

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Coffea arabica*

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|------------------|------------|---------|----------|----------------------|--|
| 102 | CAFFEIC-ACID | Leaf | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 102 | CAFFEIC-ACID | Fruit | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 77 | CHLOROGENIC-ACID | Seed | 50000.0 | 80000.0 | 2.099473455662158 | -- |
| 76 | EUGENOL | Seed | | | | Jim Duke's personal files. |
| 62 | CAFFEINE | Seed | 600.0 | 32000.0 | 0.32954849831842203 | -- |
| 53 | BETA-CAROTENE | Leaf | 20.0 | 25.0 | -1.0290654853904624 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 47 | BETA-SITOSTEROL | Seed | 520.0 | 530.0 | -0.42759619083407946 | -- |
| 44 | SCOPOLETIN | Seed | | | | -- |
| 41 | TANNIC-ACID | Seed | | | | -- |
| 39 | NIACIN | Leaf | 52.0 | 56.0 | -0.5047983115442195 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 39 | NIACIN | Seed | 13.0 | 14.0 | -0.8646782329499472 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 36 | THEOPHYLLINE | Seed | | 5.0 | -0.8086779488341806 | -- |
| 36 | THEOPHYLLINE | Leaf | | | | -- |
| 35 | TANNIN | Seed | | 90000.0 | 0.12467231877609526 | -- |
| 32 | ALPHA-TOCOPHEROL | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 31 | THIAMIN | Seed | | 2.0 | -1.0937002421726418 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 28 | CALCIUM | Seed | 1200.0 | 1281.0 | -0.5262569010113829 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|------------------|------------|----------|----------|----------------------|--|
| 28 | CALCIUM | Leaf | 19000.0 | 20406.0 | 0.1345247907090656 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 27 | LINOLEIC-ACID | Seed | | | | -- |
| 25 | P-COUMARIC-ACID | Plant | | | | -- |
| 24 | PECTIN | Seed | | | | -- |
| 23 | CITRIC-ACID | Seed | | | | -- |
| 21 | THEOBROMINE | Seed | 18.0 | 20.0 | -0.49992618078868906 | -- |
| 21 | THEOBROMINE | Leaf | | | | -- |
| 20 | CHOLINE | Seed | | 300.0 | -1.291686985764833 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 18 | GUAIACOL | Seed | | | | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 18 | OLEIC-ACID | Seed | 5920.0 | 12800.0 | -0.8738766959416714 | -- |
| 16 | ISOEUGENOL | Seed | | | | Jim Duke's personal files. |
| 15 | TRIGONELLINE | Seed | 3000.0 | 13000.0 | 2.6975560988319325 | -- |
| 15 | METHIONINE | Seed | | | | -- |
| 15 | FIBER | Seed | 229000.0 | 244000.0 | 0.8624290700798181 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 15 | FIBER | Leaf | 175000.0 | 187000.0 | 0.3149049121779396 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 15 | RIBOFLAVIN | Seed | | 1.0 | -0.9674166926890354 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 15 | RIBOFLAVIN | Leaf | | 2.0 | -0.16848655199175794 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 14 | GAMMA-TOCOPHEROL | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 13 | PALMITIC-ACID | Seed | | 23680.0 | -0.21100581460020332 | -- |
| 13 | CYSTEINE | Seed | | | | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|---------------|------------|---------|----------|----------------------|--|
| 12 | STIGMASTEROL | Seed | 240.0 | 270.0 | -0.18717042991843028 | -- |
| 12 | ALLANTOIN | Leaf | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 11 | ADENINE | Seed | | | | -- |
| 10 | SQUALENE | Seed | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 9 | OXALIC-ACID | Fruit | | 154.0 | -0.2978571100852865 | Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp. |
| 9 | SINAPIC-ACID | Plant | | | | -- |
| 8 | STEARIC-ACID | Seed | 5920.0 | 12800.0 | -0.28767350524597596 | -- |
