

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Vaccinium myrtillus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WATER	Fruit		920000.0	0.6497106840979096	--
0	FIBER(DIETARY)	Fruit		370000.0	-0.1454086686639877	--
0	FAT	Seed		310000.0	0.2349895147568526	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	INVERT-SUGARS	Fruit		300000.0	0.8532031018639995	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CATECHINS	Leaf		200000.0	1.0	--
35	TANNIN	Leaf	60000.0	200000.0	1.0922402514317946	--
0	SUGARS	Fruit	12000.0	150000.0	-0.26503678076002984	--
0	PROTEIN	Fruit	10320.0	129000.0	0.26142555134441664	--
35	TANNIN	Fruit	50000.0	120000.0	0.2460348882910567	--
0	FIBER(CRUDE)	Fruit		89000.0	-0.6728110234170557	--
24	PECTIN	Fruit	4000.0	50000.0	-0.03661673030520101	--
1	QUINIC-ACID	Leaf	20000.0	50000.0	0.7547340705685329	--
0	ASH	Fruit	3840.0	48000.0	-0.2243510805009802	--
0	ANTHOCYANOSIDES	Fruit		30000.0	1.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	FAT	Fruit	1760.0	22000.0	-0.4732178594145328	--
0	ANTHOCYANOSIDES	Leaf	3000.0	20000.0		--
14	POTASSIUM	Fruit	1338.0	16730.0	-0.10497458816336862	--
15	ARBUTIN	Plant		15000.0	-1.3286388424226248	--
4	PHOSPHORUS	Fruit	856.0	10700.0	2.2731902006060767	--
28	CALCIUM	Fruit	510.0	6380.0	0.582373090515347	--
65	MAGNESIUM	Fruit	312.0	3900.0	0.8197346940018424	--
15	ARBUTIN	Leaf	0.0	3000.0	-0.7316170494453632	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Leaf		2800.0	1.0924264319161126	--
14	MANGANESE	Leaf		2500.0	3.6962602714553836	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
89	URSOLIC-ACID	Fruit		2500.0	-0.2673024778	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	ISOCHLOROGENIC-ACID	Leaf		2000.0		--
77	CHLOROGENIC-ACID	Fruit		1900.0	0.5534391651296359	--
112	ASCORBIC-ACID	Fruit	132.0	1650.0	-0.18189696747022557	--
0	DELPHINIDIN-3-O-GLUCOSIDE	Leaf	581.0	1162.0		--
14	SULFUR	Fruit	130.0	1075.0	-0.2363356329259065	ACTA AGRIC SCAND SUPPL 22: 1980
0	DELPHINIDIN-3-O-GALACTOSIDE	Leaf	504.0	1004.0		--
0	DELPHINIDIN-3-O-ARABINOSIDE	Leaf	432.0	864.0		--
0	PETUNIDIN-3-O-GLUCOSIDE	Leaf	367.0	734.0		--
19	CYANIDIN-3-O-GLUCOSIDE	Leaf	342.0	684.0		--
4	CYANIDIN-3-O-GALACTOSIDE	Leaf	275.0	550.0		--
0	CYANIDIN-3-O-ARABINOSIDE	Leaf	219.0	438.0		--
0	CYANADIN-3-O-ARABINOSIDE	Leaf	219.0	438.0		--
0	PETUNIDIN-3-O-GALACTOSIDE	Leaf	189.0	378.0		--
0	MALVIDIN-3-O-GLUCOSIDE	Leaf	335.0	370.0		--
5	ALUMINUM	Fruit	25.0	318.0	-0.13100832398788578	--
0	PEONIDIN-3-O-GLUCOSIDE	Leaf	131.0	262.0		--
0	MALVIDIN-3-O-GALACTOSIDE	Leaf	127.0	254.0		--
4	ISOCHLOROGENIC-ACID	Fruit		250.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	IRON	Leaf		250.0	-0.28689375971144965	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PETUNIDIN-3-O-ARABINOSIDE	Leaf	108.0	216.0		--
