

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Brassica oleracea var. botrytis I.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
1	4-HYDROXY-GLUCOBRASSICIN	Flower	7.0	390.0		--
1	4-HYDROXY-GLUCOBRASSICIN	Leaf	3.0	325.0		--
4	4-VINYL-GUAIACOL	Plant				--
3	ACETONE	Leaf				--
3	ACETONE	Flower				--
3	ALANINE	Leaf	1180.0	12673.0	0.017867252591863454	--
3	ALANINE	Flower	1050.0	13565.0		--
16	ALLYL-ISOTHIOCYANATE	Leaf				--
10	ALPHA-AMYRIN	Bud				--
10	ALPHA-AMYRIN	Flower				--
7	ALPHA-CAROTENE	Plant				--
15	ALPHA-LINOLENIC-ACID	Leaf	1290.0	13855.0	1.243183883058032	--
32	ALPHA-TOCOPHEROL	Flower	0.3	4.0	-1.0	--
32	ALPHA-TOCOPHEROL	Leaf	7.0	439.0	0.35927304562664447	--
5	ALUMINUM	Flower	1.0	150.0	0.9080903837793464	--
5	ALUMINUM	Leaf	1.0	27.0	-0.7515974845433717	--
14	ARGININE	Flower	960.0	12400.0		--
14	ARGININE	Leaf	1450.0	15573.0	-0.25040545078848814	--
2	ARSENIC	Flower				--
2	ARSENIC	Leaf				--
112	ASCORBIC-ACID	Leaf	911.0	10360.0	0.5173558895778465	--
112	ASCORBIC-ACID	Flower	660.0	9300.0	2.0283569773652044	--
3	ASPARTIC-ACID	Leaf	2130.0	22876.0	-0.262328714251028	--
9	BETA-AMYRIN	Bud				--
9	BETA-AMYRIN	Flower				--
53	BETA-CAROTENE	Leaf	9.0	138.0	-0.5369565297726103	--
53	BETA-CAROTENE	Flower		4.0	-0.5606735845287268	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	BETA-CRYPTOXANTHIN	Plant				--
47	BETA-SITOSTEROL	Plant				--
47	BETA-SITOSTEROL	Flower	120.0	1200.0	-0.7745775450534552	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	Leaf	1.0	85.0	0.6469238451071857	--
4	BORON	Flower	1.0	76.0	1.2304541664359345	--
4	BORON	Stem		21.0	-0.7419113414039952	--
3	CADMIUM	Flower	0.003	0.25		--
3	CADMIUM	Leaf	0.01	0.18	-0.7863999904697607	--
102	CAFFEIC-ACID	Leaf		8.0	-0.7148173591555008	--
28	CALCIUM	Flower	210.0	4040.0	-0.4787571488570857	--
28	CALCIUM	Leaf	360.0	54247.0	2.4468006382605774	--
2	CAMPESTEROL	Flower	30.0	300.0		Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
77	CHLOROGENIC-ACID	Leaf				--
21	CHLOROPHYLL	Leaf				--
24	CHROMIUM	Leaf	0.005	0.18	-0.6314530785674829	--
24	CHROMIUM	Flower	0.001	0.125	-1.3473800790006203	--
18	CINNAMIC-ACID	Leaf				--
23	CITRIC-ACID	Plant				--
23	CITRIC-ACID	Flower				--
2	COBALT	Leaf	0.02	0.6	-0.29531921745391343	--
2	COBALT	Flower	0.001	0.125	-0.5425117041971756	--
12	COPPER	Flower	0.3	8.0	-0.9960623124329469	--
12	COPPER	Leaf	0.68	52.0	0.6699011255650867	--
2	CYSTINE	Flower	230.0	2970.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	CYSTINE	Leaf	200.0	2148.0	-0.6472110127615397	--
2	DIMETHYL-AMINE	Flower		14.0	1.0	--
2	DIMETHYL-DISULFIDE	Plant				--
24	ETHANOL	Plant				--
24	ETHANOL	Flower				--
61	FERULIC-ACID	Leaf		13.0	0.08918222301645602	--
15	FIBER	Leaf	10760.0	122866.0	-0.47818554218157117	--
