

Table 1: Chemical components of the essential oils in leaves of *H. triquetrifolium* extracted and detected by ITEX-GC/MS and HD/GS-MS

| No | Name of Compound | ITEX: Conc. % | HD: Conc. % |
|----|---|---------------|-------------|
| 1 | 1-Penten-3-ol | 2.03 | - |
| 2 | 2,2,4-trimethyl-Pentane | 2.35 | - |
| 3 | 2-ethyl-Furan | 1.03 | - |
| 4 | 3-methyl-2-Pentanone | 0.37 | - |
| 5 | 3-methyl-2-Butenal | 0.98 | - |
| 6 | (1,1-dimethylethyl)-Cyclohexane | 3.29 | - |
| 7 | (E)-2-Hexenal | 12.63 | - |
| 8 | 2,3,3-trimethyl-Octane | 11.36 | 0.49 |
| 9 | p-Xylene | 1.08 | - |
| 10 | 2,2,3,3-tetramethyl-Hexane | 6.42 | - |
| 11 | Alpha-Pinene | 5.75 | 1.34 |
| 12 | 3-methyl-Nonane | 0.41 | - |
| 13 | 3,5-dimethyl-Octane | 0.48 | - |
| 14 | 1-ethyl-2,4-dimethyl-Benzene | 1.04 | - |
| 15 | β -Terpinyl acetate | 3.01 | - |
| 16 | Benzeneacetaldehyde | 1.08 | - |
| 17 | 7-methyl-Pentadecane | 9.79 | - |
| 18 | cis-Linalool Oxide | 0.82 | - |
| 19 | Undecane | 6.15 | - |
| 20 | Nonanal | 0.85 | - |
| 21 | 2,3-dimethyl-Undecane | 0.52 | - |
| 22 | Hexadecane | 1.15 | - |
| 23 | 3-methyl-Undecane | 0.02 | - |
| 24 | Dodecane | 0.29 | - |
| 25 | Ylangene | 0.84 | - |
| 26 | Copaene | 1.94 | - |
| 27 | 1-Methyl-4-methylene-2-(2-methyl-1-propen-1-yl)-1-vinylcycloheptane | 4.5 | - |
| 28 | 2,6,10,10-Tetramethylbicyclo[7.2.0]undeca-2,6-diene | 0.9 | - |
| 29 | Gamma-Muurolene | 3.85 | 3.02 |
| 30 | Delta Cadinene | 1.62 | 1.82 |
| 31 | Calamenene | 1.43 | 2.29 |
| 32 | 2,5-Diphenyl-1,4-benzoquinone | 3.05 | 1.35 |
| 33 | Cumene | - | 7.5 |
| 34 | Benzaldehyde | - | 0.34 |
| 35 | 3-methyl-Nonane | - | 6.85 |
| 36 | 3,7-dimethyl-Undecane | - | 0.37 |
| 38 | Alpha-Caryophyllene | - | 2.37 |
| 39 | Alpha-Muurolene | - | 0.97 |
| 40 | Alpha-Calacorene | - | 0.63 |
| 41 | Cubenol | - | 23.64 |
| 42 | Beta-Humulene | - | 6.7 |
| 43 | Cadalene | - | 5.85 |
| | Total | 91.03 | 65.53 |

Table 2: Constituents of the essential oils in stem of *H. triquetrifolium* Turra detected by ITEX-GC/MS and HD/GC-MS