| 8 | P-CRESOL | Seed | | | | Jim Duke's personal files. |
| 8 | GLUTAMIC-ACID | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 8 | M-CRESOL | Seed | | | | Jim Duke's personal files. |
| 7 | CYANIDIN | Plant | | | | -- |
| 7 | SALICYLATES | Seed | 0.0 | 10.0 | -0.2865247216874145 | -- |
| 6 | MYRISTIC-ACID | Seed | | | | -- |
| 6 | IRON | Seed | 29.0 | 31.0 | -0.5565954591757142 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 6 | IRON | Leaf | 966.0 | 1032.0 | 1.6952709840911955 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 6 | ACETALDEHYDE | Seed | | | | -- |
| 6 | O-CRESOL | Seed | | | | Jim Duke's personal files. |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|----------------------------|------------|---------|----------|----------------------|--|
| 4 | ISOCHLOROGENIC-ACID | Seed | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 4 | PHOSPHORUS | Seed | 1780.0 | 1900.0 | -0.9125797887501755 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 4 | PHOSPHORUS | Leaf | 1700.0 | 1816.0 | -0.580562542862247 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 3 | CYCLOEUCALENOL | Seed | | | | -- |
| 3 | 3,5-DICAFFEOYL-QUINIC-ACID | Seed | | | | -- |
| 3 | MANNOSE | Seed | | | | -- |
| 3 | ASPARTIC-ACID | Seed | | | | -- |
| 2 | 3,4-DICAFFEOYL-QUINIC-ACID | Seed | | | | -- |
| 2 | CAFESTOL | Seed | | 6000.0 | | -- |
| 2 | CAMPESTEROL | Seed | 110.0 | 120.0 | -0.3742741742761247 | -- |
| 2 | ASPARAGINE | Seed | | | | -- |
| 2 | CYSTINE | Seed | | | | -- |
| 2 | PHYTOSTEROLS | Seed | 920.0 | 940.0 | -0.39269135400530825 | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| 1 | LANOSTEROL | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 1 | N-NONACOSANE | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 1 | RAFFINOSE | Seed | | | | -- |
| 1 | STACHYOSE | Seed | | | | -- |
| 1 | CITROSTADIENOL | Seed | | | | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|----------------------------|------------|----------|----------|---------------------|--|
| 1 | SPERMINE | Seed | | | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 1 | SPERMIDINE | Seed | | | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 1 | CHOLESTEROL | Seed | | | | -- |
| 1 | XANTHINE | Seed | | | | -- |
| 1 | CELLULOSE | Seed | | | | -- |
| 1 | LIGNOCERIC-ACID | Seed | | | | -- |
| 0 | PHYTATE | Seed | 7.0 | 370.0 | -1.5315645120943797 | -- |
| 0 | WATER | Seed | 60000.0 | 100000.0 | -0.4896816688601282 | -- |
| 0 | CAFFEOL | Seed | | | | -- |
| 0 | ARABINOSE | Seed | | | | -- |
| 0 | CARBOHYDRATES | Seed | 600000.0 | 728000.0 | 0.8131126460843718 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | RHAMNOSE | Seed | | | | -- |
| 0 | 4,5-DICAFFEOYL-QUINIC-ACID | Seed | | | | -- |
| 0 | GLUCOGALACTOMANNAN | Seed | | | | -- |
| 0 | L-ASPARTIC-ACID | Fruit | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | EO | Seed | 1000.0 | 2000.0 | -0.5252163822922106 | -- |
| 0 | P-XYLENOL | Seed | | | | Jim Duke's personal files. |
| 0 | ARABINOGALACTOSE | Seed | | | | -- |
| 0 | GAMMA-SITOSTEROL | Seed | | | | -- |

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|------------------|--|------------|----------|----------|---------------------|--|
| 0 | CARBOHYDRATES | Leaf | 666000.0 | 712000.0 | 0.7964570524747036 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | L-ASPARAGINE | Fruit | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | ENT-16-KAUREN-19-OL | Plant | | | | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991. |
| 0 | COFFEASTEROL | Seed | | | | -- |
| 0 | GALACTOMANNAN | Seed | | | | -- |
| 0 | CAPRINIC-ACID | Seed | | | | -- |
| 0 | PUTRESCINE | Seed | | | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 0 | KAHWEOL | Seed | | 3000.0 | | -- |