15	FIBER	Flower	8000.0	132000.0	0.00499085884442514	--
15	FOLACIN	Leaf	0.64	8.4	-0.15226470429048047	--
7	FUMARIC-ACID	Plant				--
7	FUMARIC-ACID	Flower				--
1	GLUCOBRASSICIN	Leaf	30.0	580.0		--
1	GLUCOBRASSICIN	Flower	60.0	1670.0		--
1	GLUCOIBERIN	Leaf	0.0	248.0		--
1	GLUCOIBERIN	Flower	0.0	1600.0		--
1	GLUCONASTURTIN	Leaf	0.0	145.0		--
1	GLUCONASTURTIN	Flower				--
1	GLUCORAPHANIN	Flower	0.0	990.0		--
1	GLUCORAPHANIN	Leaf	255.0	8990.0		--
8	GLUTAMIC-ACID	Flower	2650.0	34240.0		--
8	GLUTAMIC-ACID	Leaf	3750.0	40275.0	0.12712766718145815	--
12	GLYCINE	Flower	640.0	8270.0		--
12	GLYCINE	Leaf	950.0	10203.0	-0.05657990592554876	--
1	HEXYL-ACETATE	Plant				--
7	HISTIDINE	Flower	400.0	5165.0		--
7	HISTIDINE	Leaf	500.0	5370.0	-0.0031655528062669996	--
3	INDOLE-3-ACETONITRILE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
32	INDOLE-3-CARBINOL	Leaf				--
6	IRON	Leaf	8.0	109.0	-0.6442917506016965	--
6	IRON	Flower	5.0	122.0	-0.3012855132197258	--
3	ISOLEUCINE	Leaf	1090.0	11707.0	-0.09196747371544084	--
3	ISOLEUCINE	Flower	760.0	9820.0		--
75	KAEMPFEROL	Leaf				--
75	KAEMPFEROL	Flower		30.0	-1.0760015465680726	--
2	LEUCINE	Leaf	1310.0	14069.0	-0.3764770761728601	--
2	LEUCINE	Flower	1160.0	15000.0		--
27	LINOLEIC-ACID	Flower	190.0	2455.0	0.4542076634572454	--
27	LINOLEIC-ACID	Leaf	380.0	4081.0	-0.6928297779549968	--
4	LYSINE	Flower	1070.0	13825.0		--
4	LYSINE	Leaf	1410.0	15143.0	0.5181729835111131	--
65	MAGNESIUM	Flower	115.0	2250.0	-0.4063280335551449	--
65	MAGNESIUM	Leaf	214.0	3072.0	-0.406886321355332	--
15	MALIC-ACID	Flower				--
15	MALIC-ACID	Plant				--
14	MANGANESE	Flower	1.5	48.0	-0.2230146829051698	--
14	MANGANESE	Leaf	2.0	80.0	-0.32688920745367256	--
1	MERCURY	Flower	0.0	0.025	-0.9374693023756843	--
1	MERCURY	Leaf	0.002	0.09	1.1722789664445759	--
2	METHANOL	Plant				--
2	METHANOL	Flower				--
15	METHIONINE	Leaf	340.0	3652.0	0.46965125289987986	--
15	METHIONINE	Flower	280.0	3615.0		--
1	METHYL-AMINE	Flower		65.0	1.0000000000000002	--
2	MOLYBDENUM	Stem		1.76	-0.13934558811150258	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	MOLYBDENUM	Leaf	0.1	3.76	0.6801012829363977	--
2	MOLYBDENUM	Flower		0.1		--
13	MUFA	Flower	120.0	1550.0	0.46291004988627577	--
1	NEOGLUCOBRASSICIN	Leaf	10.0	900.0		--
1	NEOGLUCOBRASSICIN	Tissue Culture				--
1	NEOGLUCOBRASSICIN	Flower	8.0	450.0		--
39	NIACIN	Leaf				--
39	NIACIN	Flower	5.0	85.0	-0.09352864336463278	--
3	NICKEL	Flower	0.03	12.0	1.0	--
3	NICKEL	Leaf	0.3	7.0	-0.28467312579555515	--
18	OLEIC-ACID	Flower	120.0	1550.0	0.47798392866277417	--
18	OLEIC-ACID	Leaf	240.0	2578.0	-0.3066324749217592	--
9	OXALIC-ACID	Plant		68.0	-0.5351320075910592	--
25	P-COUMARIC-ACID	Flower		35.0		--
25	P-COUMARIC-ACID	Leaf		13.0	-0.3465642412720655	--
