

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Myrtus communis*

| Activities Count | Chemical            | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|---------------------|------------|---------|----------|----------------------|--|
| 2                | MYRTENOL            | Leaf       | 3.0     | 250.0    | 1.7099549006735737   | --   |
| 5                | MYRTENAL            | Plant      | 4.0     | 6.0      | 1.0                  | --   |
| 35               | TANNIN              | Plant      |         | 140000.0 | 0.8228868573581      | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 28               | ALPHA-PINENE        | Plant      | 242.0   | 1420.0   | 0.5234413297158256   | --   |
| 23               | ALPHA-TERPINEOL     | Leaf       | 20.0    | 600.0    | 0.4629879079223302   | --   |
| 5                | GERANYL-ACETATE     | Leaf       | 8.0     | 250.0    | 0.29682879796236855  | --   |
| 0                | LIMONENE-OXIDE-II   | Shoot      | 0.0     | 4.5      | 0.21270799391196718  | --   |
| 60               | LIMONENE            | Leaf       | 40.0    | 585.0    | 0.16763618493123245  | --   |
| 67               | 1,8-CINEOLE         | Plant      | 135.0   | 2065.0   | 0.01796423062126339  | --   |
| 28               | ALPHA-PINENE        | Leaf       | 150.0   | 1900.0   | -0.10118788305965953 | --   |
| 60               | LIMONENE            | Plant      | 185.0   | 585.0    | -0.1262705110543247  | --   |
| 0                | TRANS-OCIMENE       | Shoot      | 1.0     | 30.0     | -0.16788134283044173 | --   |
| 0                | P-CYMEN-8-OL        | Shoot      | 0.0     | 1.0      | -0.17036603907271525 | --   |
| 35               | GERANIOL            | Leaf       | 1.0     | 75.0     | -0.19564022822357305 | --   |
| 2                | CITRONELLYL-ACETATE | Shoot      | 2.0     | 8.5      | -0.20172491946646642 | --   |
| 0                | ALPHA-THUJENE       | Shoot      | 2.0     | 18.0     | -0.23235009860030018 | --   |
| 67               | 1,8-CINEOLE         | Leaf       | 135.0   | 2250.0   | -0.24081674980649576 | --   |
| 23               | TERPINEN-4-OL       | Plant      | 3.0     | 4.0      | -0.27974574786240924 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 11               | ALPHA-PHELLANDRENE  | Shoot      | 1.0     | 10.0     | -0.2839552167099319  | --   |
| 0                | EO                  | Plant      | 1667.0  | 5900.0   | -0.29173905112572635 | --   |
| 5                | SABINENE            | Shoot      | 0.4     | 3.0      | -0.29272781709699197 | --   |
| 0                | LINALOL             | Plant      | 18.0    | 505.0    | -0.3180486984089818  | --   |
| 0                | BETA-CARYOPHYLLENE  | Shoot      | 7.0     | 40.0     | -0.3288775565477849  | --   |
| 0                | PERILLENE           | Shoot      | 0.0     | 2.5      | -0.356535455724173   | --   |

| Activities Count | Chemical               | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|------------------------|------------|---------|----------|----------------------|--|
| 16               | P-CYMENE               | Plant      | 30.0    | 106.0    | -0.3926619251887391  | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 11               | NEROLIDOL              | Shoot      | 0.0     | 5.0      | -0.3951214975377221  | --   |
| 8                | CARYOPHYLLENE-OXIDE    | Plant      | 2.0     | 3.0      | -0.4090592161629753  | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 23               | ALPHA-TERPINEOL        | Plant      | 58.0    | 88.0     | -0.4123445345033982  | --   |
| 0                | ALPHA-TERPINYL-ACETATE | Plant      | 58.0    | 88.0     | -0.42016529961533833 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 11               | GAMMA-TERPINENE        | Plant      | 185.0   | 278.0    | -0.4209013957366027  | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 13               | BETA-PINENE            | Plant      | 2.0     | 8.0      | -0.4268487360991912  | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 19               | CARVONE                | Plant      | 8.0     | 12.0     | -0.4319279701992528  | --   |
| 35               | GERANIOL               | Plant      | 1.0     | 2.0      | -0.44931709206646747 | --   |
| 12               | BORNYL-ACETATE         | Plant      | 12.0    | 18.0     | -0.45749105875331714 | --   |
| 5                | BETA-ELEMENE           | Plant      | 3.0     | 4.0      | -0.4608979924282207  | --   |
| 22               | MYRCENE                | Plant      | 2.0     | 6.0      | -0.46951072518303016 | --   |
| 13               | ALPHA-TERPINENE        | Shoot      | 0.0     | 4.0      | -0.47000816500737647 | --   |
| 9                | DELTA-CADINENE         | Plant      | 8.0     | 12.0     | -0.480204637192657   | --   |
| 76               | EUGENOL                | Shoot      | 1.0     | 15.0     | -0.4811620591902165  | --   |
| 5                | GERANYL-ACETATE        | Plant      | 8.0     | 12.0     | -0.55306285222535    | --   |
| 9                | CAMPHENE               | Plant      | 8.0     | 30.0     | -0.5545069597862352  | --   |
| 7                | LINALYL-ACETATE        | Plant      | 18.0    | 28.0     | -0.5646034028299372  | --   |
| 4                | NERAL                  | Shoot      | 1.0     | 2.0      | -0.5683722866724288  | --   |
| 31               | CARYOPHYLLENE          | Plant      | 3.0     | 4.0      | -0.5710991250271118  | --   |
| 0                | EO                     | Leaf       | 1000.0  | 5000.0   | -0.5748200656170724  | --   |
| 3                | AR-CURCUMENE           | Plant      | 4.0     | 6.0      | -0.589673085617198   | --   |

