

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Rubus idaeus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
30	(+)-CATECHIN	Stem				--
30	(+)-CATECHIN	Pericarp				--
30	(+)-CATECHIN	Leaf				--
30	(+)-CATECHIN	Juice				--
38	(-)-EPICATECHIN	Plant				--
38	(-)-EPICATECHIN	Leaf				--
38	(-)-EPICATECHIN	Pericarp				--
38	(-)-EPICATECHIN	Stem				--
38	(-)-EPICATECHIN	Juice				--
0	1-BETA-O-GALLOYLPEDUNCULAGIN	Leaf				--
0	1-PENTANOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	1-PENTEN-3-OL	Plant				--
0	2-HEXEN-4-OLIDE	Plant				--
0	3-METHYL-2-BUTEN-1-OL	Plant				--
0	5-METHYL-FURFURAL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	ACETIC-ACID	Plant				--
0	ACETOIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	ALPHA-CAROTENE	Fruit	0.13	0.6	-0.46232287758038665	--
0	ALPHA-FURANCARBONIC-ACID	Plant				--
32	ALPHA-TOCOPHEROL	Fruit	9.0	56.0	-0.2596481602858355	--
5	ALUMINUM	Leaf	66.0	392.0	-0.3598774207421672	--
112	ASCORBIC-ACID	Fruit	70.0	1870.0	-0.16821802906976244	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Seed		300.0	-0.15835200323963525	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
112	ASCORBIC-ACID	Leaf	620.0	3670.0	-0.10339086235718767	--
0	ASH	Leaf	13520.0	80000.0	-0.6845191217694889	--
0	ASH	Fruit	3880.0	30815.0	-0.6693626260182457	Revised USDA data received 1993.
24	BENZALDEHYDE	Plant				--
20	BENZOIC-ACID	Plant				--
53	BETA-CAROTENE	Leaf	19.0	114.0	-0.6414752460100303	--
53	BETA-CAROTENE	Fruit	0.06	7.0	-0.13726975525121177	--
2	BETA-CRYPTOXANTHIN	Fruit				--
13	BETA-IONONE	Plant				--
0	BETA-PHENYLETHYLALCOHOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Seed Oil				--
4	BORON	Fruit	1.0	13.0	-0.5421662869530862	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
6	BUTYRIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
102	CAFFEIC-ACID	Plant				--
102	CAFFEIC-ACID	Fruit				Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
28	CALCIUM	Fruit	220.0	1645.0	-0.5102772768150714	Revised USDA data received 1993.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	CALCIUM	Leaf	2045.0	12100.0	-0.4330046318778217	--
0	CAPRONIC-ACID	Fruit				--
5	CAPRYLIC-ACID	Fruit				--
0	CARBOHYDRATES	Leaf	133510.0	790000.0	1.4167610297591213	--
0	CARBOHYDRATES	Fruit	115700.0	865370.0	0.44110745013750263	Revised USDA data received 1993.
24	CHROMIUM	Leaf	0.2	1.3	-0.5356966871657832	--
6	CINNAMYL-ALCOHOL	Plant				--
0	CIS-HEXEN-3-OL	Plant				--
23	CITRIC-ACID	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	COBALT	Leaf	0.6	3.4	-0.27867675528926233	--
12	COPPER	Fruit	0.7	6.0	-0.5307153602504487	Revised USDA data received 1993.
0	CYANIDIN-3-GLUCOSIDE	Plant				--
0	CYANIDIN-3-GLUCOSYL-RUTINOSIDE	Plant				--
19	CYANIDIN-3-O-GLUCOSIDE	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	CYANIDIN-3-RUTINOSIDE	Plant				--
0	CYANIDIN-3-SOPHOROSIDE	Plant				--
0	CYANIDIN-5-MONOGLYCOSIDE	Plant				--
5	CYANIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DAMASCENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	DEXTROSE	Fruit		35000.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	DIACETYL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DIHYDRO-BETA-IONONE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
51	ELLAGIC-ACID	Juice	5.0	50.0		--
51	ELLAGIC-ACID	Leaf				--
0	EPOXY-BETA-IONONE	Plant				--
24	ETHANOL	Plant				--
6	ETHYL-ACETATE	Plant				--
17	FARNESOL	Plant				--
0	FAT	Seed	145000.0	240000.0	-0.13372552418655537	--
0	FAT	Leaf	2873.0	17000.0	-0.7863531000407186	--
0	FAT	Fruit	5100.0	44130.0	-0.3041906994801652	Revised USDA data received 1993.
61	FERULIC-ACID	Fruit				--
61	FERULIC-ACID	Plant				--
15	FIBER	Leaf		82000.0	-0.9835404944355358	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	FIBER	Fruit	30000.0	352280.0	1.9873569833760867	Revised USDA data received 1993.
