

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Aspalathus linearis*

| Activities Count | Chemical                                | Plant Part       | Low PPM | High PPM | StdDev | Refernce Citation |
|------------------|---|------------------|---------|----------|--------|-------------------|
| 30               | (+)-CATECHIN                            | Shoot            |         |          |        | --                |
| 0                | 1,2-DICHLOROBENZENE                     | Leaf Essent. Oil |         |          |        | --                |
| 0                | 1-METHYLNAPHTHALENE                     | Leaf Essent. Oil |         | 4000.0   |        | --                |
| 0                | 2,2,6-TRIMETHYL-CYCLOHEXANONE           | Leaf Essent. Oil |         | 3700.0   |        | --                |
| 1                | 2,3-DIHYDROBENZOFURAN                   | Leaf Essent. Oil |         | 3200.0   |        | --                |
| 0                | 2,4-DIHYDROXY-ACETOPHENONE              | Leaf Essent. Oil |         | 2100.0   |        | --                |
| 0                | 2,4-DIMETHYLBENZALDEHYDE                | Leaf Essent. Oil |         | 1300.0   |        | --                |
| 0                | 2,6,6-TRIMETHYLCYCLOHEXENONE            | Leaf Essent. Oil |         | 7100.0   |        | --                |
| 0                | 2-METHOXY-2-BUTEN-4-OLIDE               | Plant            |         |          |        | --                |
| 0                | 2-METHYL-HEPT-2-EN-4-ONE                | Leaf Essent. Oil |         | 5900.0   |        | --                |
| 0                | 2-METHYL-NAPHTHALENE                    | Leaf Essent. Oil |         | 6800.0   |        | --                |
| 0                | 2-PENTYL-FURAN                          | Leaf Essent. Oil |         | 1000.0   |        | --                |
| 0                | 2-PHENYLETHANOL                         | Plant            |         |          |        | --                |
| 0                | 3,4,5-TRIHYDROXYCINNAMIC-ACID           | Shoot            |         |          |        | --                |
| 0                | 3,5,5-TRIMETHYLCYCLOHEX-3-EN-1-ONE      | Leaf Essent. Oil |         | 500.0    |        | --                |
| 0                | 3-METHYL-BUTANOIC-ACID                  | Plant            |         |          |        | --                |
| 0                | 4-BUTANOLIDE                            | Plant            |         |          |        | --                |
| 0                | 4-HYDROXY-BENZOIC-ACID                  | Shoot            |         |          |        | --                |
| 0                | 5-HYDROXY-3',4',7-TRI-O-METHYL-LUTEOLIN | Shoot            |         |          |        | --                |
| 0                | 6,10,14-TRIMETHYLPENTADECANONE          | Plant            |         |          |        | --                |
| 0                | 6-METHYL-HEPT-5-EN-2-ONE                | Leaf Essent. Oil |         | 39700.0  |        | --                |
| 0                | 6-METHYL-HEPTA-3,5-DIEN-2-ONE-ISOMER-A  | Leaf Essent. Oil |         | 51800.0  |        | --                |
| 0                | 6-METHYL-HEPTA-3,5-DIEN-2-ONE-ISOMER-B  | Leaf Essent. Oil |         | 1900.0   |        | --                |

