

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cichorium intybus

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Root				--
24	VITAMIN-B-1	Root		0.05		--
24	VANILLIC-ACID	Leaf		0.5	-1.181981260366695	--
3	VALINE	Leaf	410.0	9180.0	-0.9848461873827702	USDA's Ag Handbook 8 and sequelae)
22	UMBELLIFERONE	Flower				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
22	UMBELLIFERONE	Plant				--
29	TRYPTOPHAN	Leaf	160.0	3672.0	0.6804048665688907	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Leaf	250.0	5712.0	-1.367011082098785	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Root	0.0	2.0	-0.41582954985618054	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Leaf	1.0	14.0	1.1869303740705777	USDA's Ag Handbook 8 and sequelae)
6	TARTARIC-ACID	Shoot				--
6	TARTARIC-ACID	Plant				--
2	TARAXASTEROL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
35	TANNIN	Plant				--
14	SUCROSE	Root		140000.0	0.1611945921135931	--
8	STEARIC-ACID	Root	20.0	100.0	-0.6446087280612671	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Leaf	10.0	204.0	-0.48893321127321177	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Plant				--
8	STEARIC-ACID	Seed				--
1	SODIUM	Leaf	70.0	1428.0	-0.3936622771435691	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Root	500.0	2500.0	0.6512650124326103	--
9	SINAPIC-ACID	Plant		0.5	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SILVER	Root				--
4	SILICON	Root				--
44	SCOPOLETIN	Flower				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
44	SCOPOLETIN	Plant				--
7	SALICYLATES	Leaf	10.0	100.0	-0.3593779047496331	--
87	RUTIN	Leaf		14000.0	-0.1353936273578098	--
87	RUTIN	Seed		6400.0	0.07536225897017279	--
15	RIBOFLAVIN	Root	0.0	2.0	-0.45399811156287	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Leaf	1.0	29.0	-0.04192444032714655	USDA's Ag Handbook 8 and sequelae)
44	QUERCITRIN	Shoot				--
2	QUERCETIN-3-O-BETA-D-GLUCURONIDE	Plant				--
2	QUERCETIN-3-O-BETA-D-GLUCURONIDE	Leaf				--
176	QUERCETIN	Plant				--
176	QUERCETIN	Seed		1.0		--
4	PUFA	Leaf	440.0	8030.0	-1.576432461803007	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Root	870.0	4350.0	-0.318698697794576	USDA's Ag Handbook 8 and sequelae)
2	PROTocatechuic-ALDEHYDE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	POTASSIUM	Root	2900.0	14500.0	-0.09363688811813217	--
14	POTASSIUM	Leaf	1820.0	37128.0	0.2995628765550062	USDA's Ag Handbook 8 and sequelae)
3	PONTICAEOXIDE	Root				--
4	PHOSPHORUS	Root	610.0	3050.0	-0.0821867763972658	--
4	PHOSPHORUS	Leaf	210.0	4284.0	-0.12648268363942136	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	PHENYLALANINE	Leaf	220.0	4896.0	-1.3885269608474589	USDA's Ag Handbook 8 and sequelae)
24	PECTIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PALMITOLEIC-ACID	Root	750.0	3750.0	1.9212861697652845	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Root	410.0	2050.0	-0.30431334760427364	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Leaf	210.0	4284.0	-0.3076698789052898	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Seed				--
13	P-HYDROXY-BENZOIC-ACID	Leaf		11.0	-0.7729405090241419	--
18	OLEIC-ACID	Seed				--
18	OLEIC-ACID	Leaf	20.0	408.0	-0.6177088987554278	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Root	40.0	200.0	-0.6297846550737646	USDA's Ag Handbook 8 and sequelae)
2	NORHARMAN	Root				--
39	NIACIN	Root	4.0	20.0	-0.8763923978074498	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Leaf	5.0	102.0	0.05472679513303063	USDA's Ag Handbook 8 and sequelae)
2	NEO-CHLOROGENIC-ACID	Shoot				--
2	NEO-CHLOROGENIC-ACID	Root				--
6	MYRISTIC-ACID	Leaf	10.0	204.0	-0.6023075913949533	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Root	30.0	150.0	-0.5390201665235613	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Root	40.0	200.0	-0.8770490931439714	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Leaf	20.0	365.0	-0.692331152044028	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Leaf	50.0	1224.0	-1.5483275310004487	USDA's Ag Handbook 8 and sequelae)