0	FIBER(CRUDE)	Leaf		82000.0	-1.1842756430220331	--
0	FIBER(DIETARY)	Leaf		323000.0	-0.6193479291932424	--
0	FLAVONOLS	Juice		122.0		--
13	FORMIC-ACID	Fruit				--
8	FRUCTOSE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	FURFURAL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GADOLEIC-ACID	Fruit	40.0	300.0	1.0	Revised USDA data received 1993.
62	GALLIC-ACID	Leaf				--
62	GALLIC-ACID	Juice				Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
62	GALLIC-ACID	Plant				--
8	GENTISIC-ACID	Plant				--
35	GERANIOL	Fruit				--
7	GLUCOSE	Fruit				--
0	HEXEN-2-ACID	Fruit				--
0	HEXEN-3-ACID	Fruit				--
0	HOMOPROTOCATECHUIC-ACID	Plant				--
0	HYDROXYBENZOIC-ACID	Juice				--
0	HYDROXYCINNAMIC-ACID	Juice				--
6	IRON	Fruit	5.0	45.0	-0.34898531116184145	Revised USDA data received 1993.
6	IRON	Leaf	17.0	101.0	-0.664569650794051	--
3	ISOAMYL-ALCOHOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ISOBUTYRIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	ISOQUERCITRIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISOVALERIANIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
75	KAEMPFEROL	Juice				--
0	KAEMPFEROL-3-BETA-GLUCURONIDE	Plant				--
0	KAEMPFEROL-3-GLUCURONIDE	Juice	1.0	5.0		--
0	KAEMPFEROL-3-O-BETA-D-GLUCURONIDE	Fruit		1.0		--
0	KILOCALORIES	Leaf		2750.0	-0.43212504723366724	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	KILOCALORIES	Fruit	490.0	3665.0	0.006755743707852334	Revised USDA data received 1993.
8	LACTIC-ACID	Leaf				--
0	LAMBERTIANIN-A	Leaf				--
0	LAMBERTIANIN-B	Leaf				--
0	LAMBERTIANIN-C	Leaf				--
0	LAMBERTIANIN-D	Leaf				--
1	LEVULOSE	Fruit		35000.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
27	LINOLEIC-ACID	Seed Oil				--
27	LINOLEIC-ACID	Fruit	2080.0	15555.0	-0.13594241677819272	Revised USDA data received 1993.
0	LINOLENIC-ACID	Seed Oil				--
0	LINOLENIC-ACID	Fruit	1050.0	7855.0	0.1473004215517145	Revised USDA data received 1993.
15	LUTEIN	Fruit	0.76	4.0	-0.48918352740142235	--
65	MAGNESIUM	Fruit	175.0	1400.0	-0.33791055544330456	Revised USDA data received 1993.
65	MAGNESIUM	Leaf	539.0	3190.0	-0.361322498820846	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	MALTOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	MANGANESE	Leaf	25.0	146.0	-0.21716694893797103	--
14	MANGANESE	Fruit	10.0	80.0	0.12397207406698312	Revised USDA data received 1993.
18	MANNITOL	Fruit				--
13	MUFA	Fruit	530.0	3965.0	-0.19628214752627327	Revised USDA data received 1993.
0	N-HEPTACOSANE	Seed Oil				--
1	N-NONACOSANE	Seed Oil				--
39	NIACIN	Leaf	65.0	382.0	3.4605317922989003	--
39	NIACIN	Fruit	9.0	67.0	0.08424528986355267	Revised USDA data received 1993.
0	O-PHTHALIC-ACID	Plant				--
0	O-PHTHALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	OLEIC-ACID	Fruit	490.0	3665.0	-0.4524977786497885	Revised USDA data received 1993.
0	ORGANIC-ACIDS	Plant	15000.0	20000.0	-1.0	--
0	OXYBENZOIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
25	P-COUMARIC-ACID	Bark				--
25	P-COUMARIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Juice				--
25	P-COUMARIC-ACID	Plant				--
8	P-CRESOL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-ETHYL-PHENOL	Plant				--
13	P-HYDROXY-BENZOIC-ACID	Plant				--
0	P-HYDROXYPHENYLETHYLALCOHOL	Plant				--
13	PALMITIC-ACID	Fruit	130.0	970.0	-0.35043476151081787	Revised USDA data received 1993.
11	PANTOTHENIC-ACID	Fruit	2.4	18.0	-0.006662132557618176	Revised USDA data received 1993.
24	PECTIN	Fruit		14500.0	-0.4580948328310023	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	PECTIN	Leaf	8450.0	50000.0	0.4345814175326895	--
9	PEDUNCULAGIN	Leaf				--
0	PELARGONIN-3,2-GLUCOSYLROUTINOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PELARGONIN-3,5-DIGLYCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Fruit	110.0	955.0	-0.6867540372783977	Revised USDA data received 1993.
