

P Cocos nucifera

Common Name(s)

Coconut, Coconut Palm, Cocotero (Sp.), Copra, Kokospalme (Ger.), Nariyal

How Used

F

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|-------------------------------------------|-----------|----------|--------|----------------------------------------------------------------------------------------------------------------------------|
| 0 | 1,3-DIPHENYLUREA? | Seed | -- | -- | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | 2,3,5-TRIMETHYLPYRAZINE | Endosperm | -- | -- | Jim Duke's personal files. |
| 0 | 2-(3-METHYL-BUT-2-ENYL-AMINO)-PURIN-6-ONE | Juice | -- | -- | Jim Duke's personal files. |
| 0 | 24-METHYLENE-CYCLOARTENOL | Seed Oil | -- | -- | Jim Duke's personal files. |
| 0 | ACETOIN | Endosperm | -- | -- | Jim Duke's personal files. |
| 0 | ACETOSYRINGONE | Leaf | -- | -- | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | ACETOVANILLONE | Leaf | -- | -- | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 3 | ALANINE | Endosperm | -- | -- | Jim Duke's personal files. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------|-----------|----------|--------|----------------------|---------------------------------------------------------------------------|
| 3 | ALANINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 3 | ALANINE | Seed | 1700 | 3205 | -1.4776910288536462 | USDA's Ag Handbook 8 and sequelae) |
| 10 | ALPHA-AMYRIN | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 23 | ALPHA-TERPINEOL | Fruit | -- | -- | | Jim Duke's personal files. |
| 32 | ALPHA-TOCOPHEROL | Oil | -- | 18 | -0.6737505559360731 | |
| 32 | ALPHA-TOCOPHEROL | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 32 | ALPHA-TOCOPHEROL | Seed | 7 | 13 | -0.6896654823517182 | |
| 5 | ALUMINUM | Leaf | -- | -- | | Jim Duke's personal files. |
| 5 | ALUMINUM | Seed | 7.2 | 7.2 | -0.3516653417103102 | |
| 0 | ANTIMONY | Seed | 0.1 | 0.1 | -0.16686477174992723 | Furr, A.K., et al. 1979 |
| 14 | ARGININE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 14 | ARGININE | Leaf | -- | -- | | Jim Duke's personal files. |
| 14 | ARGININE | Seed | 5460 | 10300 | -0.6072249141458423 | USDA's Ag Handbook 8 and sequelae) |
| 2 | ARSENIC | Seed | 0.02 | 0.02 | -0.6237689826185465 | Furr, A.K., et al. 1979 |
| 112 | ASCORBIC-ACID | Seed | 20 | 88 | -0.2856259499860121 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | ASH | Seed | 9000 | 22000 | -0.7784124813877332 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 3 | ASPARTIC-ACID | Leaf | -- | -- | | Jim Duke's personal files. |
| 3 | ASPARTIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|------------------|-----------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | ASPARTIC-ACID | Seed | 3250 | 6130 | -1.4611540528862226 USDA's Ag Handbook 8 and sequelae) |
| 0 | BARIUM | Seed | 0.1 | 0.1 | -0.27939450847576075 Furr, A.K., et al. 1979 |
| 9 | BETA-AMYRIN | Seed Oil | -- | -- | Jim Duke's personal files. |
| 47 | BETA-SITOSTEROL | Seed Oil | -- | -- | Jim Duke's personal files. |
| 47 | BETA-SITOSTEROL | Fruit | -- | 270 | -0.43949317582642705 Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| 4 | BORON | Seed | 3 | 5.2 | -0.8970628189505873 |
| 0 | BROMINE | Seed | 4 | 4 | -0.36819583850065973 Furr, A.K., et al. 1979 |
| 0 | BUTANE-2,3-DIOL | Endosperm | -- | -- | Jim Duke's personal files. |
| 0 | BUTANE-2,3-DIONE | Endosperm | -- | -- | Jim Duke's personal files. |
| 0 | BUTYROIN | Fruit | -- | -- | Jim Duke's personal files. |
| 3 | CADMIUM | Seed | 0.03 | 0.03 | -0.33359741952043553 Furr, A.K., et al. 1979 |
| 28 | CALCIUM | Seed | 71 | 476 | -0.6741015491289437 |
| 0 | CALCIUM-OXIDE | Leaf | 2700 | 2700 | -1 ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 2 | CAMPESTEROL | Fruit | -- | 30 | -0.4046460894399287 Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| 2 | CAMPESTEROL | Seed Oil | -- | -- | Jim Duke's personal files. |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference | Citation |
|----------|---------------|-----------|----------|--------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| 3 | CAPRIC-ACID | Seed | 2628 | 69743 | 2.633904573975057 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 1 | CAPROIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |
| 1 | CAPROIC-ACID | Seed | 117 | 3595 | -0.34501465200156417 | |
| 5 | CAPRYLIC-ACID | Seed | 3154 | 68305 | 1.9870944275459317 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | CARBOHYDRATES | Seed | 94000 | 331000 | -0.7646455579586512 | |
| 1 | CELLULOSE | Hull Husk | 266000 | 266000 | -1.1355499479153377 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | CESIUM | Seed | 0.1 | 0.1 | -0.3427209689454117 | Furr, A.K., et al. 1979 |
| 7 | CHLORINE | Seed | 1007 | 1007 | 1.3276510863378361 | Furr, A.K., et al. 1979 |
| 24 | CHROMIUM | Seed | 0.2 | 0.2 | -0.6533762381344975 | Furr, A.K., et al. 1979 |
| 23 | CITRIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 2 | COBALT | Seed | 0.2 | 0.2 | -0.19726970453812753 | Furr, A.K., et al. 1979 |
| 12 | COPPER | Seed | 3.2 | 33 | 1.6495159701011972 | |
| 7 | CYCLOARTENOL | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 2 | CYSTINE | Seed | 660 | 1245 | -1.3252475351434945 | USDA's Ag Handbook 8 and sequelae) |