| Activities Count | Chemical        | Plant Part | Low PPM  | High PPM | StdDev              | Reference Citation   |
|------------------|-----------------|------------|----------|----------|---------------------|--|
| 53               | LINALOOL        | Plant      | 18.0     | 505.0    | -0.5959988975523308 | --   |
| 0                | FAT             | Seed       | 120000.0 | 150000.0 | -0.6077877171137942 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 13               | GERANIAL        | Shoot      | 0.0      | 1.5      | -0.6210581561316936 | --   |
| 41               | CAMPHOR         | Plant      | 12.0     | 18.0     | -0.6448042875195812 | --   |
| 6                | BETA-BISABOLENE | Plant      | 0.0      | 1.0      | -0.6535148941588209 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 20               | METHYL-EUGENOL  | Plant      | 8.0      | 12.0     | -0.6677721094092535 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | ALCOHOLS        | Plant      | 667.0    | 1000.0   | -0.6742987756649957 | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 16               | ACETIC-ACID     | Plant      | 0.0      | 1.0      | -0.6988076937022064 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 9                | TERPINOLENE     | Plant      | 0.0      | 1.0      | -0.7291018522032187 | --   |
| 2                | ALPHA-HUMULENE  | Plant      | 3.0      | 4.0      | -0.7430109839502796 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | CALAMENENE      | Plant      | 1.0      | 2.0      | -0.7588347614195404 | --   |
| 3                | BETA-SELINENE   | Plant      | 0.0      | 1.0      | -0.7709379055711856 | --   |
| 1                | COPAENE         | Plant      | 2.0      | 8.0      | -0.7831643620957981 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 37               | CARVACROL       | Plant      | 2.0      | 3.0      | -0.8663816025698796 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 6                | FURFURAL        | Plant      | 0.0      | 1.0      | -0.8970149171498789 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 3                | ALPHA-SELINENE  | Plant      | 0.0      | 1.0      | -0.9595850100763278 | --   |
| 8                | TRANS-ANETHOLE  | Shoot      | 0.0      | 5.0      | -1.0                | --   |

| Activities Count | Chemical                 | Plant Part | Low PPM | High PPM | StdDev              | Reference Citation   |
|------------------|--------------------------|------------|---------|----------|---------------------|--|
| 1                | TOLUENE                  | Plant      | 200.0   | 710.0    | -1.0                | --   |
| 0                | ALPHA-P-DIMETHYL-STYRENE | Plant      | 0.0     | 1.0      | -1.0                | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.   |
| 0                | 2-METHYL-BUTANOL         | Shoot      | 0.8     | 7.0      | -1.0                | --   |
| 2                | MYRTENOL                 | Plant      | 3.0     | 4.0      | -1.0                | --   |
| 6                | METHYL-CHAVICOL          | Plant      | 58.0    | 88.0     | -1.0009165023038997 | --   |
| 5                | VERBENONE                | Plant      | 0.0     | 1.0      | -1.0163839203754967 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.   |
| 0                | ALPHA-FENCHOL            | Shoot      | 0.0     | 10.0     | -1.4142135623730954 | --   |
| 0                | L-MYRTENOL               | Plant      |         |          |                     | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 0                | 5-METHYL-3-HEXANONE      | Plant      |         |          |                     | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.   |
| 0                | LIMONENE-OXIDE-I         | Shoot      | 0.4     | 2.5      |                     | --   |
| 6                | MYRISTIC-ACID            | Seed       |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.   |
| 13               | PALMITIC-ACID            | Seed       |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.   |
| 0                | KAEMPFEROL-GLYCOSIDE     | Plant      |         |          |                     | Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| 0                | 3,6-DIGALLOYLGLUCOSE     | Plant      |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.   |
| 0                | TRANS-CARVYL-ACETATE     | Plant      | 0.0     | 1.0      |                     | --   |