13	P-HYDROXY-BENZOIC-ACID	Leaf				--
13	PALMITIC-ACID	Flower	240.0	3100.0	0.13966281921675727	--
13	PALMITIC-ACID	Leaf	470.0	5048.0	-0.2927982427753776	--
11	PANTOTHENIC-ACID	Leaf	5.35	63.0	0.8524389937224381	--
11	PANTOTHENIC-ACID	Flower	1.4	18.0	-1.0	--
3	PHENETHYL-ISOTHIOCYANATE	Leaf				--
3	PHENETHYLAMINE	Flower		1.8		--
7	PHENYLALANINE	Leaf	840.0	9022.0	-0.32366072893862124	--
7	PHENYLALANINE	Flower	710.0	9175.0		--
4	PHOSPHORUS	Leaf	644.0	9090.0	0.7577587277969241	--
4	PHOSPHORUS	Flower	385.0	7375.0	1.5411143666705196	--
9	PHYTIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Plant				--
2	PHYTOSTEROLS	Flower	180.0	1800.0		Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	POTASSIUM	Flower	3300.0	49080.0	3.0578856743972493	--
14	POTASSIUM	Leaf	3178.0	37270.0	0.3058332790917791	--
1	PROGOITRIN	Flower	0.0	60.0		--
1	PROGOITRIN	Leaf				--
4	PUFA	Flower	830.0	10725.0	1.333147880984072	--
176	QUERCETIN	Flower		6.0	-1.4106513565908647	--
176	QUERCETIN	Leaf				--
44	QUERCITRIN	Leaf				--
1	QUINIC-ACID	Flower				--
1	QUINIC-ACID	Leaf				--
15	RIBOFLAVIN	Leaf	1.1	21.0	-0.07942432526480918	--
15	RIBOFLAVIN	Flower	0.3	11.0	1.1243491725579133	--
87	RUTIN	Leaf				--
34	SALICYLIC-ACID	Leaf				--
60	SELENIUM	Stem		0.015	-0.42886426089167784	--
60	SELENIUM	Leaf		0.024	-0.3807027917986485	--
60	SELENIUM	Flower				--
1	SERINE	Flower	1040.0	13440.0		--
1	SERINE	Leaf	1000.0	10740.0	-0.003085924608790074	--
4	SILICON	Flower	2.0	125.0	2.1795902118292325	--
4	SILICON	Leaf	1.0	90.0	-0.14550202645318341	--
9	SINAPIC-ACID	Leaf		40.0	-0.5050096614914733	--
7	SINIGRIN	Flower	0.0	325.0		--
7	SINIGRIN	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Flower	120.0	2300.0	0.7325478785988843	--
1	SODIUM	Leaf	252.0	3091.0	-0.09830203577402047	--
10	SQUALENE	Plant				--
8	STEARIC-ACID	Leaf	70.0	752.0	-0.13186141525885503	--
8	STEARIC-ACID	Flower	30.0	390.0	0.6447612226140537	--
12	STIGMASTEROL	Plant				--
12	STIGMASTEROL	Flower	20.0	200.0		Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
7	SUCCINIC-ACID	Plant				--
7	SUCCINIC-ACID	Flower				--
14	SULFUR	Leaf	1200.0	11800.0	1.6302603378370644	--
31	THIAMIN	Leaf	0.6	8.0	-0.06349209547044472	--
31	THIAMIN	Flower	0.6	12.0	1.9586178131455851	--
4	THREONINE	Flower	720.0	9300.0		--
4	THREONINE	Leaf	910.0	9773.0	-0.005488458413534491	--
2	TRANS-FERULIC-ACID	Leaf				--
29	TRYPTOPHAN	Flower	260.0	3360.0		--
29	TRYPTOPHAN	Leaf	290.0	3115.0	0.10979300838520059	--
8	TYROSINE	Leaf	630.0	6766.0	-0.34477094479123366	--
8	TYROSINE	Flower	430.0	5555.0		--
3	VALINE	Leaf	1280.0	13747.0	0.29552238675671566	--
3	VALINE	Flower	1000.0	12920.0		--
24	VANILLIC-ACID	Plant				--
77	ZINC	Leaf	4.0	118.0	0.19739995136190341	--
77	ZINC	Flower	3.0	97.0	3.0606347490514247	--