0	MALVIDIN-3-O-ARABINOSIDE	Leaf	81.0	162.0		--
6	IRON	Fruit	12.0	151.0	0.07148811973975773	--
0	NEOCLOROGENIC-ACID	Leaf		140.0		--
14	MANGANESE	Fruit	7.0	91.0	0.1965046391200611	--
0	PEONIDIN-3-O-GALACTOSIDE	Leaf	34.0	68.0		--
39	NIACIN	Fruit	5.0	65.0	0.057508760745179625	--
0	RUBIDIUM	Fruit	5.0	60.0	3.0850078278809683	ACTA AGRIC SCAND SUPPL 22: 1980
4	TIN	Fruit	4.0	50.0	-0.1811041243657825	--
1	SODIUM	Fruit	4.0	50.0	-0.17920934261084967	--
53	BETA-CAROTENE	Fruit	4.0	47.0	-0.059950475940205736	--
0	PEONIDIN-3-O-ARABINOSIDE	Leaf	22.0	44.0		--
102	CAFFEIC-ACID	Leaf		40.0	-0.7103779880667277	--
15	LUTEIN	Fruit	2.6	26.0	1.4117785541906174	--
0	MYRTINE	Shoot		17.5		--
0	NEOCLOROGENIC-ACID	Fruit		10.0		--
4	BORON	Fruit	0.6	10.0	-0.6025676490591996	ACTA AGRIC SCAND SUPPL 22: 1980
0	MYRTINE	Plant		10.0		--
77	ZINC	Fruit	1.0	8.7	-0.6499015135402889	--
31	THIAMIN	Fruit	7.0	8.0	0.3414272755878574	--
0	THIAMINE	Fruit	0.6	7.8	2.0731663991191227	--
12	COPPER	Fruit	0.7	6.3	-0.5073665269805587	ACTA AGRIC SCAND SUPPL 22: 1980
0	EPIMYRTINE	Shoot		4.3		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	SELENIUM	Fruit	0.2	2.8	0.30814666605054625	--
15	RIBOFLAVIN	Fruit	0.2	2.6	-0.5159915584690182	--
0	BROMINE	Fruit		1.0	-0.42563543443835	ACTA AGRIC SCAND SUPPL 22: 1980
24	CHROMIUM	Fruit		0.7	-0.4093125277624259	--
0	LEAD	Fruit	0.04	0.7	-0.44890981456900714	--
16	ACETIC-ACID	Fruit Juice		0.32	-0.9999999999999999	--
0	BUTANOIC-ACID	Fruit Juice		0.13	0.9999999999999999	--
2	MOLYBDENUM	Fruit		0.1	-0.46519775248328327	ACTA AGRIC SCAND SUPPL 22: 1980
0	FLUORINE	Fruit		0.1	-1.2385741096298049	ACTA AGRIC SCAND SUPPL 22: 1980
2	COBALT	Fruit		0.1	-0.5230092918235771	--
9	BENZYL-ALCOHOL	Fruit Juice		0.08		--
0	HEX-TRANS-2-EN-1-AL	Fruit Juice		0.06		--
0	HEX-CIS-3-EN-1-OL	Fruit Juice		0.06		--
0	2-METHYL-BUTANOIC-ACID	Fruit Juice		0.06	1.0000000000000013	--
0	PENTAN-1-OL	Fruit Juice		0.05	0.9999999999999999	--
0	GAMMA-OCTALACTONE	Fruit Juice		0.045		--
5	PHYLLOQUINONE	Fruit		0.04	-0.22673532125634782	--
1	CAPROIC-ACID	Fruit Juice		0.04	-0.9999999999999997	--
0	HEX-TRANS-2-EN-1-OIC-ACID	Fruit Juice		0.03		--
26	PHENOL	Fruit Juice		0.03		--
3	GAMMA-DECALACTONE	Fruit Juice		0.022		--
0	2-HYDROXY-3-METHYLBUTANOIC-ACID-METHYL-ESTER	Fruit Juice		0.02		--
0	2-PHENYLETHANOL	Fruit Juice		0.02		--
3	CADMIUM	Fruit	0.001	0.02	-0.5848464463574334	ACTA AGRIC SCAND SUPPL 22: 1980
0	HEXAN-1-OL	Fruit Juice		0.02		--
28	VANILLIN	Fruit Juice		0.015		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Fruit Juice		0.015	-0.7625968906166204	--
0	HEX-TRANS-2-EN-1-OL	Fruit Juice		0.01	-1.0	--