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|----------|----------------------|---------------------------|----------|--------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| 0 | D-GALACTOSE | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | D-GALACTURONIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | D-SORBITOL | Endosperm | -- | 15000 | | |
| 3 | DECANOIC-ACID | Seed | 4100 | 50330 | 1 | |
| 3 | DECANOIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |
| 1 | DELTA-DECALACTONE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 1 | DELTA-DODECALACTONE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 0 | DELTA-OCTALACTONE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 0 | DIHYDRO-PHASEIC-ACID | Resin, Exudate, Sap | -- | -- | | Jim Duke's personal files. |
| 0 | EHTYL-LACTATE | Fruit | -- | -- | | Jim Duke's personal files. |
| 0 | EUROPIUM | Seed | 0.1 | 0.1 | 1.4740366676721104 | Furr, A.K., et al. 1979 |
| 0 | FAT | Seed | 58400 | 719000 | 2.3893388137261935 | |
| 61 | FERULIC-ACID | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 15 | FIBER | Seed | 30000 | 115000 | -0.15617696206043077 | |
| 0 | FLUORINE | Seed | 2.7 | 2.7 | 1.3555425831264722 | Furr, A.K., et al. 1979 |

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|----------|-------------------|---------------------|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8 | FRUCTOSE | Root | -- | -- | Jim Duke's personal files. |
| 8 | FRUCTOSE | Resin, Exudate, Sap | 2100 | 2100 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 8 | FRUCTOSE | Juice | 22200 | 22200 | Jim Duke's personal files. |
| 0 | FUCOSTEROL | Pollen Or Spore | -- | -- | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 22 | GABA | Seed | -- | -- | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | GALACTITOL | Endosperm | -- | -- | Jim Duke's personal files. |
| 0 | GALACTOMANNAN | Seed | 16000 | 16000 -1 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 2 | GAMMA-NONALACTONE | Seed | -- | -- | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 14 | GAMMA-TOCOPHEROL | Oil | -- | -- | |
| 8 | GENTISIC-ACID | Leaf | -- | -- | Jim Duke's personal files. |
| 7 | GLUCOSE | Juice | 19700 | 19700 | Jim Duke's personal files. |
| 7 | GLUCOSE | Root | -- | -- | Jim Duke's personal files. |