| Activities Count | Chemical                           | Plant Part       | Low PPM | High PPM | StdDev              | Reference Citation |
|------------------|------------------------------------|------------------|---------|----------|---------------------|--------------------|
| 16               | ACETIC-ACID                        | Plant            |         |          |                     | --                 |
| 6                | ACETOPHENONE                       | Leaf Essent. Oil |         | 4000.0   |                     | --                 |
| 13               | ALPHA-TERPINENE                    | Leaf Essent. Oil |         |          |                     | --                 |
| 23               | ALPHA-TERPINEOL                    | Leaf Essent. Oil |         | 4200.0   | -0.7797871552056034 | --                 |
| 32               | ALPHA-TOCOPHEROL                   | Plant            |         |          |                     | --                 |
| 5                | ALUMINUM                           | Shoot            |         | 9900.0   | 1.0787185957210077  | --                 |
| 112              | ASCORBIC-ACID                      | Shoot            | 157.0   | 94000.0  | 4.1806764777423835  | --                 |
| 0                | ASH                                | Shoot            |         | 25000.0  | -1.7963329752128847 | --                 |
| 1                | ASPALATHIN                         | Shoot            | 17.0    | 15000.0  |                     | --                 |
| 0                | ASPALATHIN-BETA-D-GLUCOPYRANOSIDES | Shoot            |         |          |                     | --                 |
| 24               | BENZALDEHYDE                       | Leaf Essent. Oil |         | 15900.0  | 0.6952232834176496  | --                 |
| 20               | BENZOIC-ACID                       | Shoot            |         |          |                     | --                 |
| 0                | BENZOIC-ACID-METHYL-ESTER          | Leaf Essent. Oil |         | 600.0    |                     | --                 |
| 0                | BENZOTHAZOLE                       | Leaf Essent. Oil |         | 3400.0   |                     | --                 |
| 9                | BENZYL-ALCOHOL                     | Leaf Essent. Oil |         |          |                     | --                 |
| 0                | BETA-CYCLOCITRAL                   | Leaf Essent. Oil |         | 10200.0  |                     | --                 |
| 0                | BETA-DAMISCENONE                   | Plant            |         |          |                     | --                 |
| 13               | BETA-IONONE                        | Leaf             |         |          |                     | --                 |
| 0                | BETA-PHENYLETHYLALCOHOL            | Leaf Essent. Oil |         | 40700.0  |                     | --                 |
| 3                | BETA-TERPINEOL                     | Leaf Essent. Oil |         | 4300.0   |                     | --                 |
| 35               | BORNEOL                            | Leaf Essent. Oil |         | 500.0    | -0.6785540022451703 | --                 |
| 102              | CAFFEIC-ACID                       | Shoot            |         | 0.66     | -0.703465468886938  | --                 |
| 28               | CALCIUM                            | Plant            |         | 90.0     | -1.443984393362664  | --                 |
| 28               | CALCIUM                            | Shoot            |         | 2000.0   | -0.9297794818295042 | --                 |
| 28               | CALCIUM                            | Leaf             |         |          |                     | --                 |
| 7                | CHRYSOERIOL                        | Shoot            |         | 6.6      | -0.7384459049265101 | --                 |
| 18               | CINNAMIC-ACID                      | Shoot            |         |          |                     | --                 |

| Activities Count | Chemical                     | Plant Part       | Low PPM | High PPM | StdDev              | Reference Citation   |
|------------------|------------------------------|------------------|---------|----------|---------------------|--|
| 0                | DAMASCENONE                  | Leaf Essent. Oil |         | 50500.0  | 1.0                 | --   |
| 0                | DELTA-VALEROLACTONE          | Leaf Essent. Oil |         | 400.0    |                     | --   |
| 0                | DIHYDROACTINIDIOLIDE         | Leaf             |         |          |                     | --   |
| 0                | DIHYDROACTINIDIOLIDE         | Plant            |         |          |                     | --   |
| 0                | DODECAN-1-AL                 | Leaf Essent. Oil |         | 1000.0   |                     | --   |
| 76               | EUGENOL                      | Leaf Essent. Oil |         | 13600.0  | -1.0138787287413815 | --   |
| 0                | FAT                          | Shoot            |         | 17000.0  | -0.5582126582705272 | --   |
| 61               | FERULIC-ACID                 | Shoot            |         | 0.66     |                     | --   |
| 0                | FLAVANOL-O-GLYCOSIDE         | Shoot            |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | FLAVONOIDS                   | Leaf             |         |          |                     | --   |
| 3                | FLUORIDE                     | Plant            | 0.44    | 1.65     | -0.5740115779302913 | --   |
| 62               | GALLIC-ACID                  | Shoot            |         | 44000.0  | 1.4140081297693825  | --   |
| 62               | GALLIC-ACID                  | Leaf             |         | 44000.0  | 0.6988544721314695  | --   |
| 2                | GAMMA-NONALACTONE            | Leaf Essent. Oil |         | 3200.0   |                     | --   |
| 0                | GAMMA-OCTALACTONE            | Leaf Essent. Oil |         | 4200.0   |                     | --   |
| 11               | GAMMA-TERPINENE              | Leaf Essent. Oil |         |          |                     | --   |
| 2                | GERANYL-ACETONE              | Plant            |         |          |                     | --   |
| 18               | GUAIACOL                     | Leaf Essent. Oil |         | 240000.0 |                     | --   |
| 18               | GUAIACOL                     | Leaf             |         |          |                     | --   |
| 18               | GUAIACOL                     | Plant            |         |          |                     | --   |
| 0                | HEPT-1-EN-3-OL               | Leaf Essent. Oil |         | 2000.0   |                     | --   |
| 0                | HEPT-2-EN-1-AL               | Leaf Essent. Oil |         | 1500.0   |                     | --   |
| 0                | HEPT-2-EN-1-OL               | Leaf Essent. Oil |         | 5000.0   |                     | --   |
| 0                | HEPT-4-EN-1-AL               | Leaf Essent. Oil |         | 2000.0   |                     | --   |
| 0                | HEPTA-2,4-DIEN-1-AL-ISOMER-A | Leaf Essent. Oil |         | 24600.0  |                     | --   |

