 117.52 | 905.9 | 240.2817 |
| 14 | 3-Pentanone, 2,2,4,4-tetramethyl- | 0.094774 | C9H18O | 938 | DATABASE | 1085428 | 164.87 | 342.8 | 142.1358 |
| 81 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.08919 | C22H42O4 | 904 | DATABASE | 408813 | 62.098 | 1331.5 | 370.3083 |
| 2 | Butanoic acid, 3-methyl- | 0.078798 | C5H10O2 | 933 | DATABASE | 303443 | 46.092 | 237 | 102.0681 |
| 85 | Decane, 5-ethyl-5-methyl- | 0.057391 | C13H28 | 716 | mainlib | 297021 | 45.117 | 1488.1 | 184.2191 |
| 89 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.05637 | C24H42O4 | 782 | mainlib | 306762 | 46.596 | 1520.9 | 394.3083 |
| 47 | Benzene, 1-methyl-4-(2-propenyl)- | 0.051537 | C10H12 | 915 | mainlib | 245901 | 37.352 | 512.2 | 132.0939 |
| 9 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.026811 | C10H16 | 908 | mainlib | 245165 | 37.24 | 307.3 | 136.1252 |
| 49 | Azulene | 0.021104 | C10H8 | 862 | replib | 485167 | 73.696 | 548.9 | 128.0626 |

**TABLE 39: *B. conglomeratum* EKB2 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 31 | 2,5-Piperazinedione, 3,6-bis(2-methylpropyl)- | 13.291 | C12H22N2O2 | 733 | mainlib | 7521822 | 1234.5 | 1098.3 | 226.1681 |
| 34 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 8.3952 | C11H18N2O2 | 875 | mainlib | 3948137 | 647.96 | 1104.7 | 210.1368 |
| 33 | 5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione, octahydro-, (5as-cis)- | 8.3763 | C10H14N2O2 | 865 | DATABASE | 3941907 | 646.93 | 1103.7 | 194.1055 |
| 13 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 2.261 | C10H18O | 937 | DATABASE | 2660587 | 436.65 | 404.3 | 154.1358 |
| 10 | Benzene, 1,2,4-trimethyl- | 1.9974 | C9H12 | 943 | mainlib | 1831095 | 300.51 | 368.8 | 120.0939 |
| 12 | Benzene, 1-methyl-2-(1-methylethyl)- | 1.8063 | C10H14 | 945 | mainlib | 1335945 | 219.25 | 396.4 | 134.1096 |
| 21 | 1-DODECANOL | 1.7484 | C12H26O | 671 | DATABASE | 1028140 | 168.74 | 959.1 | 186.1984 |
| 1 | 1,3,5-Trimethylhexahydro-1,3,5-triazine | 1.6497 | C6H17N3 | 828 | DATABASE | 600872 | 98.613 | 202.9 | 131.1422 |
| 19 | Hexadecane | 0.69591 | C16H34 | 931 | replib | 664516 | 109.06 | 867 | 226.2661 |
| 17 | Tetradecane | 0.5641 | C14H30 | 933 | replib | 435298 | 71.44 | 718.3 | 198.2348 |
| 26 | Pentadecane | 0.42855 | C15H32 | 916 | DATABASE | 466392 | 76.543 | 1000.8 | 212.2504 |
| 38 | 3-Benzyl-6-isopropyl-2,5-piperazinedione # | 0.39466 | C14H18N2O2 | 834 | DATABASE | 248616 | 40.802 | 1284.5 | 246.1368 |
| 2 | Benzene, 1,3-dimethyl- | 0.2454 | C8H10 | 809 | mainlib | 209953 | 34.457 | 261.6 | 106.0783 |
| 40 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.24158 | C22H42O4 | 722 | replib | 221676 | 36.381 | 1332 | 370.3083 |
| 36 | Nonadecane | 0.24121 | C19H40 | 909 | replib | 253731 | 41.642 | 1122.5 | 268.313 |
| 23 | Hexahydropyrrolizin-3-one | 0.22941 | C7H11NO | 662 | mainlib | 229152 | 37.608 | 976.2 | 125.0841 |
| 4 | Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-, (ñ)- | 0.17695 | C10H16 | 918 | mainlib | 218229 | 35.815 | 315.3 | 136.1252 |
