

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cichorium intybus

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WATER	Leaf	931000.0	951000.0	0.7152320256671255	USDA's Ag Handbook 8 and sequelae)
0	WATER	Root	240000.0	800000.0	0.2012998824504101	--
0	CARBOHYDRATES	Root	175100.0	875500.0	0.5834772969600167	USDA's Ag Handbook 8 and sequelae)
19	INULIN	Root	80000.0	850000.0	2.568442619517879	--
0	PENTOSANE	Root	47000.0	65000.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	FRUCTOSE	Root	45000.0	220000.0	1.999334825861607	--
0	CARBOHYDRATES	Leaf	32000.0	654000.0	0.33520537705808534	--
15	FIBER	Root	19500.0	97500.0	0.20849392887813434	--
0	PROTEIN	Root	14000.0	86000.0	-0.3639841360982529	--
0	PROTEIN	Leaf	10000.0	246000.0	0.34072863379732415	--
15	FIBER	Plant	9000.0	153000.0	-0.5161042249299459	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Root	8900.0	44500.0	-0.6584550332799385	--
0	ASH	Leaf	6000.0	180000.0	1.0773581121700988	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Root	2900.0	14500.0	-0.09363688811813217	--
0	FAT	Root	2000.0	16000.0	-0.2294322736898297	--
14	POTASSIUM	Leaf	1820.0	37128.0	0.2995628765550062	USDA's Ag Handbook 8 and sequelae)
3	CICHORIIN	Flower	1000.0	2000.0		--
0	FAT	Leaf	1000.0	29000.0	-0.5472316463900033	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Root	870.0	4350.0	-0.318698697794576	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Leaf	790.0	19900.0	0.09995100214309341	--
27	LINOLEIC-ACID	Root	750.0	3750.0	0.23419013142339878	--
2	PALMITOLEIC-ACID	Root	750.0	3750.0	1.9212861697652845	USDA's Ag Handbook 8 and sequelae)
14	ARGININE	Leaf	660.0	14892.0	-0.29705091845608234	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Root	610.0	3050.0	-0.0821867763972658	--
3	ISOLEUCINE	Leaf	540.0	12240.0	0.045339706929741146	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Root	500.0	2500.0	0.6512650124326103	--
0	SFA	Root	480.0	2400.0	-0.20544019680514997	USDA's Ag Handbook 8 and sequelae)
4	PUFA	Leaf	440.0	8030.0	-1.576432461803007	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Root	410.0	2050.0	-0.30431334760427364	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Root	410.0	2050.0	-0.5862286623630208	--
3	VALINE	Leaf	410.0	9180.0	-0.9848461873827702	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Leaf	390.0	8976.0	-1.160783880324028	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Leaf	370.0	7548.0	-0.10687088053184475	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Leaf	350.0	7956.0	-1.1182801972380008	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Leaf	250.0	5712.0	-1.367011082098785	USDA's Ag Handbook 8 and sequelae)
0	SFA	Leaf	240.0	4380.0	-0.45748721001349424	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Leaf	220.0	4896.0	-1.3885269608474589	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Root	220.0	1100.0	-0.7776954016677178	--
13	PALMITIC-ACID	Leaf	210.0	4284.0	-0.3076698789052898	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Leaf	210.0	4284.0	-0.12648268363942136	--
29	TRYPTOPHAN	Leaf	160.0	3672.0	0.6804048665688907	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Leaf	150.0	3468.0	-0.9576955368033032	USDA's Ag Handbook 8 and sequelae)
15	ALPHA-LINOLENIC-ACID	Root	130.0	650.0	-0.32107850770475904	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Leaf	130.0	2652.0	-0.5690626388509602	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Leaf	100.0	2040.0	-0.254634091901897	--
