

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in Brassica napus var. napobrassica**

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	FIBER	Root	11000.0	106370.0	0.40548188259817086	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Root	2200.0	43850.0	2.0554708036839013	--
14	ARGININE	Root	1480.0	14310.0	0.17714518801318105	USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Root	1420.0	13730.0	-0.12656879284513156	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Root	880.0	8800.0	1.4969964331379306	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Root	870.0	8410.0	-0.20068380455090434	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Root	500.0	4835.0	0.7114548943031703	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Root	480.0	4640.0	0.3309238530229536	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Root	460.0	4445.0	0.22067202021034055	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Root	390.0	3770.0	0.029990875485301268	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Root	380.0	3675.0	-0.3939386812418397	USDA's Ag Handbook 8 and sequelae)
14	SULFUR	Root	350.0	5000.0	0.6721985672075504	ACTA AGRIC SCAND SUPPL 22: 1980
1	SERINE	Root	350.0	3385.0	0.012451729341143537	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Root	350.0	3385.0	0.09816926627523243	USDA's Ag Handbook 8 and sequelae)
3	ALANINE	Root	330.0	3190.0	-0.12401447431860009	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Root	310.0	3000.0	0.09680714819601026	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Root	300.0	2900.0	1.0788641098044627	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Root	290.0	7250.0	0.6557923409686905	--
28	CALCIUM	Root	270.0	6040.0	-0.14925166659847308	--
12	GLYCINE	Root	270.0	2610.0	-0.1322498781605236	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Root	250.0	2415.0	0.12622998370595992	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Root	250.0	2415.0	0.7345478536486332	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Root	250.0	2500.0	0.07398045035870428	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	PALMITIC-ACID	Root	240.0	2320.0	-0.291367632582844	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Root	230.0	2225.0	0.3484594002519018	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Root	200.0	1930.0	0.3858644625823273	USDA's Ag Handbook 8 and sequelae)
29	TRYPTOPHAN	Root	130.0	1255.0	1.3418488078003312	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Root	110.0	2610.0	0.025782666729043294	--
2	CYSTINE	Root	110.0	1065.0	0.41416520648682914	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Root	100.0	965.0	-0.19695207353540853	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Root	30.0	290.0	-0.18860255369586548	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Root	7.0	68.0	0.5147577614900641	USDA's Ag Handbook 8 and sequelae)
4	BORON	Root	2.5	30.0	0.2199887387786964	ACTA AGRIC SCAND SUPPL 22: 1980
6	IRON	Root	2.0	62.0	-0.3515801948569051	--
11	PANTOTHENIC-ACID	Root	2.0	15.0	-0.35963628154828453	USDA's Ag Handbook 8 and sequelae)
77	ZINC	Root	1.7	33.0	0.38637779530428495	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Root	1.3	17.0	-0.342877544388157	ACTA AGRIC SCAND SUPPL 22: 1980
31	THIAMIN	Root	1.0	9.0	0.20687378151698016	USDA's Ag Handbook 8 and sequelae)
4	SILICON	Root	1.0	30.0	-0.20509399754262064	ACTA AGRIC SCAND SUPPL 22: 1980
15	RIBOFLAVIN	Root	0.4	4.0	-0.0163136920018201	USDA's Ag Handbook 8 and sequelae)
5	ALUMINIUM	Root	0.3	1.0	-0.31194365262523716	ACTA AGRIC SCAND SUPPL 22: 1980
12	COPPER	Root	0.2	4.0	-0.8547042082668113	ACTA AGRIC SCAND SUPPL 22: 1980
15	FOLACIN	Root	0.18	2.0	-0.5271708591989388	USDA's Ag Handbook 8 and sequelae)
3	NICKEL	Root	0.02	1.0	-0.6074520694182507	ACTA AGRIC SCAND SUPPL 22: 1980
24	CHROMIUM	Root	0.005	0.1	-0.5400069758594586	ACTA AGRIC SCAND SUPPL 22: 1980
3	CADMIUM	Root	0.004	0.1	-0.7647786809084502	ACTA AGRIC SCAND SUPPL 22: 1980

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Root	0.001	0.1	-0.5430381312407203	ACTA AGRIC SCAND SUPPL 22: 1980
1	MERCURY	Root	0.0	0.01	-0.4761926805350732	ACTA AGRIC SCAND SUPPL 22: 1980
7	SALICYLATES	Root		0.0	-0.6998023989548637	--
2	MOLYBDENUM	Stem		0.32	-0.6821525679507198	--
5	PHYLLOQUINONE	Root		0.02	1.0	--
2	MOLYBDENUM	Root		0.1	-0.46089530570591497	ACTA AGRIC SCAND SUPPL 22: 1980
12	ALLANTOIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	NEOGLUCOBRASSICIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	MOLYBDENUM	Leaf		0.65	-0.7555970707143209	--
4	BORON	Stem		24.0	-0.5283308037270876	--
1	GLUCOBRASSICIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	GLUCOBRASSICANAPIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
4	BORON	Leaf		52.0	-0.2521054051389519	--
2	CAMPESTEROL	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
53	BETA-CAROTENE	Root		0.0	-0.4364222203358877	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	BRASSINOLIDE	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.
60	SELENIUM	Stem		0.017	-0.428602555754419	--
16	LYCOPENE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
60	SELENIUM	Root		0.002	-0.3623106990048751	ACTA AGRIC SCAND SUPPL 22: 1980
2	ARSENIC	Root		0.01	-0.20704596077537676	ACTA AGRIC SCAND SUPPL 22: 1980
60	SELENIUM	Leaf		0.031	-0.3801649499638808	--