| 14 | Benzene, 2-propenyl- | 0.1386 | C9H10 | 913 | replib | 122870 | 20.165 | 408.3 | 118.0783 |

**TABLE 40: *Arthrobacter sp.* EKB3 hexane extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 37 | Octadecane | 12.703 | C18H38 | 892 | DATABASE | 54524768 | 8361.5 | 1004.4 | 254.2974 |
| 19 | Pentadecane | 12.351 | C15H32 | 896 | DATABASE | 56193190 | 8617.4 | 869 | 212.2504 |
| 20 | Hexadecane | 12.351 | C16H34 | 850 | replib | 56193190 | 8617.4 | 870 | 226.2661 |
| 21 | Nonadecane | 12.128 | C19H40 | 852 | replib | 55832584 | 8562.1 | 870.8 | 268.313 |
| 47 | Eicosane | 11.027 | C20H42 | 865 | replib | 51054997 | 7829.4 | 1125.4 | 282.3287 |
| 10 | Tetradecane | 7.6735 | C14H30 | 944 | replib | 55446435 | 8502.9 | 718.9 | 198.2348 |
| 53 | 1-Iodo-2-methylundecane | 6.8045 | C12H25I | 856 | mainlib | 46106759 | 7070.6 | 1236.4 | 296.1001 |
| 52 | Heneicosane | 6.7609 | C21H44 | 938 | replib | 46073938 | 7065.6 | 1236.2 | 296.3443 |
| 46 | 6-Tetradecanesulfonic acid, butyl ester | 3.4403 | C18H38O3S | 703 | mainlib | 47954368 | 7353.9 | 1124.4 | 334.2542 |
| 56 | Heptacosane | 2.5788 | C27H56 | 929 | replib | 30145086 | 4622.8 | 1337.5 | 380.4382 |
| 35 | 1-Nonadecene | 0.53415 | C19H38 | 948 | replib | 5870963 | 900.33 | 997.2 | 266.2974 |
| 17 | 7-Hexadecene, (Z)- | 0.41954 | C16H32 | 931 | mainlib | 4145473 | 635.72 | 861.6 | 224.2504 |
| 45 | 1-Docosene | 0.38937 | C22H44 | 958 | replib | 4634134 | 710.66 | 1119.7 | 308.3443 |
| 7 | Dodecane | 0.38524 | C12H26 | 928 | DATABASE | 5202311 | 797.79 | 550.3 | 170.2035 |
| 48 | 7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione | 0.29233 | C17H24O3 | 783 | replib | 3633913 | 557.27 | 1139.3 | 276.1725 |
| 13 | Pentadecane | 0.26397 | C15H32 | 922 | DATABASE | 3437073 | 527.09 | 793.7 | 212.2504 |
| 62 | Eicosane, 2-methyl- | 0.15579 | C21H44 | 910 | mainlib | 1208419 | 185.31 | 1607.7 | 296.3443 |
| 30 | Heptadecane, 2,6-dimethyl- | 0.14561 | C19H40 | 907 | mainlib | 1380080 | 211.64 | 964.1 | 268.313 |
| 9 | Tridecane | 0.14072 | C13H28 | 937 | DATABASE | 1881488 | 288.53 | 635.8 | 184.2191 |
| 24 | Hexadecane, 4-methyl- | 0.12821 | C17H36 | 925 | mainlib | 1613229 | 247.39 | 906 | 240.2817 |
| 39 | Octadecane, 4-methyl- | 0.11656 | C19H40 | 928 | mainlib | 1393468 | 213.69 | 1036.5 | 268.313 |
| 33 | Heptadecane, 3-methyl- | 0.11323 | C18H38 | 914 | replib | 1339428 | 205.41 | 982.1 | 254.2974 |
| 34 | Benzene, (1-ethyldecyl)- | 0.11323 | C18H30 | 873 | replib | 1339428 | 205.41 | 982.5 | 246.2348 |
| 32 | Tetradecane, 4-ethyl- | 0.1067 | C16H34 | 894 | mainlib | 914478 | 140.24 | 968.4 | 226.2661 |
| 41 | Octadecane, 2,6-dimethyl- | 0.089092 | C20H42 | 884 | mainlib | 867737 | 133.07 | 1088.5 | 282.3287 |
| 50 | Pentacosane | 0.087796 | C25H52 | 916 | DATABASE | 972134 | 149.08 | 1179.2 | 352.4069 |
| 3 | Undecane | 0.080371 | C11H24 | 924 | replib | 1096264 | 168.12 | 460.6 | 156.1878 |
| 16 | Pentadecane, 3-methyl- | 0.079788 | C16H34 | 889 | mainlib | 974655 | 149.47 | 845.4 | 226.2661 |
