**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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