**Table S1:** List of semivolatile organic compounds (SVOCs) isolated from sclerites from: healthy fans (HH), from healthy tissue from diseased fans (HD) and diseased tissue (DD) and their respective roles.

|  |  |  |  |
| --- | --- | --- | --- |
| **SVOCs** | **Sclerites** | **Biological** | **Reference** |
| **HH** | **HD** | **DD** | **Function** |
| Bis( 2-ethylhexyl) phtalate | ✓ |   |   | Apoptosis inductor | Priya & Jayachandran, 2012 |
| 2,3-dihydroxypropyl ester Octadecanoic acid | ✓ |   |   | Unknown |   |
| 3,6-dione- (5,17,20) Cholestane- | ✓ |   |   | cytotoxic | Ktari, Blond, & Guyot, 2000 |
| Dodecyl acrylate | ✓ |   |   | anti-oxidant | Joo , Kim & Lee, 2010 |
| 2-Hexadecanol | ✓ |   |   | Anti-microbial, anti-oxidant | Senthil et al., 2016 |
| 2-methyl-2-Undecanethiol | ✓ |   |   | Anti-microbial | Meenakshi et al., 2013 |
| 5-Octadene (E)  | ✓ |   |   | Unknown |   |
| 2-Tetradecene | ✓ |   |   | Anti-microbial | Roy et al., 2010 |
| 1-Tridecene | ✓ |   |   | Unknown |   |
| 5,22-dien-3-ol, (3·)-Cholesta |   | ✓ |   | Unknown |   |
| 2-ethyl-1-Decanol  |   | ✓ |   | Anti-microbial | Kumar et al., 2013 |
| 15-Heptadecenal |   | ✓ |   | Unknown |   |
| 7-Hexadecene |   | ✓ |   | Anti-microbial | Mujeeb, Bajpai & Pathak, 2014 |
| 2,6,10,14-Hexadecatetraen-1-ol, 3,7,11,15-tetramethyl-acetate |   | ✓ |   | Unknown |   |
| Methyl stearate |   | ✓ |   | Unknown |   |
| 2-methyl-1-Dodecanol  |   | ✓ |   | Anti-microbial | Kuppuswamy, Jonnalagadda, & Arockiasamy, 2013 |
| 9-methyl-1-Undecene |   | ✓ |   | Antibacterial | Okwu & Ighodaro, 2010 |
| 4-Nonene 2-ethyl |   | ✓ |   | Unknown |   |
| Phytol acetate |   | ✓ |   | Unknown |   |
| Tetradecane |   | ✓ |   | Unknown |   |
| 3-Tetradecene |   | ✓ |   | Unknown |   |
| 4-Tetradecene |   | ✓ |   | Unknown |   |
| 5-Tetradecene |   | ✓ |   | Unknown |   |
| 3,7,11,15-Tetramethyl-2-hexadecen-1-ol |   | ✓ |   | Unknown |   |
| 2-Tridecanol |   | ✓ |   | Unknown |   |
| 5-Tridecene |   | ✓ |   | Unknown |   |
| 1-Undecanol |   | ✓ |   | Unknown |   |
| Bis (7-methyloctyl) ester Phthalic acid |   |   | ✓ |  Anti-oxidant | Sivasubranian & Brindha, 2013 |
| 5-Cholestene-3-ol, 24-methyl |   |   | ✓ | Unknown |   |
| 1-Decene |   |   | ✓ | Unknown |   |
| 4-Decene |   |   | ✓ | Unknown |   |
| 5-Eicosene |   |   | ✓ | Unknown |   |
| 4-Ethyl-2-octanol |   |   | ✓ | Unknown |   |
| Heptadecane |   |   | ✓ | Unknown |   |
| Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester |   |   | ✓ | anti-oxidant | Kumar et al., 2013 |
| 2-Hexyl-1-octanol |   |   | ✓ | anti-oxidant | Shah & Ahmed, 2016 |
| 2-methyl Nonadecane |   |   | ✓ | Unknown |   |
| 2-Methyl-1-undecanol |   |   | ✓ | Unknown |   |
|  7-methyl-undecene  |   |   | ✓ | Unknown |   |
| 2-Propyl-1-pentanol |  |   | ✓ | Anti-microbial-anti-fungal | Pattnaik et al., 1996 |
| 2-Tetradecanol |   |   | ✓ | Unknown |   |

**Table S1 (continue)**

|  |  |  |  |
| --- | --- | --- | --- |
| **VOCs** | **Sclerites** | **Biological** | **Reference** |
| **HH** | **HD** | **DD** | **Function** |
| 2-Butyl-1-decene | ✓ | ✓ | ✓ | Unknown |   |
| Campesterol | ✓ | ✓ | ✓ | Antioxidant | Senthil, Rameashkannan, & Mani, 2016 |
| Cetene | ✓ | ✓ | ✓ | Unknown |   |
| Cholesta-4,6-dien-3-ol, (3) | ✓ | ✓ | ✓ | Product of the oxidation of Cholesterol | Liu &Shan, 2006 |
| Cyclopropane, 1-(2-methylbutyl)-1-(1-methylpropyl) | ✓ | ✓ | ✓ | Anti-fungal | Sheoran et al., 2014 |
| 1-Decanol, 2-hexyl | ✓ | ✓ | ✓ | Anti-microbial | Xiangwei et al., 2006 |
| Dodecane, 2,6,11-trimethyl | ✓ | ✓ | ✓ | Unknown |  |
| 1-Dodecene | ✓ | ✓ | ✓ | Anti-microbial | Senthil, Rameashkannan & Mani, 2016 |
| 17-(1,5-Dimethylhexyl)-10,13-dimethyl-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyclopenta[a]phenanthren-3-ol | ✓ | ✓ | ✓ | Anti-microbial | Altameme Hameed & Kereem, 2015 |
| Ergosta-5,22-dien-3-ol, (3·,22E,24S | ✓ | ✓ | ✓ | Apoptsis  | Byju et al., 2014 |
| Nonadecane | ✓ | ✓ | ✓ | Anti-fungal | Omoruyi, Afolayan & Bradley, 2014 |
| 3-Octadecene, (E) | ✓ | ✓ | ✓ | Unknown |  |
| 1-Tetradecene | ✓ | ✓ | ✓ | Unknown |   |
| Benzoic acid, 4-ethoxy-, ethyl ester | ✓ | ✓ |   | Anti-microbial | Sheela & Uthayakumari, 2013 |
| Cholesterol | ✓ | ✓ |   | Cell membrane  |   |
| Ergost-5-en-3-ol, (3) | ✓ | ✓ |   | Anti-oxidant | Ponnamma & Manjunath, 2012 |
| Hexadecanoic acid, methyl ester | ✓ | ✓ |   | Anti-fungal |   |
| 1-Octanol, 2-butyl | ✓ | ✓ |   | Unknown |   |
| 4-Trifluoroacetoxytridecane | ✓ | ✓ |   | Unknown |   |
| Cholest-5-en-3-ol, 24-propylidene-, (3·) |   | ✓ | ✓ |  |   |
| Glycerol 1-palmitate |   | ✓ | ✓ | Unknown |  |
| Undecane, 2-methyl |   | ✓ | ✓ | Unknown |   |
| Cholestane-3,6-dione, (5) | ✓ |   | ✓ |  |   |
| 3-Hexadecene, (Z) | ✓ |   | ✓ | Unknown |   |
| 1-Undecene, 7-methy | ✓ |   | ✓ | Unknown |   |

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