| 0 | DIMETHYL-5-ALPHA-CHOLEST-8-EN-3-BETA-OL | Seed | | | | -- |
| 0 | METHYL-1-5-ALPHA-STIGMAST-7-EN-3-BETA-OL | Seed | | | | -- |
| 0 | PROTEIN | Seed | 98700.0 | 140000.0 | -0.8343645955506414 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | 24-METHYLENEPHENOL | Seed | | | | -- |
| 0 | GALACTAN | Seed | | | | -- |
| 0 | DIMETHYL-5-ALPHA-CHOLEST-7-EN-3-BETA-OL | Seed | | | | -- |
| 0 | CAFESTEROL | Seed | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|---------------------------|------------|---------|----------|---------------------|--|
| 0 | ALLANTOIC-ACID | Leaf | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | CAMOESTANOL | Seed | | | | -- |
| 0 | PROTEIN | Leaf | | 99000.0 | -1.1257384013756186 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | 24-METHYLENE-CYCLOARTENOL | Seed | | | | -- |
| 0 | FURFURALDEHYDE | Seed | | | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | DIHYDROSITOSTEROL | Seed | | | | -- |
| 0 | BETA-TOCOPHEROL | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 0 | ATRACTYLIGENIN | Seed | | | | -- |
| 0 | 2-METHOXY-4-ETHYLPHENOL | Seed | | | | Jim Duke's personal files. |
| 0 | HYPOXANTHINE | Seed | | | | -- |
| 0 | FUFURYL-ALCOHOL | Seed | | | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | DIHYDROLANASTEROL | Seed | | | | -- |
| 0 | OBTUSIFOLIOL | Seed | | | | -- |
| 0 | MANNAN | Seed | | | | -- |
| 0 | 2-ETHYLPHENOL | Seed | | | | Jim Duke's personal files. |
| 0 | HYDROGEN-SULFIDE | Seed | | | | -- |
| 0 | 10-O-METHYLCAFEOSTOL | Seed | | | | -- |
| 0 | CAMPESTANOL | Seed | | | | 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 | DEXTRINS | Seed | | 8700.0 | | -- |
| 0 | TETRACOSIC-ACID | Seed | | | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | O-XYLENOL | Seed | | | | Jim Duke's personal files. |
| 0 | CHOLESTANOL | Seed | | | | -- |
| 0 | 7-STIGMASTEROL | Seed | | | | -- |
| 0 | CAHWEOL | Seed | | | | -- |
| 0 | PENTOSANS | Seed | | | | -- |
| 0 | 2,3,5-TRIMETHYLPHENOL | Seed | | | | Jim Duke's personal files. |
| 0 | HOMOCELLULOSE | Seed | | | | -- |
| 0 | XYLAN | Seed | | | | -- |
| 0 | DATURIC-ACID | Seed | | | | -- |
| 0 | SACCHAROSE | Seed | | | | -- |
| 0 | 5-AVENASTEROL | Seed | | | | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | LINOLENIC-ACID | Seed | 33300.0 | 72000.0 | 0.6770794300897944 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | PENTOSANE | Seed | | | | -- |
| 0 | HEMICELLULOSE | Seed | | | | -- |
| 0 | POLYAMINES | Seed | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 0 | FAT | Seed | 74000.0 | 170000.0 | -0.5024405631299633 | -- |
| 0 | CAFFETANNIC-ACID | Seed | | 84600.0 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | ASH | Seed | | 37400.0 | -0.31521697993801695 | -- |

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|-------------------------|------------|---------|----------|----------------------|--|
| 0 | NITROGEN | Seed | 16000.0 | 23000.0 | -0.08890229552415746 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | 4-METHOXY-4-VINYLPHENOL | Seed | | | | Jim Duke's personal files. |
| 0 | GUANOSINE | Seed | | | | -- |
| 0 | FAT | Leaf | 55000.0 | 59000.0 | 0.05057198773678454 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | WAX | Seed | 10000.0 | 14000.0 | 1.2675004445952587 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | CAFFEOYL-3-QUINIC-ACID | Seed | | | | -- |
| 0 | SUGAR | Seed | | 4300.0 | -0.9041931273600093 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | ARACHIDIC-ACID | Seed | | | | -- |
| 0 | CARNAUBIC-ACID | Seed | | | | -- |
| 0 | 4-ETHYLPHENOL | Seed | | | | Jim Duke's personal files. |