76	EUGENOL	Fruit Juice		0.01		--
0	3-HYDROXY-3-METHYLBUTANOIC-ACID-ETHYL-ESTER	Fruit Juice		0.01		--
0	4-VINYLPHENOL	Fruit Juice		0.01		--
2	ARSENIC	Fruit		0.01	-0.5241085631054083	ACTA AGRIC SCAND SUPPL 22: 1980
0	BUTAN-2-OL	Fruit Juice		0.01	-1.0	--
53	LINALOOL	Fruit Juice		0.004	-0.9999999999999998	--
0	3-PHENYL-PROPAN-1-OL	Fruit Juice		0.003		--
2	PHENYL-ACETALDEHYDE	Fruit Juice		0.003		--
0	FORMIC-ACID-2-PHENYL-ETHYL-ESTER	Fruit Juice		0.002		--
10	NEROL	Fruit Juice		0.002		--
8	P-CRESOL	Fruit Juice		0.001		--
1	MERCURY	Fruit		0.001	-0.7865389313824043	ACTA AGRIC SCAND SUPPL 22: 1980
15	CITRONELLOL	Fruit Juice		0.001		--
0	SALICYLIC-ACID-METHYL-ESTER	Fruit Juice		0.001		--
0	BUTAN-1-OL	Fruit Juice		0.001	-0.9999999999999999	--
15	ARBUTIN	Fruit		0.0		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
40	EPICATECHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	BETA-AMYRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELPHINIDIN-3-O-GALACTOSIDE	Fruit				--
87	RUTIN	Leaf				--
0	4-HYDROXY-BENZOIC-ACID	Leaf				--
4	ISOFERULIC-ACID	Leaf				--
0	3-HYDROXY-3-METHYLBUTANOIC-ACID-METHYL-ESTER	Fruit Juice				--
1	PROCYANIDIN-B-2	Fruit				--
0	HYDROXY-ISOCARVOMENTHOL	Fruit Juice				--
6	SYRINGIC-ACID	Fruit				--
1	MYRTILLIN	Fruit				--
9	OXALIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PETUNIDIN-3-O-ARABINOSIDE	Fruit				--
43	PROTOCATECHUIC-ACID	Fruit Juice				--
0	QUERCETIN-3-GLUCOSIDOGALACTOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	MALIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MONOTROPEOSIDE	Leaf				--
23	CITRIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PAEONIDIN-3-O-GALACTOSIDE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CYANIDIN-3-ARABINOSIDE	Fruit				--
43	CATECHIN	Leaf				--
30	HYPEROSIDE	Fruit				--
20	BENZOIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	QUERCETIN-3-RHAMNOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	ISOQUERCITRIN	Fruit Juice				--
0	4-HYDROXY-BENZOIC-ACID	Fruit Juice				--
61	FERULIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Fruit				--
9	ASPERULOSIDE	Fruit				--
2	MONOTROPEIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PETUNIDIN-GLYCOSIDE	Plant				--
0	NEOMYRTILLIN	Shoot				--
0	QUERCETIN-3-ARABINOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	MELILOTIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Fruit Juice				--
0	CYANIDIN-GLYCOSIDE	Plant				--
24	VANILLIC-ACID	Leaf				--
31	CARYOPHYLLENE	Leaf				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
32	HYDROQUINONE	Leaf				--
7	ASTRAGALIN	Leaf				--
44	QUERCITRIN	Fruit				--
0	3,4-DIHYDROXYCINNAMIC-ACID	Fruit				--
16	ISOEUGENOL	Fruit Juice				--
25	OPCS	Fruit				--