4	PHOSPHORUS	Leaf	395.0	2340.0	-0.4841533669170441	--
14	POTASSIUM	Leaf	2265.0	13400.0	-0.7482125557868814	--
14	POTASSIUM	Fruit	1490.0	11635.0	-0.555747708167046	Revised USDA data received 1993.
4	PROCYANIDIN-B-4	Stem				--
4	PROCYANIDIN-B-4	Pericarp				--
4	PROCYANIDIN-B-4	Plant				--
4	PROCYANIDIN-B-4	Leaf				--
0	PROCYANIDIN-B-5	Stem				--
0	PROCYANIDIN-B-5	Pericarp				--
0	PROCYANIDIN-B-5	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROCYANIDIN-B-8	Stem				--
0	PROCYANIDIN-B-8	Pericarp				--
0	PROCYANIDIN-B-8	Leaf				--
0	PROCYANIDIN-G	Stem				--
0	PROCYANIDIN-G	Pericarp				--
0	PROCYANIDIN-G	Leaf				--
6	PROPIONIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PROTEIN	Leaf	19097.0	113000.0	-0.9860748742162907	--
0	PROTEIN	Fruit	8800.0	70530.0	-0.5223902238389811	Revised USDA data received 1993.
43	PROTOCATECHUIC-ACID	Plant				--
43	PROTOCATECHUIC-ACID	Juice				--
4	PUFA	Fruit	3130.0	23410.0	0.8363439902360195	Revised USDA data received 1993.
176	QUERCETIN	Juice				--
0	QUERCETIN-3-O-GALACTOSIDE	Juice	1.0	6.0		--
0	QUERCETIN-3-BETA-GLUCURONIDE	Plant				--
0	QUERCETIN-3-GLUCURONIDE	Fruit		1.0		--
0	QUERCETIN-3-GLUCURONIDE	Juice	10.0	90.0		--
0	QUERCETIN-3-O-ALPHA-L-GALACTOSIDE	Fruit				--
0	QUERCETIN-3-O-BETA-D-GLUCORONIDE	Fruit		4.0		--
0	QUERCETIN-3-SOPHOROSIDE	Juice	1.0	80.0		--
0	QUERCETIN-3-XYLOSYLGLUCURONIDE	Juice	1.0	6.0		--
15	RIBOFLAVIN	Fruit	0.9	6.7	0.36209168106597706	Revised USDA data received 1993.
15	RIBOFLAVIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
87	RUTIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
34	SALICYLIC-ACID	Plant				--
34	SALICYLIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	SANGUIIN-H-2	Leaf				--
5	SANGUIIN-H-6	Leaf				--
60	SELENIUM	Leaf	0.4	2.5	-0.19046045138655818	--
0	SFA	Fruit	190.0	1420.0	-0.3479590827314696	Revised USDA data received 1993.
4	SILICON	Leaf	0.2	1.3	-0.40932526208989356	--
1	SODIUM	Leaf	13.0	77.0	-0.6336091719663351	--
1	SODIUM	Fruit	0.0	1.0	-0.18385595758003662	Revised USDA data received 1993.
11	SORBITOL	Fruit				--
8	STEARIC-ACID	Fruit	130.0	970.0	-0.2148929675183572	Revised USDA data received 1993.
7	SUCCINIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	SUCCINIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Fruit				--
0	SUGARS	Leaf	10140.0	60000.0	-0.7162601683395223	--
35	TANNIN	Leaf	16900.0	120000.0	0.11560400756237017	--
35	TANNIN	Fruit		6200.0	-0.8518650257063927	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
0	TETRACOSAN-1-OL	Seed Oil				--
0	THEASPIRANE	Plant				--
31	THIAMIN	Fruit	0.3	2.2	-0.4010034158314492	Revised USDA data received 1993.
31	THIAMIN	Leaf		3.4	-1.0221493221185618	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Leaf	0.6	3.4	-0.43873738648145555	--
4	TIN	Leaf	4.0	22.0	0.7648770558118653	--
93	TOCOPHEROL	Fruit	3.0	12.0	-0.6276472611238401	USDA's Ag Handbook 8 and sequelae)
0	TRANS-2-PHENYLBUTANONE	Plant				--
1	VALERIANIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	VANILLIC-ACID	Plant				--
0	VIT-B-6	Fruit	0.5	4.3	-0.6565905620231853	Revised USDA data received 1993.
0	WATER	Fruit		865700.0	0.4136092014194993	Revised USDA data received 1993.
0	WATER	Leaf		831000.0	0.11655419260711948	--
10	XYLITOL	Fruit		0.4		--
3	XYLOSE	Fruit				--
77	ZINC	Fruit	4.0	37.0	0.2015288171723333	Revised USDA data received 1993.
77	ZINC	Leaf				--