| No | Name of compounds | ITEX: Conc. % | HD: Conc. % |
|----|--|---------------|-------------|
| 1 | 2,2-dimethyl-hexane | 4.08 | - |
| 2 | (1,1-dimethylethyl)-cyclohexane | 2.72 | - |
| 3 | 2,3,3-trimethyl-octane | 10.74 | - |
| 4 | 1,3-dimethyl-benzene | 5.62 | - |
| 5 | 2,4-dimethyl-hexane | 11.52 | - |
| 6 | Alpha-pinene | 20.47 | 3.01 |
| 7 | Camphene | 9.79 | 0.57 |
| 8 | 3-methyl-nonane | 2.12 | 7.87 |
| 9 | 2,4,6-trimethyl-octane | 0.63 | - |
| 10 | 1-methyl-2-(1-methylethyl)-benzene | 4.14 | - |
| 11 | D-limonene | 3.28 | - |
| 12 | 2,3,3-trimethyl-octane | 3.53 | - |
| 13 | Undecane | 9.28 | - |
| 14 | Nonanal | 0.82 | - |
| 15 | 1,3,3-Trimethylbicyclo[2.2.1] heptan-2-ol | 1.73 | - |
| 16 | Decamethyl-cyclopentasiloxane | 0.61 | - |
| 17 | 2-methyl-5-(1-methylethenyl)-2-cyclohexen-1-ol | 2.72 | - |
| 18 | 1-iodo-decane | 0.46 | - |
| 19 | Isoborneol | 2.70 | - |
| 20 | Verbenone | 1.65 | - |
| 21 | 3,4-dimethyl-benzaldehyde | 1.39 | - |
| 22 | Cumene | - | 16.56 |
| 23 | Alpha-caryophyllene | - | 0.75 |
| 24 | Gamma-muurolene | - | 0.26 |
| 25 | Alpha-muurolene | - | 0.33 |
| 26 | Germacrene D | - | 2.16 |
| 27 | Delta-cadinene | - | 1.54 |
| 28 | Calamenene | - | 1.80 |
| 29 | Alpha-calacorene | - | 0.95 |
| 30 | Cubenol | - | 26.72 |
| 31 | Humulene | - | 7.23 |
| 32 | Cadalene | - | 6.67 |
| 33 | 6,10,14-trimethyl-2-pentadecanone | - | 1.07 |
| | Total | 100 | 77.49 |

Table 3: Chemical composition of the essential oils in flower of *H. triquetrifolium* Turra extracted and detected by ITEX/GC-MS and HD/GC-MS

| No | Name of compounds | ITEX: Conc. % | HD: Conc. % |
|----|--|---------------|-------------|
| 1 | 3-methyl-2-butanal | 0.23 | - |
| 2 | 4-hydroxy-3-methyl-butanal | 0.43 | - |
| 3 | 2,3,3-trimethyl-octane | 17.98 | - |
| 4 | 2,4,6-trimethyl-octane | 8.61 | 0.37 |
| 5 | Alpha-pinene | 14.44 | 18.39 |
| 6 | Isolimonene | 0.14 | - |
| 7 | 3-methyl-nonane | 27.76 | - |
| 8 | Beta-pinene | 0.46 | 0.54 |
| 9 | 1-methyl-2-(1 methylethyl)-benzene | 0.86 | - |
| 10 | D-limonene | 1.18 | - |
| 11 | 7-methyl-pentadecane | 15.42 | 6.26 |
| 12 | Alpha-methyl-alpha-[4-methyl-3-pentenyl] oxirane methanol | 0.21 | - |
| 13 | Dodecane | 6.99 | - |
| 14 | 2,2,3-trimethyl-3-cyclopentene-1-acetaldehyde | 0.24 | - |
| 15 | 2-methyl-5-(1-methylethenyl)-2-cyclohexen-1-ol | 0.11 | - |
| 16 | 3-methyl-undecane | 0.28 | 2.31 |
| 17 | 2,3,5-trimethyl-decane | 0.11 | - |
| 18 | Nonanol | 0.16 | - |
| 19 | 2,3-dimethyl-undecane | 0.17 | - |
| 20 | Ylangene | 0.11 | 0.94 |
| 21 | Copaene | 0.31 | - |
| 22 | Caryophyllene | 0.35 | 1.65 |
| 23 | Gamma-murolene | 0.74 | 5.95 |
| 24 | Germacrene D | 0.23 | 4.17 |
| 25 | Delta.-cadinene | 0.10 | - |
| 26 | Cumene | - | 4.04 |
| 27 | Beta-pinene | - | 0.54 |
| 28 | Cymene | - | 0.47 |
| 29 | 1-octanol | - | 0.86 |
| 30 | 8-methyl-1-decene | - | 1.01 |
| 31 | Calamenene | - | 2.06 |
| 32 | Alpha-calacorene | - | 1.08 |
| 33 | Alloaromadendrene oxide | - | 4.11 |
| 34 | Caryophyllene oxide | - | 10.84 |
| 35 | Caryophyllene oxide | - | 0.50 |
| 36 | 6,6-Dimethyl-1,2,3b,6,7,8-hexahydrocyclopenta[1,3]cyclopropa[1,2][7]annulen-3(3aH)-one | - | 0.87 |
| 37 | Trans-longipinocarveol | - | 1.12 |
| 38 | 6,10,14-trimethyl-2-pentadecanone | - | 0.65 |
| 39 | 2,5-diphenyl-1,4-benzoquinone | - | 1.12 |
| | Total | 97.62 | 69.85 |