



# Jade Bloom

Certified GC-MS Report Prepared By Dr. Hussam Bdour

## GC-MS Profiling Analysis Prepared for Jade Bloom, Inc

Date: March 14, 2018

Sample: Manuka

Type: Essential Oil

Source: *Leptospermum scoparium*

Batch: MI1051510

### Manuka\_12188\_M11051510\_10\_5

| Peak | Compound                     | RT     | Area Sum % |
|------|------------------------------|--------|------------|
| 1    | $\alpha$ -Thujene            | 9.605  | 0.04       |
| 2    | $\alpha$ -Pinene             | 9.885  | 1.2        |
| 3    | Isopinocampheol              | 10.602 | 0.09       |
| 4    | $\beta$ -Pinene              | 12.278 | 0.25       |
| 5    | $\beta$ -Myrcene             | 13.488 | 0.27       |
| 6    | (E)-3-Hexen-1-ol, acetate    | 14.702 | 0.06       |
| 7    | $\alpha$ -Terpinene          | 14.975 | 0.04       |
| 8    | p-Cymene                     | 15.532 | 0.14       |
| 9    | Limonene                     | 15.79  | 0.14       |
| 10   | 1,8-Cineole                  | 15.948 | 0.12       |
| 11   | (E)- $\beta$ -Ocimene        | 17.488 | 0.03       |
| 12   | $\gamma$ -Terpinene          | 18.055 | 0.14       |
| 13   | $\alpha$ -Terpinolene        | 20.236 | 0.1        |
| 14   | Linalool                     | 21.439 | 0.07       |
| 15   | unknown                      | 21.624 | 0.05       |
| 16   | Isopentyl isovalerate        | 22.077 | 0.07       |
| 17   | Ethylundecyl pentanoate      | 22.273 | 0.06       |
| 18   | Ipsenol                      | 22.947 | 0.09       |
| 19   | Terpinen-4-ol                | 27.292 | 0.05       |
| 20   | $\alpha$ -Terpineol          | 28.496 | 0.07       |
| 21   | iso-Amyl tiglate             | 29.311 | 0.19       |
| 22   | Decanal<n->                  | 30.107 | 0.05       |
| 23   | 2-Nonyl-1-ol                 | 33.611 | 0.06       |
| 24   | unknown                      | 36.055 | 0.06       |
| 25   | $\alpha$ -Cubebene           | 41.511 | 4.08       |
| 26   | $\alpha$ -Ylangene           | 43.018 | 0.25       |
| 27   | $\alpha$ -Copaene            | 43.44  | 2.86       |
| 28   | $\beta$ -Bourbonene          | 44.06  | 0.04       |
| 29   | unknown                      | 44.367 | 0.01       |
| 30   | $\beta$ -Elemene             | 44.928 | 2.65       |
| 31   | unknown                      | 45.407 | 0.05       |
| 32   | $\alpha$ -Gurjunene          | 46.042 | 0.38       |
| 33   | $\beta$ -Caryophyllene       | 46.701 | 5.22       |
| 34   | $\beta$ -Cubebene            | 47.557 | 0.1        |
| 35   | Aromandendrene               | 48.214 | 0.47       |
| 36   | trans- $\alpha$ -Bergamotene | 48.475 | 0.16       |
| 37   | 6,9-Guaiadiene               | 48.618 | 0.07       |
| 38   | $\beta$ -Guaiene             | 48.834 | 0.09       |

|    |                               |        |       |
|----|-------------------------------|--------|-------|
| 39 | Cadina-3,5-diene              | 49.232 | 9.96  |
| 40 | Alloaromadendrene             | 49.904 | 0.29  |
| 41 | $\alpha$ -Amorphene           | 50.657 | 0.18  |
| 42 | $\delta$ -Amorphene           | 51.167 | 5.72  |
| 43 | $\gamma$ -Muurolene           | 51.442 | 0.76  |
| 44 | $\beta$ -Selinene             | 51.883 | 8.25  |
| 45 | $\delta$ -Guaiene             | 52.136 | 0.28  |
| 46 | cis-Muurola-4(15),5-diene     | 52.314 | 1.45  |
| 47 | $\alpha$ -Selinene            | 52.629 | 9.49  |
| 48 | $\alpha$ -Muurolene           | 53.334 | 1.05  |
| 49 | Cadina-3,9-diene              | 53.805 | 0.51  |
| 50 | $\gamma$ -Cadinene            | 54.221 | 0.64  |
| 51 | (3E,6E)- $\alpha$ -Farnesene  | 54.497 | 0.38  |
| 52 | trans-Calamenene              | 54.959 | 10.45 |
| 53 | $\delta$ -Cadinene            | 55.107 | 6.43  |
| 54 | Cadina-1,4-diene              | 55.592 | 5.23  |
| 55 | $\alpha$ -Cadinene            | 55.982 | 0.21  |
| 56 | $\alpha$ -Calacorene          | 56.287 | 0.61  |
| 57 | Flavesone                     | 56.867 | 1.07  |
| 58 | $\gamma$ -Selinene            | 57.83  | 0.08  |
| 59 | Isospathulenol                | 58.71  | 0.13  |
| 60 | Caryophyllene oxide           | 58.976 | 0.24  |
| 61 | Globulol                      | 59.124 | 0.12  |
| 62 | Glennol                       | 59.599 | 0.12  |
| 63 | Elemol acetate                | 59.947 | 0.06  |
| 64 | Cubenol                       | 60.492 | 0.31  |
| 65 | Humulene oxide II             | 60.942 | 0.07  |
| 66 | Neointermedeol                | 61.32  | 0.36  |
| 67 | iso-Leptospermone             | 62.115 | 1.53  |
| 68 | $\tau$ -Muurolol              | 62.237 | 1.52  |
| 69 | $\gamma$ -Eudesmol            | 62.372 | 1.29  |
| 70 | Leptospermone                 | 62.467 | 2.46  |
| 71 | $\gamma$ -Gurjunenepoxide-(2) | 62.647 | 0.15  |
| 72 | epi-Cubebol                   | 62.807 | 1.3   |
| 73 | $\beta$ -Eudesmol             | 62.986 | 2.35  |
| 74 | $\alpha$ -Eudesmol            | 63.102 | 3.8   |
| 75 | unknown                       | 63.772 | 0.08  |
| 76 | Citronellyl tiglate           | 63.837 | 0.12  |

|                    |                       |                               |                |                        |                                  |
|--------------------|-----------------------|-------------------------------|----------------|------------------------|----------------------------------|
| <b>Sample Name</b> | Manuka_M11051510_10_5 | <b>Position</b>               | 5              | <b>Instrument Name</b> | Intuvo GCMS                      |
| <b>User Name</b>   |                       | <b>Inj Vol</b>                | 1              | <b>InjPosition</b>     |                                  |
| <b>Sample Type</b> |                       | <b>IRM Calibration Status</b> | Not Applicable | <b>Data Filename</b>   | Manuka_M11051510_10_5.D          |
| <b>ACQ Method</b>  | 70min_1to1splitter.M  | <b>Comment</b>                |                | <b>Acquired Time</b>   | 3/14/2018 1:58:46 AM (UTC-07:00) |