30	ANTHOCYANINS	Leaf				--
7	SUCCINIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	MONOTROPEIN	Fruit				--
0	PEONIDIN-3-O-GALACTOSIDE	Fruit				--
1	M-HYDROXYBENZOIC-ACID	Fruit Juice				--
1	QUERCETIN-3-O-RHAMNOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	M-HYDROXYBENZOIC-ACID	Fruit				--
0	MALVIDIN-3-O-GALACTOSIDE	Fruit				--
7	CYANIDIN	Leaf				--
0	APS-SULFOTRANSFERASE	Leaf				--
3	PETUNIDIN	Fruit				--
62	GALLIC-ACID	Leaf				--
7	ASTRAGALIN	Fruit				--
77	CHLOROGENIC-ACID	Fruit Juice				--
44	QUERCITRIN	Fruit Juice				--
21	(-)-EPIGALLOCATECHIN	Leaf				--
0	LEUCOANTHOCYANINS	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ACETOIN	Fruit Juice				--
0	PEONIDIN-3-O-ARABINOSIDE	Fruit				--
0	DELPHINIDIN-3-MONOGLUCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	QUERCETIN-3-O-GALACTOSIDE	Leaf				--
0	M-COUMARIC-ACID	Fruit				--
0	MALVIDIN-3-O-BETA-D-GLUCOSIDE	Fruit				--
0	CERYL-ALCOHOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
64	OLEANOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PROCYANIDIN-B-2	Leaf				--
19	CYANIDIN-3-O-GLUCOSIDE	Fruit				--
7	GLUCOSE	Fruit				--
9	ASPERULOSIDE	Leaf				--
0	QUERCETIN-3-GLUCOSYL-GLUCOSIDE	Leaf				--
1	IRIDOIDS	Leaf				--
0	ACETIC-ACID-HEX-CIS-3-ENYL-ESTER	Fruit Juice				--
4	SILICON	Fruit				--
9	DELPHINIDIN	Fruit				--
38	(-)-EPICATECHIN	Leaf				--
0	M-COUMARIC-ACID	Fruit Juice				--
2	QUERCETIN-3'-GLUCOSIDE	Leaf				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	Refernce Citation
0	MALVIDIN-3-O-ARABINOSIDE	Fruit				--
8	FRUCTOSE	Fruit				--
25	P-COUMARIC-ACID	Leaf				--
6	SYRINGIC-ACID	Leaf				--
4	O-COUMARIC-ACID	Fruit				--
1	PROCYANIDIN-B-1	Fruit				--
61	FERULIC-ACID	Fruit				--
0	CYANIDIN-3-O-ARABINOSIDE	Fruit				--
35	GERANIOL	Fruit Juice				--
30	(+)-CATECHIN	Fruit				--
0	HOMOPROTOCATECHUIC-ACID	Leaf				--
24	VANILLIC-ACID	Fruit				--
4	TRANS-2-HEXENAL	Fruit				--
0	ACETIC-ACID-2-PHENYL-ETHYL-ESTER	Fruit Juice				--
0	PENTAN-1-OIC-ACID	Fruit Juice				--
30	(+)-CATECHIN	Leaf				--
0	GAMMA-DODECALACTONE	Fruit Juice				--
23	CITRIC-ACID	Fruit				--
176	QUERCETIN	Leaf				--
0	MALVIDIN-3,5-DIGLUCOSIDE	Fruit				--
61	FERULIC-ACID	Fruit Juice				--
6	SYRINGIC-ACID	Fruit Juice				--
0	PROCYANIDIN-A-1	Leaf				--
0	CYANIDIN-3-GLUCOSIDE	Fruit				--
8	GENTISIC-ACID	Leaf				--
43	PROTOCATECHUIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	ZEAXANTHIN	Tissue Culture				--
0	2-HYDROXY-3-METHYLBUTANOIC-ACID-ETHYL-ESTER	Fruit Juice				--
89	URSOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	NONACOSANE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ETHYL-3-METHYLBUTYRATE	Fruit				--
0	PAEONIDIN	Fruit				--
0	TRANS-CINNAMYL-ALCOHOL	Fruit Juice				--