| Activities Count | Chemical                     | Plant Part       | Low PPM | High PPM | StdDev              | Reference Citation   |
|------------------|------------------------------|------------------|---------|----------|---------------------|--|
| 0                | HEPTA-2,4-DIEN-1-AL-ISOMER-B | Leaf Essent. Oil |         | 27700.0  |                     | --   |
| 0                | HEPTAN-1-AL                  | Leaf Essent. Oil |         | 1700.0   |                     | --   |
| 0                | HEPTAN-1-OL                  | Leaf Essent. Oil |         | 500.0    |                     | --   |
| 0                | HEPTAN-2-OL                  | Leaf Essent. Oil |         | 9600.0   |                     | --   |
| 0                | HEPTAN-2-ONE                 | Leaf Essent. Oil |         | 6400.0   |                     | --   |
| 0                | HEPTAN-3-OL                  | Leaf Essent. Oil |         | 6700.0   |                     | --   |
| 0                | HEPTAN-3-ONE                 | Leaf Essent. Oil |         | 4700.0   |                     | --   |
| 0                | HEPTAN-4-OL                  | Leaf Essent. Oil |         | 3900.0   |                     | --   |
| 0                | HEPTAN-4-ONE                 | Leaf Essent. Oil |         | 2100.0   |                     | --   |
| 0                | HEXAN-1-OL                   | Leaf Essent. Oil |         | 700.0    |                     | --   |
| 0                | HEXAN-1-OL-ACETATE           | Leaf Essent. Oil |         | 400.0    |                     | --   |
| 0                | HEXANE-2,5-DIONE             | Leaf Essent. Oil |         | 1500.0   |                     | --   |
| 2                | HEXANOIC-ACID                | Plant            |         |          |                     | --   |
| 0                | HEXANOIC-ACID-METHYL-ESTER   | Leaf Essent. Oil |         | 600.0    |                     | --   |
| 0                | HOMOORIENTIN                 | Shoot            |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 6                | IRON                         | Plant            |         | 14.0     | -0.7218159135751593 | --   |
| 6                | IRON                         | Shoot            |         | 3300.0   | 3.751125723153258   | --   |
| 0                | ISOBITEXIN                   | Shoot            |         |          |                     | --   |
| 4                | ISOORIENTIN                  | Shoot            |         |          |                     | --   |
| 3                | ISOQUERCETIN                 | Shoot            |         |          |                     | --   |
| 22               | ISOQUERCITRIN                | Shoot            |         | 1.0      | -1.1453747053075045 | --   |
| 4                | ISOVITEXIN                   | Shoot            |         | 0.5      |                     | --   |
| 60               | LIMONENE                     | Leaf Essent. Oil |         |          |                     | --   |
| 53               | LINALOOL                     | Leaf Essent. Oil |         | 5400.0   | -0.661654653443934  | --   |
| 0                | LINALOOL-OXIDE               | Leaf Essent. Oil |         | 2000.0   | -1.146764358161992  | --   |

| Activities Count | Chemical                     | Plant Part       | Low PPM | High PPM | StdDev              | Refernce Citation |
|------------------|------------------------------|------------------|---------|----------|---------------------|-------------------|
| 78               | LUTEOLIN                     | Shoot            | 0.66    | 1.0      | -0.7054905387561778 | --                |
| 78               | LUTEOLIN                     | Leaf             |         |          |                     | --                |
| 65               | MAGNESIUM                    | Leaf             |         |          |                     | --                |
| 65               | MAGNESIUM                    | Plant            |         | 140.0    | -1.2188549999457055 | --                |
| 65               | MAGNESIUM                    | Shoot            |         | 3300.0   | -0.5803607740011649 | --                |
| 14               | MANGANESE                    | Shoot            |         | 120.0    | -0.9591769438559322 | --                |
| 0                | METHYL-ETHYLMALIMIDE         | Plant            |         |          |                     | --                |
| 2                | METHYL-PHENYLACETATE         | Leaf Essent. Oil |         | 7900.0   |                     | --                |
| 22               | MYRCENE                      | Leaf Essent. Oil |         |          |                     | --                |
| 1                | NAPHTHALENE                  | Leaf Essent. Oil |         | 4300.0   |                     | --                |
| 0                | NEROL-ACETATE                | Leaf Essent. Oil |         | 2000.0   | -1.0                | --                |
| 0                | NON-2-EN-1-AL                | Leaf Essent. Oil |         | 5200.0   |                     | --                |
| 0                | NONA-2,6-DIEN-1-AL           | Leaf Essent. Oil |         | 4200.0   |                     | --                |
| 0                | NONAN-1-AL                   | Leaf Essent. Oil |         | 2800.0   |                     | --                |
| 0                | NONAN-2-ONE                  | Leaf Essent. Oil |         | 1900.0   |                     | --                |
| 1                | NOTHOFAGIN                   | Shoot            |         |          |                     | --                |
| 0                | OCT-1-EN-3-OL                | Leaf Essent. Oil |         | 6400.0   |                     | --                |
| 0                | OCT-2-EN-1-AL                | Leaf Essent. Oil |         | 4900.0   |                     | --                |
| 0                | OCT-3-EN-2-ONE               | Leaf Essent. Oil |         | 4600.0   |                     | --                |
| 0                | OCTA-2,4-DIEN-1-AL           | Leaf Essent. Oil |         | 3000.0   |                     | --                |
| 0                | OCTA-3,5-DIEN-2-ONE-ISOMER-A | Leaf Essent. Oil |         | 24200.0  |                     | --                |
| 0                | OCTA-3,5-DIEN-2-ONE-ISOMER-B | Leaf Essent. Oil |         | 11500.0  |                     | --                |
| 0                | OCTAN-1-OL                   | Leaf Essent. Oil |         | 2300.0   |                     | --                |
| 0                | OCTAN-2-OL                   | Leaf Essent. Oil |         | 4100.0   |                     | --                |
| 0                | OCTAN-2-ONE                  | Leaf Essent. Oil |         | 800.0    |                     | --                |
| 0                | OCTANOIC-ACID-METHYL-ESTER   | Leaf Essent. Oil |         | 1300.0   |                     | --                |