| 58 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.067135 | C24H38O4 | 923 | replib | 570593 | 87.502 | 1403.2 | 390.277 |
| 27 | Benzene, (1-methyldecyl)- | 0.056584 | C17H28 | 914 | DATABASE | 572590 | 87.808 | 940.8 | 232.2191 |
| 61 | Squalene | 0.051799 | C30H50 | 919 | replib | 583237 | 89.441 | 1526.7 | 410.39 |
| 18 | 1,2-Benzenedicarboxylic acid, diethyl ester | 0.040691 | C12H14O4 | 910 | DATABASE | 1277352 | 195.89 | 863 | 222.0892 |
| 29 | Benzene, (1-butyloctyl)- | 0.028724 | C18H30 | 815 | replib | 290052 | 44.48 | 958.2 | 246.2348 |
| 12 | Cycloheptasiloxane, tetradecamethyl- | 0.028533 | C14H42O7Si7 | 743 | replib | 249678 | 38.289 | 764.7 | 518.1315 |
| 25 | Benzene, (1-ethylnonyl)- | 0.027459 | C17H28 | 890 | DATABASE | 278825 | 42.759 | 914.5 | 232.2191 |
| 4 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.024993 | C10H14 | 888 | mainlib | 243822 | 37.391 | 484 | 134.1096 |
| 28 | Benzene, (1-pentylheptyl)- | 0.018324 | C18H30 | 788 | DATABASE | 264962 | 40.633 | 955.1 | 246.2348 |
| 22 | Benzene, (1-butylheptyl)- | 0.015993 | C17H28 | 896 | mainlib | 188758 | 28.947 | 891.3 | 232.2191 |
| 6 | Azulene | 0.011777 | C10H8 | 929 | DATABASE |  | 296324 | 45.442 | 548.8 |

**TABLE 41: *Arthrobacter sp.* EKB3 ethyl acetate crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact mass |
| 27 | Hexadecane | 21.555 | C16H34 | 947 | replib | 49153492 | 8190.3 | 868.2 | 226.2661 |
| 37 | Oxalic acid, isobutyl nonyl ester | 16.195 | C15H28O4 | 865 | mainlib | 45843749 | 7638.8 | 1002.5 | 272.1988 |
| 36 | Octadecane | 16.163 | C18H38 | 925 | replib | 45833976 | 7637.1 | 1002.2 | 254.2974 |
| 20 | Tetradecane | 11.396 | C14H30 | 957 | replib | 43537341 | 7254.5 | 718 | 198.2348 |
| 48 | Eicosane | 6.3202 | C20H42 | 922 | replib | 27885860 | 4646.5 | 1123.4 | 282.3287 |
| 60 | 3-Benzylhexahydropyrrolo[1,2-a]pyrazine-1,4-dione | 2.2093 | C14H16N2O2 | 863 | DATABASE | 4314471 | 718.9 | 1348.3 | 244.1212 |
| 51 | Pentacosane | 1.4052 | C25H52 | 915 | DATABASE | 5233745 | 872.08 | 1234 | 352.4069 |
| 45 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 1.371 | C11H18N2O2 | 872 | mainlib | 2951677 | 491.83 | 1103.2 | 210.1368 |
| 56 | 1H-1,2,4-Triazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]- | 1.292 | C15H17Cl2N3O2 | 884 | mainlib | 2758723 | 459.68 | 1325.4 | 341.0698 |
| 34 | 1-Nonadecene | 0.84268 | C19H38 | 934 | replib | 3010627 | 501.65 | 996.5 | 266.2974 |
| 26 | 1-Hexadecene | 0.66672 | C16H32 | 927 | replib | 2371082 | 395.08 | 861.2 | 224.2504 |
| 13 | 2-Oxabicyclo[2.2.2]octane, 1,3,3-trimethyl- | 0.66326 | C10H18O | 936 | DATABASE | 2612209 | 435.26 | 404.2 | 154.1358 |
| 33 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro- | 0.61812 | C7H10N2O2 | 916 | mainlib | 1128082 | 187.97 | 993.6 | 154.0742 |
| 10 | Benzene, 1,2,4-trimethyl- | 0.52732 | C9H12 | 945 | mainlib | 1783519 | 297.18 | 368.8 | 120.0939 |
| 12 | Benzene, 1-methyl-2-(1-methylethyl)- | 0.51129 | C10H14 | 948 | mainlib | 1397528 | 232.86 | 396.4 | 134.1096 |