1	SODIUM	Leaf	70.0	1428.0	-0.3936622771435691	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)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	METHIONINE	Leaf	50.0	1224.0	-1.5483275310004487	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Root	50.0	250.0	-0.5030624603012167	--
13	MUFA	Root	40.0	200.0	-0.8770490931439714	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Root	40.0	200.0	-0.6297846550737646	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	Leaf	20.0	365.0	-0.692331152044028	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Root	20.0	100.0	-0.6446087280612671	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Leaf	20.0	408.0	-0.6177088987554278	USDA's Ag Handbook 8 and sequelae)
7	SALICYLATES	Leaf	10.0	100.0	-0.3593779047496331	--
6	MYRISTIC-ACID	Leaf	10.0	204.0	-0.6023075913949533	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Leaf	10.0	204.0	-0.48893321127321177	USDA's Ag Handbook 8 and sequelae)
6	IRON	Root	8.0	40.0	-0.38354158556693424	--
39	NIACIN	Leaf	5.0	102.0	0.05472679513303063	USDA's Ag Handbook 8 and sequelae)
6	IRON	Leaf	5.0	246.0	-0.29703270980762686	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Root	4.0	20.0	-0.8763923978074498	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Leaf	1.0	29.0	-0.04192444032714655	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Leaf	1.0	14.0	1.1869303740705777	USDA's Ag Handbook 8 and sequelae)
53	BETA-CAROTENE	Leaf	0.0	228.0	-0.14501134388228565	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Root	0.0	2.0	-0.45399811156287	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Root	0.0	2.0	-0.41582954985618054	USDA's Ag Handbook 8 and sequelae)
77	CHLOROGENIC-ACID	Shoot				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CREPIDIASIDE-B	Plant				--
2	QUERCETIN-3-O-BETA-D-GLUCURONIDE	Plant				--
57	COUMARIN	Plant				--
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.
0	LUTEOLIN-7-O-BETA-D-GLUCURONIDE	Leaf				--
101	APIGENIN	Shoot				--
0	(11S)-11,13-DIHYDROLACTUCIN	Root				--
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).
23	CITRIC-ACID	Plant				--
0	SONCHUSIDE-C	Root		2.0		--
5	8-DEOXYLACTUCIN	Root		17.0		--
9	SINAPIC-ACID	Plant		0.5	-1.0	--
0	KAEMPFEROL-3-O-BETA-D-GLUCURONIDE	Leaf				--
77	CHLOROGENIC-ACID	Root				--
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.
0	CICHORIOSIDE-B	Plant				--
2	QUERCETIN-3-O-BETA-D-GLUCURONIDE	Leaf				--
12	COPPER	Root				--
27	LINOLEIC-ACID	Seed				--
5	ALUMINUM	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	VITAMIN-B-1	Root		0.05		--
14	BETAINE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CICHORIOSIDE-C	Root		8.0		--
0	SONCHUSIDE-A	Root		7.0		--
1	11(S),13-DIHYDROLACTUCOPICRIN	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.
75	KAEMPFEROL	Seed		20.0		--
10	CHICORIC-ACID	Plant				--
77	CHLOROGENIC-ACID	Plant				--
176	QUERCETIN	Seed		1.0		--
1	LEVULOSE	Fruit Juice				--
0	ALPHA-LACTUCEROL	Plant				--
0	VITAMIN-A	Leaf				--
24	PECTIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CICHORIOSIDE-B	Root		6.0		--
7	HARMAN	Root				--
3	SILVER	Root				--
1	11(S),13-DIHYDROLACTUCIN	Root				--
4	ISOCHLOROGENIC-ACID	Root				--
10	CHICORIC-ACID	Leaf		1100.0		--
77	ZINC	Root				--
14	CICHORIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CATECHOL-TANNINS	Root				--
3	PONTICAEPOXIDE	Root				--
0	LACTUPICRIN-METHYL-ESTER	Plant				--
4	LACTUCOPICRIN	Root				--
10	ALPHA-AMYRIN	Seed				--
0	URIDINE-5'-DIPHOSPHOGLUCOSE	Root				--
0	CICHORIOLIDE-A	Root		2.0		--
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.