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|----------|---------------------|---------------------------|----------|--------|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 7 | GLUCOSE | Resin, Exudate, Sap | 2400 | 2400 | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 8 | GLUTAMIC-ACID | Seed | 7610 | 14355 | -1.154267228968401 | USDA's Ag Handbook 8 and sequelae) |
| 8 | GLUTAMIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |
| 8 | GLUTAMIC-ACID | Leaf | -- | -- | | Jim Duke's personal files. |
| 12 | GLYCINE | Seed | 1580 | 2980 | -1.1526395672471974 | USDA's Ag Handbook 8 and sequelae) |
| 12 | GLYCINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 12 | GLYCINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 3 | GOLD | Plant | -- | -- | | |
| 0 | HEPTAN-2-OL | Fruit | -- | -- | | Jim Duke's personal files. |
| 2 | HEXANOIC-ACID | Seed | 585 | 7190 | | |
| 7 | HISTIDINE | Seed | 770 | 1455 | -1.2412650733514448 | USDA's Ag Handbook 8 and sequelae) |
| 7 | HISTIDINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 0 | HYDROXYPHASEIC-ACID | Resin, Exudate, Sap | -- | -- | | Jim Duke's personal files. |
| 1 | HYDROXYPROLINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 8 | INOSITOL | Resin, Exudate, Sap | 690 | 690 | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 12 | IODINE | Seed | 0.3 | 0.3 | -0.2504859725466935 | Furr, A.K., et al. 1979 |

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|----------|--------------|-----------|----------|--------|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 6 | IRON | Seed | 20 | 33 | -0.4683156382183686 | |
| 3 | ISOLEUCINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 3 | ISOLEUCINE | Seed | 1310 | 2470 | -1.0235626374582578 | USDA's Ag Handbook 8 and sequelae) |
| 0 | KILOCALORIES | Seed | 2960 | 7050 | 1.714930755646975 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | L-RHAMNOSE | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 4 | LACTOSE | Root | -- | -- | | Jim Duke's personal files. |
| 0 | LANTHANUM | Seed | 0.03 | 0.03 | -0.1663780661615404 | Furr, A.K., et al. 1979 |
| 7 | LAURIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |
| 7 | LAURIC-ACID | Seed | 25754 | 368847 | 3.356450956978854 | |
| 0 | LEAD | Seed | 0.7 | 0.7 | -0.5037706810794316 | Furr, A.K., et al. 1979 |
| 2 | LEUCINE | Seed | 2470 | 4660 | -1.1889665424024416 | USDA's Ag Handbook 8 and sequelae) |
| 2 | LEUCINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 13 | LIGNIN | Hull Husk | 294000 | 294000 | 1 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 3 | LIGUSTRAZINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 60 | LIMONENE | Fruit | -- | -- | | Jim Duke's personal files. |
| 0 | LINAMARASE | Endosperm | -- | -- | | Jim Duke's personal files. |

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|----------|-----------------|-----------|----------|--------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| 27 | LINOLEIC-ACID | Seed | 584 | 18694 | -0.7576615677270858 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | LUTETIUM | Seed | 0.01 | 0.01 | 0.06665021185544043 | Furr, A.K., et al. 1979 |
| 4 | LYSINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 4 | LYSINE | Seed | 1470 | 2775 | -1.2629328431370264 | USDA's Ag Handbook 8 and sequelae) |
| 4 | LYSINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 65 | MAGNESIUM | Seed | 300 | 770 | -0.8597643812861001 | Furr, A.K., et al. 1979 |
| 0 | MAGNESIUM-OXIDE | Leaf | 5700 | 5700 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 15 | MALIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 14 | MANGANESE | Seed | 9 | 21 | 2.833645212569222 | |
| 0 | MANNAN | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 63 | MENTHOL | Fruit | -- | -- | | Jim Duke's personal files. |
| 1 | MERCURY | Seed | 0.1 | 0.1 | -0.12385851994600533 | Furr, A.K., et al. 1979 |
| 0 | MESO-INOSITOL | Endosperm | 100 | 100 | | |
| 15 | METHIONINE | Seed | 620 | 1170 | -0.8120468095481715 | USDA's Ag Handbook 8 and sequelae) |
| 15 | METHIONINE | Endosperm | -- | -- | | Jim Duke's personal files. |