1	DELPHINIDIN-3-O-BETA-D-GLUCOSIDE	Fruit				--
43	PROTocatechuic-ACID	Fruit				--
22	ISOQUERCITRIN	Leaf				--
0	MALVIDIN-GLYCOSIDE	Plant				--
0	DELPHINIDIN-GLYCOSIDE	Plant				--
7	TRANS-CINNAMALDEHYDE	Fruit Juice				--
14	SUCROSE	Fruit				--
3	PEONIDIN	Leaf				--
0	EPIMYRTINE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CYANIDIN-3-GALACTOSIDE	Fruit				--
62	GALLIC-ACID	Fruit Juice				--
102	CAFFEIC-ACID	Fruit Juice				--
0	QUERCETIN-3-GLUCURONIDE	Leaf				--
0	ETHYL-2-METHYLBUTYRATE	Fruit				--
7	CYANIDIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PROCYANIDIN-B-3	Fruit				--
0	DELPHINIDIN-3-O-ARABINOSIDE	Fruit				--
8	INOSITOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Fruit Juice				--
24	BENZALDEHYDE	Fruit Juice				--
60	CINNAMALDEHYDE	Fruit				--
9	SINAPIC-ACID	Leaf				--
0	2-METHOXY-5-VINYLPHENOL	Fruit Juice				--
1	DIHYDROXYCINNAMIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CHRYSANTHEMIN	Fruit				--
0	PENTYL-FURAN	Fruit Juice				--
38	(-)-EPICATECHIN	Fruit				--
102	CAFFEIC-ACID	Fruit				--
0	PROCYANIDIN-C-1	Leaf				--
0	P-DIMETHYL-ALPHA-STYRENE	Fruit Juice				--
0	NEOMYRTILLIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RESINIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	NONAN-1-AL	Fruit Juice				--
1	PROCYANIDIN-B-1	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GALLOCATECHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
32	HYDROQUINONE	Fruit				--
0	MERATRINE	Leaf				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
60	CINNAMALDEHYDE	Leaf				--
0	PARACOUMARIC-ACID	Fruit				--
0	DELPHINIDIN-5-MONOGLYCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Tissue Culture				--
0	GAMMA-BUTYROLACTONE	Fruit Juice				--
4	PROCYANIDIN-B-4	Fruit				--
4	O-COUMARIC-ACID	Fruit Juice				--
0	2-METHYL-BUTAN-1-OL	Fruit Juice				--
2	MONOTROPEIN	Stem				--
1	PETUNIDIN-3-O-BETA-D-GLUCOSIDE	Fruit				--
1	DELTA-DECALACTONE	Fruit Juice				--
18	CINNAMIC-ACID	Leaf				--
6	EPIGALLOCATECHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	AVICULARIN	Leaf				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,8-CINEOL	Fruit Juice				--
34	SALICYLIC-ACID	Leaf				--
0	PETUNIDIN-3-O-GALACTOSIDE	Fruit				--
0	DELPHINIDIN-3-RHAMNOGLYCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Fruit				--
0	FOENICULIN	Leaf				--
60	LIMONENE	Fruit Juice				--
4	PROCYANIDIN-B-4	Leaf				--
15	LUTEIN	Tissue Culture				--
0	MYRTILLOL	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	Fruit				--
24	VANILLIC-ACID	Fruit Juice				--
44	QUERCITRIN	Leaf				--
6	MALVIDIN	Fruit				--
0	MONOTROPEOSIDE	Fruit				--
1	PEONIDIN-3-O-BETA-D-GLUCOSIDE	Fruit				--
4	CYANIDIN-3-O-GALACTOSIDE	Fruit				--