

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Brassica nigra

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|----------------------|------------|----------|----------|----------------------|--|
| 112 | ASCORBIC-ACID | Leaf | 234.0 | 4013.0 | -0.07156483307262614 | USDA's Ag Handbook 8 and sequelae) |
| 102 | CAFFEIC-ACID | Seed | | | | Jim Duke's personal files. |
| 77 | CHLOROGENIC-ACID | Seed | | | | Jim Duke's personal files. |
| 77 | ZINC | Leaf | 2.0 | 40.0 | -0.28128739889673965 | USDA's Ag Handbook 8 and sequelae) |
| 65 | MAGNESIUM | Leaf | 132.0 | 2471.0 | -0.6389529090097905 | USDA's Ag Handbook 8 and sequelae) |
| 61 | FERULIC-ACID | Seed | | | | Jim Duke's personal files. |
| 53 | BETA-CAROTENE | Leaf | 29.0 | 475.0 | 0.930660444061161 | USDA's Ag Handbook 8 and sequelae) |
| 43 | PROTocatechuic-ACID | Seed | | | | Jim Duke's personal files. |
| 39 | NIACIN | Leaf | 3.03 | 47.87 | -0.6036882923547856 | USDA's Ag Handbook 8 and sequelae) |
| 31 | THIAMIN | Leaf | 0.44 | 7.66 | -0.13434936874443595 | USDA's Ag Handbook 8 and sequelae) |
| 29 | TRYPTOPHAN | Leaf | 270.0 | 3976.0 | 0.9918339597248005 | USDA's Ag Handbook 8 and sequelae) |
| 28 | CALCIUM | Leaf | 1107.0 | 17867.0 | -0.03895910092928099 | USDA's Ag Handbook 8 and sequelae) |
| 27 | LINOLEIC-ACID | Leaf | 270.0 | 3976.0 | -0.7105758651281813 | USDA's Ag Handbook 8 and sequelae) |
| 25 | P-COUMARIC-ACID | Seed | | | | Jim Duke's personal files. |
| 24 | VANILLIC-ACID | Seed | | | | Jim Duke's personal files. |
| 22 | ISOQUERCITRIN | Leaf | | | | -- |
| 18 | OLEIC-ACID | Leaf | 200.0 | 2945.0 | -0.25402185393237836 | USDA's Ag Handbook 8 and sequelae) |
| 16 | ALLYL-ISOTHIOCYANATE | Seed | 6510.0 | 11760.0 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 15 | METHIONINE | Leaf | 230.0 | 3387.0 | 0.24940233291075833 | USDA's Ag Handbook 8 and sequelae) |
| 15 | ALPHA-LINOLENIC-ACID | Leaf | 240.0 | 3535.0 | -0.6415507174060238 | USDA's Ag Handbook 8 and sequelae) |
| 15 | FIBER | Seed | 110000.0 | 119048.0 | -0.12421326269528561 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |