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| 15 | METHIONINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 0 | METHOXYL | Hull Husk | 56000 | 56000 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 2 | MOLYBDENUM | Seed | 0.03 | 0.03 | -0.8557155877274645 | Furr, A.K., et al. 1979 |
| 13 | MUFA | Seed | 14250 | 26880 | -0.5971507316122795 | USDA's Ag Handbook 8 and sequelae) |
| 6 | MYRISTIC-ACID | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 6 | MYRISTIC-ACID | Seed | 7650 | 133015 | 1.4452781690520207 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | N-DOCASANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-DOTRIACONTANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-EICOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-HENEICOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 3 | N-HENTRIACONTANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-HEPTACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-HEPTADECANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 2 | N-HEXACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 1 | N-NONACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-NONADECANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-OCTACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------------|-----------|----------|--------|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 0 | N-OCTADECANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-PENTACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-TETRACOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-TRIACONTANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | N-TRICOSANE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 39 | NIACIN | Seed | 5 | 10 | -0.9844146803254511 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 3 | NICKEL | Seed | 2.1 | 2.1 | -0.5073146937660691 | Furr, A.K., et al. 1979 |
| 0 | NITROGEN | Hull Husk | 1100 | 1100 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 5 | OCTANOIC-ACID | Endosperm | -- | -- | | Jim Duke's personal files. |
| 5 | OCTANOIC-ACID | Seed | 4670 | 57520 | | |
| 18 | OLEIC-ACID | Seed | 2920 | 58958 | -0.4944308344155307 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 25 | P-COUMARIC-ACID | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 13 | P-HYDROXY-BENZOIC-ACID | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 13 | PALMITIC-ACID | Seed | 4380 | 75495 | 0.858105760546874 | |

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|----------|-------------------------|-----------|----------|--------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| 24 | PECTIN | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | PENTOSANS | Hull Husk | 277000 | 277000 | -1 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 7 | PHENYLALANINE | Seed | 1690 | 3190 | -0.9971896280936104 | USDA's Ag Handbook 8 and sequelae) |
| 7 | PHENYLALANINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 4 | PHOSPHORUS | Seed | 830 | 2400 | -0.7804502800829126 | |
| 0 | PHOSPHORUS-OXIDE-(P2O5) | Leaf | 1700 | 1700 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 5 | PHYLLOQUINONE | Oil | -- | 0.005 | -1.0944932984058764 | |
| 0 | PHYTATE | Seed | 2300 | 2370 | -1.2776088102133165 | |
| 2 | PHYTOSTEROLS | Seed | 470 | 885 | -0.40781205023024353 | USDA's Ag Handbook 8 and sequelae) |
| 14 | POTASSIUM | Seed | 2560 | 11491 | -0.09489587073970547 | |
| 0 | POTASSIUM-OXIDE-(K2O) | Leaf | 52300 | 52300 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | PROLINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 0 | PROLINE | Seed | 1380 | 2605 | -1.7152581345146969 | USDA's Ag Handbook 8 and sequelae) |
| 0 | PROTEIN | Seed | 32000 | 77000 | -1.3947822218671768 | |
| 4 | PUFA | Seed | 3660 | 26880 | -0.601249593588963 | USDA's Ag Handbook 8 and sequelae) |

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|----------|-------------|---------------------|----------|--------|------------------------------------------------------------------------------------------------------------------------------|
| 1 | QUINIC-ACID | Seed | -- | -- | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 1 | RAFFINOSE | Root | -- | -- | Jim Duke's personal files. |
| 1 | RAFFINOSE | Resin, Exudate, Sap | 900 | 900 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 15 | RIBOFLAVIN | Seed | 0.2 | 0.7 | -1.0823929498985099 CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | RUBIDIUM | Seed | 16 | 16 | -0.02826125946521563 Furr, A.K., et al. 1979 |
| 7 | SALICYLATES | Seed | 2 | 3 | -0.32408179774656004 |
| 0 | SAMARIUM | Seed | 0.04 | 0.04 | -0.3314596066672648 Furr, A.K., et al. 1979 |
| 0 | SCANDIUM | Seed | 0.002 | 0.002 | -0.6367962615099008 Furr, A.K., et al. 1979 |
| 0 | SCYLLITOL | Juice | -- | 500 | |
| 0 | SCYLLITOL | Endosperm | 500 | 500 | |
| 0 | SCYLLITOL | Leaf | 3200 | 3200 | 1 List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 60 | SELENIUM | Seed | 0.02 | 0.02 | -0.2635767939811563 Furr, A.K., et al. 1979 |
| 1 | SERINE | Leaf | -- | -- | Jim Duke's personal files. |
| 1 | SERINE | Seed | 1720 | 3245 | -1.4046655429596806 USDA's Ag Handbook 8 and sequelae) |
| 1 | SERINE | Endosperm | -- | -- | Jim Duke's personal files. |