| Activities Count | Chemical                    | Plant Part       | Low PPM | High PPM | StdDev              | Reference Citation   |
|------------------|-----------------------------|------------------|---------|----------|---------------------|--|
| 4                | ORIENTIN                    | Shoot            |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 25               | P-COUMARIC-ACID             | Shoot            |         | 1.0      | -0.7071067811865475 | --   |
| 8                | P-CRESOL                    | Leaf Essent. Oil |         |          |                     | --   |
| 0                | P-ETHYL-PHENOL              | Leaf Essent. Oil |         | 1600.0   |                     | --   |
| 13               | P-HYDROXY-BENZOIC-ACID      | Shoot            |         |          |                     | --   |
| 2                | P-METHYL-ACETOPHENONE       | Leaf Essent. Oil |         | 5000.0   |                     | --   |
| 0                | P-METHYLBENZALDEHYDE        | Leaf Essent. Oil |         |          |                     | --   |
| 26               | PHENOL                      | Leaf Essent. Oil |         | 700.0    |                     | --   |
| 2                | PHENYL-ACETALDEHYDE         | Leaf Essent. Oil |         | 17100.0  |                     | --   |
| 0                | PHOSPHATE                   | Plant            |         | 50.0     |                     | --   |
| 0                | PHOSPHATE                   | Shoot            |         | 1200.0   |                     | --   |
| 14               | POTASSIUM                   | Leaf             |         |          |                     | --   |
| 14               | POTASSIUM                   | Plant            |         |          |                     | --   |
| 14               | POTASSIUM                   | Shoot            |         | 5600.0   | -1.2816033932517448 | --   |
| 0                | PROTEIN                     | Plant            |         |          |                     | --   |
| 0                | PROTEIN                     | Shoot            |         | 69000.0  | -1.2745985759367076 | --   |
| 43               | PROTocatechuic-ACID         | Shoot            |         | 2.6      |                     | --   |
| 176              | QUERCETIN                   | Shoot            |         | 1.3      | -0.7538426844404754 | --   |
| 176              | QUERCETIN                   | Plant            |         | 7.5      | -1.0                | --   |
| 87               | RUTIN                       | Shoot            |         |          |                     | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0                | SAFRANAL                    | Leaf Essent. Oil |         | 4000.0   |                     | --   |
| 5                | SALICYLALDEHYDE             | Leaf Essent. Oil |         | 1000.0   |                     | --   |
| 0                | SALICYLIC-ACID-METHYL-ESTER | Leaf Essent. Oil |         | 4200.0   |                     | --   |

| Activities Count | Chemical      | Plant Part       | Low PPM | High PPM | StdDev              | Refernce Citation |
|------------------|---------------|------------------|---------|----------|---------------------|-------------------|
| 1                | SODIUM        | Leaf             |         |          |                     | --                |
| 0                | SULFATE       | Shoot            |         | 1100.0   |                     | --                |
| 6                | SYRINGIC-ACID | Shoot            |         |          |                     | --                |
| 35               | TANNIN        | Shoot            |         | 44000.0  | -0.8290380397657579 | --                |
| 71               | THYMOL        | Leaf Essent. Oil |         | 2200.0   | -1.0                | --                |
| 0                | UNDECAN-1-AL  | Leaf Essent. Oil |         | 6200.0   |                     | --                |
| 24               | VANILLIC-ACID | Shoot            |         | 0.76     |                     | --                |
| 0                | VITAMIN-C     | Leaf             |         |          |                     | --                |