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|------------------|------------------------------|------------|---------|----------|-----------------------|--|
| 15 | FIBER | Leaf | 8000.0 | 117820.0 | -0.540585118579396 | USDA's Ag Handbook 8 and sequelae) |
| 15 | RIBOFLAVIN | Leaf | 0.56 | 9.72 | -0.1322991630269135 | USDA's Ag Handbook 8 and sequelae) |
| 14 | MANGANESE | Leaf | 3.0 | 53.0 | -0.3717755859373686 | USDA's Ag Handbook 8 and sequelae) |
| 14 | POTASSIUM | Leaf | 1485.0 | 28215.0 | -0.09401527703835375 | USDA's Ag Handbook 8 and sequelae) |
| 14 | ARGININE | Leaf | 1810.0 | 26657.0 | 0.5087991947733539 | USDA's Ag Handbook 8 and sequelae) |
| 13 | PALMITIC-ACID | Leaf | 60.0 | 884.0 | -0.3738525527818623 | USDA's Ag Handbook 8 and sequelae) |
| 12 | COPPER | Leaf | 0.58 | 11.2 | -0.4528977655356585 | USDA's Ag Handbook 8 and sequelae) |
| 11 | PANTOTHENIC-ACID | Leaf | 0.19 | 2.79 | -0.9329367522301226 | USDA's Ag Handbook 8 and sequelae) |
| 9 | SINAPIC-ACID | Seed | | | | Jim Duke's personal files. |
| 8 | STEARIC-ACID | Leaf | 20.0 | 294.0 | -0.43029003309567143 | USDA's Ag Handbook 8 and sequelae) |
| 8 | TYROSINE | Leaf | 1320.0 | 19440.0 | 3.1741271951746977 | USDA's Ag Handbook 8 and sequelae) |
| 7 | HISTIDINE | Leaf | 450.0 | 6627.0 | 0.6276673545987139 | USDA's Ag Handbook 8 and sequelae) |
| 7 | PHENYLALANINE | Leaf | 660.0 | 9720.0 | -0.1435161264489536 | USDA's Ag Handbook 8 and sequelae) |
| 7 | SINIGRIN | Seed | 10000.0 | 12000.0 | 1.0000000000000002 | -- |
| 7 | ASTRAGALIN | Leaf | | | | -- |
| 6 | QUERCIMERITRIN | Leaf | | | | -- |
| 6 | IRON | Leaf | 12.0 | 209.0 | -0.3908179981972661 | USDA's Ag Handbook 8 and sequelae) |
| 5 | PHYLLOQUINONE | Flower | 0.57 | 3.39 | | -- |
| 4 | LYSINE | Leaf | 1130.0 | 16642.0 | 0.8594897106494074 | USDA's Ag Handbook 8 and sequelae) |
| 4 | 2-PHENYLETHYL-ISOTHIOCYANATE | Seed | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 4 | THREONINE | Leaf | 660.0 | 9720.0 | -0.023257652960522495 | USDA's Ag Handbook 8 and sequelae) |
| 4 | PHOSPHORUS | Leaf | 290.0 | 4563.0 | -0.07515031705791066 | USDA's Ag Handbook 8 and sequelae) |

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|------------------|-----------------------------|------------|---------|----------|---------------------|--|
| 3 | VALINE | Leaf | 970.0 | 14286.0 | 0.4466322316135545 | USDA's Ag Handbook 8 and sequelae) |
| 3 | ISOLEUCINE | Leaf | 910.0 | 13402.0 | 0.3446848174545089 | USDA's Ag Handbook 8 and sequelae) |
| 3 | MUCILAGE | Seed | | 200000.0 | 0.01650166098259861 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 2 | PALMITOLEIC-ACID | Leaf | 10.0 | 147.0 | -0.480150098514262 | USDA's Ag Handbook 8 and sequelae) |
| 2 | S-METHYL-CYSTEINE-SULFOXIDE | Fruit | | | | -- |
| 2 | LEUCINE | Leaf | 760.0 | 11192.0 | -0.819526492144372 | USDA's Ag Handbook 8 and sequelae) |
| 2 | ERUCIC-ACID | Leaf | 770.0 | 11340.0 | 0.9749286383095918 | USDA's Ag Handbook 8 and sequelae) |
| 2 | NONACOSANE | Leaf | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 2 | CYSTINE | Leaf | 370.0 | 5449.0 | 2.1351105505350065 | USDA's Ag Handbook 8 and sequelae) |
| 1 | GLUCONAPIN | Plant | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 1 | SODIUM | Leaf | 274.0 | 4506.0 | 0.15301169936603431 | USDA's Ag Handbook 8 and sequelae) |
| 1 | PROGOITRIN | Plant | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | GLUCONASTURTIIN | Plant | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | ALLYL-THIOCYANATE | Seed | | | | -- |