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| 0 | SFA | Seed | 296980 | 560235 | 4.92625755934881 | USDA's Ag Handbook 8 and sequelae) |
| 14 | SHIKIMIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 4 | SILICON | Seed | 370 | 370 | -0.5747786449558462 | Furr, A.K., et al. 1979 |
| 1 | SODIUM | Seed | 145 | 626 | 0.2780073375488779 | |
| 11 | SORBITOL | Endosperm | -- | -- | | Jim Duke's personal files. |
| 10 | SQUALENE | Seed | -- | -- | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 10 | SQUALENE | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 8 | STEARIC-ACID | Seed | 584 | 23008 | 0.14430588634246846 | |
| 12 | STIGMASTEROL | Seed Oil | -- | -- | | Jim Duke's personal files. |
| 0 | STRONTIUM | Seed | 2.8 | 2.8 | -0.751622808700869 | Furr, A.K., et al. 1979 |
| 7 | SUCCINIC-ACID | Root | -- | -- | | Jim Duke's personal files. |
| 7 | SUCCINIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 14 | SUCROSE | Resin, Exudate, Sap | 134000 | 134000 | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 14 | SUCROSE | Juice | 4300 | 4300 | | Jim Duke's personal files. |
| 14 | SULFUR | Seed | 440 | 1370 | -0.6588697590248107 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------|---------|----------|--------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| 4 | SYRINGALDEHYDE | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 6 | SYRINGIC-ACID | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 35 | TANNIN | Plant | -- | -- | | Jim Duke's personal files. |
| 0 | TANTALUM | Plant | -- | -- | | |
| 31 | THIAMIN | Seed | 0.3 | 1 | -1.3322834288131225 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | THORIUM | Plant | -- | -- | | |
| 4 | THREONINE | Seed | 1210 | 2285 | -1.3091612941527981 | USDA's Ag Handbook 8 and sequelae) |
| 4 | THREONINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 4 | TIN | Seed | 1.5 | 1.5 | -0.442152019568875 | Furr, A.K., et al. 1979 |
| 0 | TITANIUM | Seed | 5.6 | 5.6 | -0.45186158232568946 | Furr, A.K., et al. 1979 |
| 2 | TRIDECANOIC-ACID | Seed | -- | -- | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 29 | TRYPTOPHAN | Seed | 390 | 735 | -0.8833088946354036 | USDA's Ag Handbook 8 and sequelae) |
| 0 | TUNGSTEN | Seed | 0.3 | 0.3 | 2.89737971498178 | Furr, A.K., et al. 1979 |
| 8 | TYROSINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 8 | TYROSINE | Seed | 1030 | 1945 | -1.3427005948815731 | USDA's Ag Handbook 8 and sequelae) |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference | Citation |
|----------|-------------------|-----------|----------|--------|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 0 | UNDECANOIC-ACID | Seed | -- | -- | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | URONIC-ANHYDRIDES | Hull Husk | 35000 | 35000 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 3 | VALINE | Endosperm | -- | -- | | Jim Duke's personal files. |
| 3 | VALINE | Leaf | -- | -- | | Jim Duke's personal files. |
| 3 | VALINE | Seed | 2020 | 3810 | -1.0100996922183336 | USDA's Ag Handbook 8 and sequelae) |
| 16 | VANADIUM | Seed | 0.004 | 0.004 | -0.5871182787387549 | Furr, A.K., et al. 1979 |
| 24 | VANILLIC-ACID | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 28 | VANILLIN | Leaf | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | VIT-E | Seed | 2 | 2 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | WATER | Seed | 363000 | 546000 | 1.2218063723076176 | |
| 0 | WATER | Hull Husk | 80000 | 80000 | -1 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | WATER | Leaf | 84500 | 84500 | -3.6077208272203345 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|-----------|---------|----------|--------|---------------------------------------------|
| 0 | YTTERBIUM | Seed | 0.1 | 0.1 | -0.2826900050957917 Furr, A.K., et al. 1979 |
| 77 | ZINC | Seed | 9 | 17 | -0.5715529290009757 |