

## Department of Molecular and Cell Biology

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9 March 2023

To:

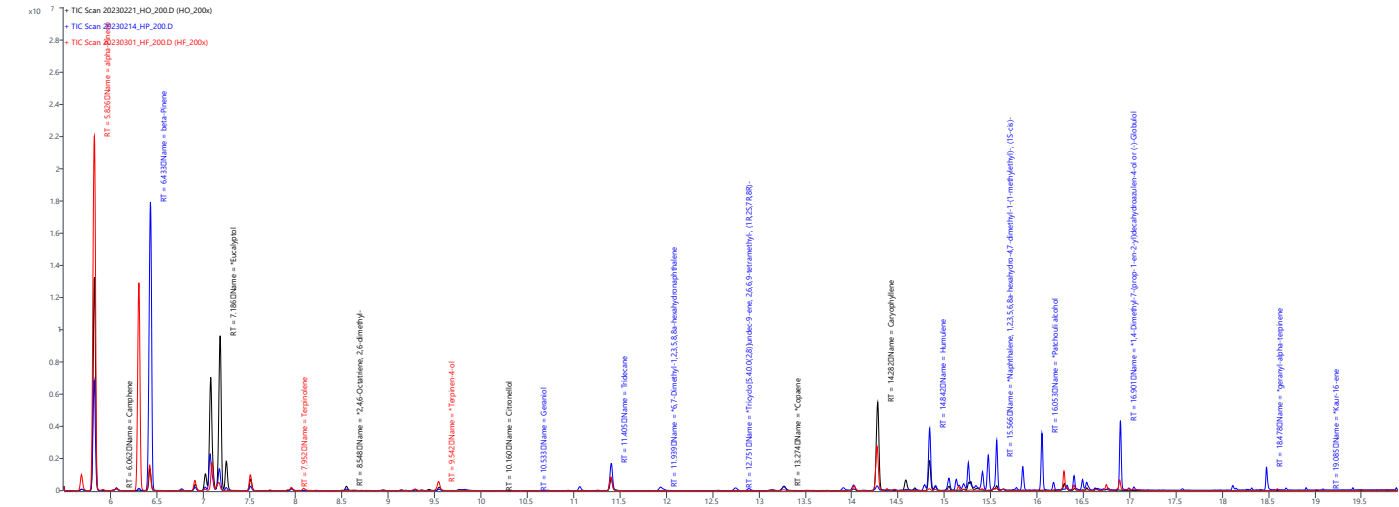
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Steam-distilled *Helichrysum foetidum* essential oil (200 times dilution with ethyl acetate), 1 µl was injected into GCMS on 1 March 2023.

### Amended Results:

| Compound names<br>“*” compound identified by NIST 13 and Agilent Fiehn library-<br>not verified by commercial reference material | Relative peak area % | wt/v % calculated with<br>standard curve |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| alpha-Pinene                                                                                                                     | 51.89                | 49.01                                    |
| *Bicyclo[3.1.0]hexane, 4-methylene-1-(1-methylethyl)- = (-) or (+)-<br>Sabinene                                                  | 30.28                |                                          |
| beta-Pinene                                                                                                                      | 3.66                 | 3.54                                     |
| *Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-methylethyl)- = alpha-Thuiene                                                            | 2.39                 |                                          |
| D-Limonene                                                                                                                       | 2.13                 | 3.74                                     |
| gamma-Terpinene                                                                                                                  | 1.84                 | 2.01                                     |
| Caryophyllene= (E) caryophyllene                                                                                                 | 1.48                 | 5.90                                     |
| *Terpinen-4-ol                                                                                                                   | 0.91                 |                                          |
| alpha-Terpinene                                                                                                                  | 0.89                 | 1.29                                     |
| *Caryophyllene oxide                                                                                                             | 0.47                 |                                          |
| *trans-alpha-Bergamotene                                                                                                         | 0.44                 |                                          |
| p-cymene                                                                                                                         | 0.27                 | 0.06                                     |
| *cis-beta-Farnesene                                                                                                              | 0.25                 |                                          |
| *1H-3a,7-Methanoazulene, 2,3,6,7,8,8a-hexahydro-1,4,9,9-tetramethyl-,<br>(1.alpha.,3a.alpha.,7.alpha.,8a.beta.)-                 | 0.24                 |                                          |
| *beta-Phellandrene                                                                                                               | 0.24                 |                                          |
| Terpinolene                                                                                                                      | 0.23                 | 0.41                                     |
| *Eucalyptol= 1,8-Cineol                                                                                                          | 0.19                 |                                          |
| *1,4-Dimethyl-7-(prop-1-en-2-yl)decahydroazulen-4-ol or (-)-Globulol                                                             | 0.19                 |                                          |
| Linalool                                                                                                                         | 0.17                 | 0.53                                     |
| Humulene (alpha)                                                                                                                 | 0.15                 | 0.14                                     |
| Camphene                                                                                                                         | 0.15                 | 0.13                                     |
| *trans-alpha-Bergamotene_1                                                                                                       | 0.14                 |                                          |
| *l-Menthone_2 = iso-methone?                                                                                                     | 0.14                 |                                          |

|                                                                                                                               |      |
|-------------------------------------------------------------------------------------------------------------------------------|------|
| *1S)-2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene = 1S-alpha-Pinene                                                                | 0.13 |
| *Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-, (1S-cis)-                                               | 0.12 |
| alpha-Cedrene                                                                                                                 | 0.12 |
| *trans-beta-Ocimene ?                                                                                                         | 0.11 |
| 3-Carene                                                                                                                      | 0.09 |
| *Copaene (alpha?)                                                                                                             | 0.08 |
| *tau.-Muurolool or Cadinol                                                                                                    | 0.07 |
| *1H-Benzocyclohepten-9-ol, 2,4a-.beta.,5,6,7,8,9,9a-.beta.-octahydro-3,5,5,9-.beta.-tetramethyl-                              | 0.06 |
| *l-Menthone                                                                                                                   | 0.06 |
| *5-Hydroxy-6-methoxy-8-[(4-amino-1-methylbutyl)amino]quinoline trihydrobromide                                                | 0.05 |
| *Ledol                                                                                                                        | 0.05 |
| *Cyclohexanemethanol, .alpha.,.alpha.-dimethyl-4-methylene= <b>delta-terpineol=Terpineol &lt;delta-&gt;</b>                   | 0.04 |
| beta-Eudesmol                                                                                                                 | 0.04 |
| *alpha-Guaiene_1                                                                                                              | 0.04 |
| *trans-alpha-Bergamotene_2                                                                                                    | 0.03 |
| *alpha-Calacorene                                                                                                             | 0.03 |
| *Hibaene                                                                                                                      | 0.03 |
| Isoborneol = <b>(-)-borneol</b>                                                                                               | 0.03 |
| L-Fenchone                                                                                                                    | 0.03 |
| *Alloaromadendrene                                                                                                            | 0.02 |
| *1-Naphthalenepropanol, alpha-ethenyldecahydro-alpha,5,5,8a-tetramethyl-2-methylene-, [1S-[1.alpha.(R*),4a.beta.,8a.alpha.]]- | 0.02 |



Overlaid chromatograms of HO (black), HP (blue); HF (red)

Mrs Pei-yin Liebrich  
 Chief Scientific Officer (Manager of GCMS unit at MCB, UCT)