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|------------------|--|------------|----------|----------|----------------------|--|
| 0 | 3-METHYLTHIOPROPYL-GLUCOSINOLATE | Seed | | | | -- |
| 0 | PHENYLETHYL-ISOTHIOCYANATE | Seed | | | | -- |
| 0 | POPULNIN | Leaf | | | | -- |
| 0 | MESOINOSITOL-HEXAPHOSPHORIC-ACID-ESTER | Seed | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | ALLYL-RHODANIDE | Seed | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | 3-SOPHOROSIDE-7-GLUCOSIDE-ISORHAMNETIN | Leaf | | | | -- |
| 0 | GADOLEIC-ACID | Leaf | 260.0 | 3829.0 | 0.07894192604291442 | USDA's Ag Handbook 8 and sequelae) |
| 0 | 2-PHENYLETHYL-GLUCOSINOLATE | Seed | | | | -- |
| 0 | CARBOHYDRATES | Seed | 192000.0 | 207792.0 | -1.2542990410914794 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | LINOLENIC-ACID | Leaf | | 480.0 | -0.40753237631529177 | -- |
| 0 | 3-SOPHOROSIDE-ISORHAMNETIN | Leaf | | | | -- |
| 0 | 2-METHYL-BUTYL-GLUCOSINOLATE | Leaf | | | | -- |
| 0 | CARBOHYDRATES | Leaf | 34100.0 | 502209.0 | -0.8719300205826715 | USDA's Ag Handbook 8 and sequelae) |
| 0 | KAEMPFEROL-3-SOPHOROSIDE-7-GLUCOSIDE | Leaf | | | | -- |
| 0 | WATER | Seed | | 76000.0 | -0.5817796800440428 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | ALLYL-CYANIDE | Seed | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | 3-O-BETA-D-GLUCOSIDE-ISORHAMNETIN | Leaf | | | | -- |

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|------------------|-------------------------------------|-----------------|----------|----------|----------------------|--|
| 0 | 2-BUTYL-GLUCOSINOLATE | Leaf | | | | -- |
| 0 | KAEMPFEROL-3-SINAPOYL-SOPHOROSIDE | Leaf | | | | -- |
| 0 | WATER | Leaf | 930030.0 | 933900.0 | 0.6299204344560746 | USDA's Ag Handbook 8 and sequelae) |
| 0 | 3,7-DIGLUCOSIDE-ISORHAMNETIN | Leaf | | | | -- |
| 0 | SINAPIN | Seed | | 10000.0 | | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |
| 0 | KAEMPFEROL-3-O-BETA-D-SOPHOROSIDE | Leaf | | | | -- |
| 0 | FAT | Seed | 282000.0 | 305195.0 | 0.20967986101223723 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | 2,4-METHYLENE-CHOLESTEROL | Pollen Or Spore | | | | -- |
| 0 | KAEMPFEROL-3-FERULOYL-SOPHOROSIDE | Leaf | | | | -- |
| 0 | SINAPINE | Seed | | | | -- |
| 0 | FAT | Leaf | 2220.0 | 46841.0 | -0.1917178251748026 | USDA's Ag Handbook 8 and sequelae) |
| 0 | ASH | Seed | 50000.0 | 54112.0 | 0.18744037202481786 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | KAEMPFEROL-3,7-DIGLUCOSIDE | Leaf | | | | -- |
| 0 | KILOCALORIES | Leaf | 200.0 | 2946.0 | -0.11619018899047374 | USDA's Ag Handbook 8 and sequelae) |
| 0 | QUERCETIN-3-SOPHOROSIDE-7-GLUCOSIDE | Leaf | | | | -- |
| 0 | ASH | Leaf | 5830.0 | 99722.0 | -0.3370416936919234 | USDA's Ag Handbook 8 and sequelae) |
| 0 | PROTEIN | Leaf | 23650.0 | 385190.0 | 1.7292833727478136 | USDA's Ag Handbook 8 and sequelae) |
| 0 | EO | Seed | 7000.0 | 12000.0 | -0.39879727889818234 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |

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|------------------|---|------------|---------|----------|--------|--|
| 0 | QUERCETIN-3-SOPHOROSIDE | Leaf | | | | -- |
| 0 | ISOPROPYLISOTHIOCYANATE | Plant | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | MYROSIN | Seed | | 6800.0 | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 0 | ISOPROPYL-GLUCOSINOLATE | Leaf | | | | -- |
| 0 | TRANS-CINNAMIC-ACID | Seed | | | | Jim Duke's personal files. |
| 0 | QUERCETIN-3-ALPHA-L-(2-O-ALPHA-L-RHAMNOPYRANISIDO-ARABO-PYRANOSIDE) | Seed | | 114.0 | | -- |
| 0 | GLUCOPUTRANJIVIN | Seed | | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | HYDROXYBENZOIC-ACID | Seed | | | | Jim Duke's personal files. |
| 0 | QUERCETIN-3,7-DIGLUCOSIDE | Leaf | | | | -- |