| 59 | Triacontane | 0.50732 | C30H62 | 916 | DATABASE | 1878194 | 312.96 | 1335.7 | 422.4852 |
| 1 | 1,3,5-TRIMETHYLHEXAHYDRO-1,3,5-TRIAZINE | 0.46394 | C6H17N3 | 747 | DATABASE | 537756 | 89.604 | 202.7 | 131.1422 |
| 39 | 1H-Indole-3-carboxaldehyde | 0.36119 | C9H7NO | 899 | replib | 1073921 | 178.94 | 1027.2 | 145.0528 |
| 53 | Heneicosane, 11-cyclopentyl- | 0.35396 | C26H52 | 666 | replib | 681015 | 113.47 | 1263.6 | 364.4069 |
| 64 | 1,2-Cyclohexanedicarboxylic acid, cyclohexylmethyl nonyl ester | 0.33123 | C24H42O4 | 746 | mainlib | 486880 | 81.127 | 1488.4 | 394.3083 |
| 30 | 2-Propenal, 3-(1-aziridinyl)-3-(dimethylamino)- | 0.25153 | C7H12N2O | 676 | mainlib | 713284 | 118.85 | 957.6 | 140.095 |
| 23 | Pentadecane | 0.22981 | C15H32 | 938 | DATABASE | 1013511 | 168.88 | 793.5 | 212.2504 |
| 28 | Hexadecane, 4-methyl- | 0.22753 | C17H36 | 919 | mainlib | 899678 | 149.91 | 906 | 240.2817 |
| 69 | 1,2-Cyclohexanedicarboxylic acid, dinonyl ester | 0.22276 | C26H48O4 | 769 | mainlib | 475086 | 79.162 | 1521.4 | 424.3553 |
| 62 | Heptacosane | 0.21071 | C27H56 | 910 | replib | 617112 | 102.83 | 1430.1 | 380.4382 |
| 70 | Squalene | 0.20233 | C30H50 | 901 | replib | 777806 | 129.6 | 1526.5 | 410.39 |
| 58 | Hexanedioic acid, bis(2-ethylhexyl) ester | 0.18654 | C22H42O4 | 910 | DATABASE | 539508 | 89.896 | 1331.7 | 370.3083 |
| 40 | Octadecane, 4-methyl- | 0.18049 | C19H40 | 898 | mainlib | 744085 | 123.98 | 1036.4 | 268.313 |
| 50 | 1-Docosene | 0.16808 | C22H44 | 911 | replib | 702244 | 117.01 | 1230.5 | 308.3443 |
| 31 | Heptadecane, 2,6-dimethyl- | 0.15096 | C19H40 | 904 | mainlib | 408380 | 68.047 | 963.8 | 268.313 |
| 49 | Eicosane, 2-methyl- | 0.13447 | C21H44 | 886 | mainlib | 446637 | 74.421 | 1154.8 | 296.3443 |
| 32 | Heptadecane, 3-methyl- | 0.10971 | C18H38 | 869 | replib | 441342 | 73.539 | 981.9 | 254.2974 |
| 3 | Benzene, 1,3-dimethyl- | 0.10796 | C8H10 | 950 | replib | 191228 | 31.864 | 261.5 | 106.0783 |
| 4 | Bicyclo[3.1.0]hexane, 4-methyl-1-(1-methylethyl)-, didehydro deriv. | 0.10678 | C10H16 | 927 | DATABASE | 412375 | 68.712 | 307.4 | 136.1252 |
| 52 | 2,5-Piperazinedione, 3-(phenylmethyl)- | 0.097523 | C11H12N2O2 | 835 | mainlib | 300324 | 50.042 | 1248 | 204.0899 |
| 5 | Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-, (ñ)- | 0.073074 | C10H16 | 931 | mainlib | 239383 | 39.887 | 315.3 | 136.1252 |
| 61 | 1,2-Benzenedicarboxylic acid, diisooctyl ester | 0.064676 | C24H38O4 | 752 | replib | 179982 | 29.99 | 1403 | 390.277 |
| 54 | 1H-indole-3-ethanol | 0.058497 | C10H11NO | 655 | DATABASE | 152738 | 25.45 | 1276.5 | 161.0841 |
| 24 | Phenol, 2,4-bis(1,1-dimethylethyl)- | 0.039531 | C14H22O | 760 | mainlib | 169811 | 28.295 | 802.5 | 206.1671 |

**TABLE 42: *Arthrobacter sp.* EKB3 DCM crude extract**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Peak # | Name | Area % | Formula | Similarity | Library | Height | Quant S/N | R.T. (s) | Exact Mass |
| 2 | Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)- | 84.018 | C11H18N2O2 | 869 | mainlib | 206059 | 35.477 | 1092.1 | 210.1368 |