3	MANNOSE	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
18	MANNITOL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Plant				--
65	MAGNESIUM	Root	220.0	1100.0	-0.7776954016677178	--
65	MAGNESIUM	Leaf	130.0	2652.0	-0.5690626388509602	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Leaf	350.0	7956.0	-1.1182801972380008	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed				--
27	LINOLEIC-ACID	Root	750.0	3750.0	0.23419013142339878	--
27	LINOLEIC-ACID	Leaf	370.0	7548.0	-0.10687088053184475	USDA's Ag Handbook 8 and sequelae)
1	LEVULOSE	Fruit Juice				--
2	LEUCINE	Leaf	390.0	8976.0	-1.160783880324028	USDA's Ag Handbook 8 and sequelae)
2	LACTUPICRIN	Plant				--
4	LACTUCOPICRIN	Latex Exudate				--
4	LACTUCOPICRIN	Fruit Juice				--
4	LACTUCOPICRIN	Root				--
6	LACTUCIN	Plant				--
6	LACTUCIN	Latex Exudate				--
6	LACTUCIN	Fruit Juice				--
6	LACTUCIN	Root				--
75	KAEMPFEROL	Plant				--
75	KAEMPFEROL	Seed		20.0		--
3	ISOLEUCINE	Leaf	540.0	12240.0	0.045339706929741146	USDA's Ag Handbook 8 and sequelae)
4	ISOCHLOROGENIC-ACID	Root				--
4	ISOCHLOROGENIC-ACID	Plant				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)
6	IRON	Root	8.0	40.0	-0.38354158556693424	--
6	IRON	Leaf	5.0	246.0	-0.29703270980762686	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
19	INULIN	Leaf				--
19	INULIN	Root	80000.0	850000.0	2.568442619517879	--
8	INOSITOL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Plant				--
30	HYPEROSIDE	Shoot				--
30	HYPEROSIDE	Leaf				--
7	HISTIDINE	Leaf	150.0	3468.0	-0.9576955368033032	USDA's Ag Handbook 8 and sequelae)
7	HARMAN	Root				--
7	GLUCOSE	Root		11000.0	-0.4327088902399002	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	FRUCTOSE	Root	45000.0	220000.0	1.999334825861607	--
15	FIBER	Plant	9000.0	153000.0	-0.5161042249299459	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Root	19500.0	97500.0	0.20849392887813434	--
61	FERULIC-ACID	Plant				--
61	FERULIC-ACID	Leaf		0.5	-1.0842680798316504	--
29	ESCULIN	Flower				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
30	ESCULETIN	Flower				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
57	COUMARIN	Plant				--
12	COPPER	Root				--
23	CITRIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CICHORIIN	Root				--
3	CICHORIIN	Plant				--
3	CICHORIIN	Flower	1000.0	2000.0		--
3	CICHORIIN	Leaf				--
14	CICHORIC-ACID	Leaf				--
20	CHOLINE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Leaf				--
77	CHLOROGENIC-ACID	Shoot				--
77	CHLOROGENIC-ACID	Root				--
77	CHLOROGENIC-ACID	Plant				--
10	CHICORIC-ACID	Plant				--
10	CHICORIC-ACID	Leaf		1100.0		--
1	CELLULOSE	Root		50000.0	-1.0	--
22	CATECHOL	Root				--
28	CALCIUM	Root	410.0	2050.0	-0.5862286623630208	--
28	CALCIUM	Leaf	790.0	19900.0	0.09995100214309341	--
102	CAFFEIC-ACID	Leaf		767.0	-0.6095210261436637	--
102	CAFFEIC-ACID	Shoot				--
4	BORON	Root		20.0	-0.14974023395860875	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).
14	BETAINE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
53	BETA-CAROTENE	Leaf	0.0	228.0	-0.14501134388228565	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	BETA-AMYRIN	Seed				--
7	ASTRAGALIN	Plant				--
7	ASTRAGALIN	Leaf				--
112	ASCORBIC-ACID	Root	50.0	250.0	-0.5030624603012167	--
112	ASCORBIC-ACID	Leaf	100.0	2040.0	-0.254634091901897	--
14	ARGININE	Leaf	660.0	14892.0	-0.29705091845608234	USDA's Ag Handbook 8 and sequelae)
101	APIGENIN	Shoot				--
5	ALUMINUM	Root				--
15	ALPHA-LINOLENIC-ACID	Root	130.0	650.0	-0.32107850770475904	USDA's Ag Handbook 8 and sequelae)
15	ALPHA-LINOLENIC-ACID	Leaf	60.0	1224.0	-1.0636070799711819	USDA's Ag Handbook 8 and sequelae)
10	ALPHA-AMYRIN	Seed				--
33	AESCULIN	Leaf				--
33	AESCULIN	Plant				--
32	AESCULETIN	Plant				--
32	AESCULETIN	Leaf				--
6	ACETOPHENONE	Root				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.
5	8-DEOXYLACTUCIN	Plant				--
5	8-DEOXYLACTUCIN	Root		17.0		--
1	11(S),13-DIHYDROLACTUCOPICRIN	Root				--
1	11(S),13-DIHYDROLACTUCIN	Root				--
1	11(S),13-DIHYDRO-8-DEOXYLACTUCIN	Root				--