| Activities Count | Chemical                            | Plant Part | Low PPM | High PPM | StdDev | Reference Citation   |
|------------------|-------------------------------------|------------|---------|----------|--------|--|
| 51               | ELLAGIC-ACID                        | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | ISOBUTYL-ISOBUTYRATE                | Shoot      | 10.0    | 110.0    |        | --   |
| 13               | MYRICITRIN                          | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 7                | ISOBORNEOL                          | Plant      |         |          |        | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 0                | PROPANOL                            | Shoot      | 0.0     | 2.0      |        | --   |
| 1                | MYRTENYL-ACETATE                    | Leaf       | 40.0    | 1000.0   |        | --   |
| 0                | 2-METHYL-PROPYL-2-METHYL-PROPIONATE | Plant      | 2.0     | 6.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | TRANS-ALLO-OCIMENE                  | Plant      | 2.0     | 6.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 7                | DIPENTENE                           | Plant      |         |          |        | --   |
| 0                | ISOBUTYL-2-METHYL-BUTYRATE          | Shoot      | 1.0     | 20.0     |        | --   |
| 34               | MYRICETIN                           | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | CALACORENE                          | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 18               | OLEIC-ACID                          | Seed       |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 5                | HEXANAL                             | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 10               | NEROL                               | Plant      |         |          |        | --   |

| Activities Count | Chemical                         | Plant Part | Low PPM | High PPM | StdDev | Reference Citation   |
|------------------|----------------------------------|------------|---------|----------|--------|--|
| 0                | 2-METHYL-PROPANOL                | Plant      | 2.0     | 6.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | BUTYL-2-METHYLBUTYRATE           | Plant      | 0.0     | 1.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 5                | NERYL-ACETATE                    | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | MYRTUCUMMULONE-A                 | Plant      |         |          |        | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 8                | DELTA-3-CARENE                   | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | GALLOTANNINS                     | Plant      |         |          |        | --   |
| 0                | 2-METHYL-FURAN                   | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | GERANYL-2-METHYLPROPIONATE       | Plant      | 4.0     | 6.0      |        | --   |
| 0                | ALPHA-MUUROLENE                  | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 1                | MYRTENYL-ACETATE                 | Plant      | 175.0   | 262.0    |        | --   |
| 0                | D-MYRTENOL                       | Plant      |         |          |        | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 0                | 2-METHYL-BUTYL-2-METHYL-BUTYRATE | Plant      | 2.0     | 6.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | GERANYL-2-METHYLBUTYRATE         | Plant      | 4.0     | 6.0      |        | --   |
| 0                | MYRTENYL-2-METHYL-PROPIONATE     | Plant      | 8.0     | 12.0     |        | --   |
| 19               | D-LIMONENE                       | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |

| Activities Count | Chemical                   | Plant Part | Low PPM | High PPM | StdDev | Reference Citation   |
|------------------|----------------------------|------------|---------|----------|--------|--|
| 0                | 2-METHYL-BUTANAL           | Plant      | 2.0     | 6.0      |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 15               | MALIC-ACID                 | Fruit      |         |          |        | --   |
| 0                | MYRTOL                     | Leaf       |         |          |        | --   |
| 0                | ALDEHYDES                  | Plant      | 30.0    | 45.0     |        | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 0                | MYRTENYL-2-METHYL-BUTYRATE | Plant      | 1.0     | 2.0      |        | --   |
| 0                | 2-METHYL-BUT-3-EN-2-OL     | Plant      | 200.0   | 710.0    |        | --   |
| 0                | SUGAR                      | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 27               | LINOLEIC-ACID              | Seed       |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | MYRTOCOMMULON-B            | Leaf       |         |          |        | --   |
| 0                | MYRTENOLS                  | Plant      | 334.0   | 500.0    |        | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 23               | CITRIC-ACID                | Fruit      |         |          |        | --   |
| 0                | 2-BUTANONE                 | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |
| 0                | RESIN                      | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | MYRTOCOMMULON-A            | Leaf       |         |          |        | --   |
| 3                | ACETONE                    | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.                                   |

| Activities Count | Chemical             | Plant Part | Low PPM | High PPM | StdDev | Reference Citation   |
|------------------|----------------------|------------|---------|----------|--------|--|
| 62               | GALLIC-ACID          | Plant      |         |          |        | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.   |
| 0                | CIS-MYRTENYL-ACETATE | Plant      | 8.0     | 12.0     |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.   |
| 0                | CARVYL-ACETATE-II    | Shoot      | 0.8     | 6.0      |        | --   |
| 0                | 2-BUTANOL            | Plant      |         |          |        | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.   |
| 0                | QUERCETIN-GLYCOSIDES | Plant      |         |          |        | Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| 35               | BORNEOL              | Plant      |         |          |        | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 0                | CARVYL-ACETATE-I     | Shoot      | 0.4     | 130.0    |        | --   |
| 0                | PENTADECANE          | Plant      | 1.0     | 2.0      |        | --   |