4	SILICON	Root				--
1	11(S),13-DIHYDRO-8-DEOXYLACTUCIN	Root				--
19	INULIN	Leaf				--
0	CERYL-ALCOHOL	Plant				--
0	VITAMIN-B-2	Root		0.7		--
20	CHOLINE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	CATECHOL	Root				--
13	PALMITIC-ACID	Seed				--
0	LACTUCIN-P-OXYPHENYLACETICACID-ESTER	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
33	AESCULIN	Leaf				--
22	UMBELLIFERONE	Plant				--
2	LACTUPICRIN	Plant				--
3	CICHORIIN	Leaf				--
0	SILICA	Leaf		27800.0	0.9413150747474829	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Plant				--
30	HYPEROSIDE	Shoot				--
102	CAFFEIC-ACID	Shoot				--
0	TRANS-ZEATIN	Root				--
1	CELLULOSE	Root		50000.0	-1.0	--
61	FERULIC-ACID	Leaf		0.5	-1.0842680798316504	--
18	OLEIC-ACID	Seed				--
3	MANNOSE	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
6	LACTUCIN	Latex Exudate				--
33	AESCULIN	Plant				--
0	TRIDECA-1,5-DIEN-7,9,11-TRIYNE-3,4-DIOL	Root				--
2	TARAXASTEROL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	LACTUCOPICRIN	Latex Exudate				--
3	CICHORIIN	Root				--
44	SCOPOLETIN	Plant				--
2	PROTOCATECHUIC-ALDEHYDE	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSIDE	Leaf				--
0	BETA-LACTUCEROL	Plant				--
0	3-GLUCURONIDE-ISORHAMNETIN	Plant				--
8	INOSITOL	Root				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
2	NEO-CHLOROGENIC-ACID	Shoot				--
18	MANNITOL	Plant				--
75	KAEMPFEROL	Plant				--
32	AESCULETIN	Plant				--
0	TITANIUM	Root				--
35	TANNIN	Plant				--
4	LACTUCOPICRIN	Fruit Juice				--
13	P-HYDROXY-BENZOIC-ACID	Leaf		11.0	-0.7729405090241419	--
3	CICHORIIN	Plant				--
87	RUTIN	Leaf		14000.0	-0.1353936273578098	--
0	DICAFFEOYL-TARTARIC-ACID	Shoot				--
9	BETA-AMYRIN	Seed				--
0	3-GLUCURONIDE-ISORHAMNETIN	Leaf				--
2	NEO-CHLOROGENIC-ACID	Root				--
0	MANNAN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	JACQUINELIN	Root				--
32	AESCULETIN	Leaf				--
6	TARTARIC-ACID	Plant				--
6	LACTUCIN	Root				--
0	CICHORALEXIN	Leaf		146.5		--
61	FERULIC-ACID	Plant				--
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)
87	RUTIN	Seed		6400.0	0.07536225897017279	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DELPHINIDIN-3-(6"-MALONYLGLUCOSIDE)-5-MALONYLGLUCOSIDE	Inflorescence				--
0	3-O-P-COUMAROYL-QUINIC-ACID	Shoot				--
0	MONOCAFFEYOYL-TARTARIC-ACID	Leaf		1800.0		--
7	ASTRAGALIN	Plant				--
5	8-DEOXYLACTUCIN	Plant				--
0	SUGARS	Root		585000.0	4.656820199809224	--
6	LACTUCIN	Plant				--
0	CHRYSANTHEMIN	Leaf				--
30	HYPEROSIDE	Plant				--
0	RUBBER	Root		420.0	-0.4734657197361741	--
0	CYANAROSIDE	Shoot				--
0	3-O-FERULOYL-QUINIC-ACID	Shoot				--
24	VANILLIC-ACID	Leaf		0.5	-1.181981260366695	--
15	MALIC-ACID	Plant				--
7	ASTRAGALIN	Leaf				--
6	TARTARIC-ACID	Shoot				--
8	STEARIC-ACID	Plant				--
6	LACTUCIN	Fruit Juice				--
2	NORHARMAN	Root				--
77	CHLOROGENIC-ACID	Leaf				--
0	DICAFFEYOYL-TARTARIC-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)
44	QUERCITRIN	Shoot				--
0	CREPIDIASIDE-B	Root		100.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LUTEOLIN-7-O-BETA-D-GLUCURONIDE	Plant				--
0	APIGENIN-7-O-ALPHA-L-ARABINOSIDE	Shoot				--
0	(11S)-11,13-DIHYDROLACTUCOPICRIN	Root				--
102	CAFFEIC-ACID	Leaf		767.0	-0.6095210261436637	--
14	SUCROSE	Root		140000.0	0.1611945921135931	--
8	STEARIC-ACID	Seed				--
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.
0	KAEMPFEROL-3-O-BETA-D-GLUCURONIDE	Plant				--