

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Centaurea cyanus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WAX	Hull Husk				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	WAX	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	VANILLIC-ACID	Flower				Jim Duke's personal files.
22	UMBELLIFERONE	Shoot				Jim Duke's personal files.
0	TRIDECA-5,7,9-TRIIN-1,3,11-TRIEN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRIDECA-3,5,7,9-TETRAIN-1,11-DIEN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRANS-SINAPIC-ACID	Flower				Jim Duke's personal files.
0	TRANS-CAFFEIC-ACID	Flower				Jim Duke's personal files.
35	TANNIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	SYRINGIC-ACID	Flower				Jim Duke's personal files.
0	SUCCINYLCYANIN	Flower				--
44	SCOPOLETIN	Shoot				Jim Duke's personal files.
34	SALICYLIC-ACID	Flower				Jim Duke's personal files.
4	RUTOSIDE	Plant				Wealth of India.
6	QUERCIMERITRIN	Shoot				Jim Duke's personal files.
0	QUERCIMERETRIN	Plant				Wealth of India.
0	QUERCIMERETRIN	Flower				--
1	QUERCETOL	Plant				Wealth of India.
176	QUERCETIN	Shoot				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTOCYANIN	Flower		11.6		--
43	PROTOCATECHUIC-ACID	Flower				Jim Duke's personal files.
0	PROTEIN	Plant	194000.0	254000.0	0.6599808093451381	--
0	POPULNIN	Shoot				Jim Duke's personal files.
0	POLYYNES	Plant				Wealth of India.
0	POLYGALACTURONIC-ACIDS	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	POLYENES	Plant				Wealth of India.
1	PELARGONIN	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	PELARGONIDIN-3-(6'-SUCCINYL-GLUCOSIDE)-5-GLUCOSIDE	Flower				--
0	PELARGONIDIN-3,5-DIGLUCOSIDE	Flower				Wealth of India.
0	P-HYDROXYPHENYLACETIC-ACID	Flower				Jim Duke's personal files.
13	P-HYDROXY-BENZOIC-ACID	Flower				Jim Duke's personal files.
25	P-COUMARIC-ACID	Flower				Jim Duke's personal files.
0	O-HYDROXYPHENYLACETIC-ACID	Flower				Jim Duke's personal files.
2	NEO-CHLOROGENIC-ACID	Flower				Jim Duke's personal files.
2	NEO-CHLOROGENIC-ACID	Shoot				Jim Duke's personal files.
1	N-NONACOSANE	Flower				Jim Duke's personal files.
3	MUCILAGE	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
78	LUTEOLIN	Plant				Wealth of India.
78	LUTEOLIN	Shoot				Jim Duke's personal files.
0	KAEMPFEROL-3-O-GLUCOSIDE	Plant				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
75	KAEMPFEROL	Shoot				Jim Duke's personal files.
75	KAEMPFEROL	Plant				Wealth of India.
11	ISORHAMNETIN	Shoot				Jim Duke's personal files.
4	ISOCHLOROGENIC-ACID	Shoot				Jim Duke's personal files.
6	IRON	Plant				--
7	HISPIDULIN	Shoot				Jim Duke's personal files.
0	GRAVEOBIOSIDE	Shoot				Jim Duke's personal files.
0	FRAGARIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
61	FERULIC-ACID	Flower				Jim Duke's personal files.
0	FAT	Seed	158000.0	181000.0	-0.4444996284388564	--
3	CYNAROSIDE	Shoot				Jim Duke's personal files.
0	CYANOCENTAURIN	Flower		975.0		Jim Duke's personal files.
0	CYANOCENTAUREIN	Flower				--
5	CYANIN	Flower				--
0	CYANIDIN-5-O-BETA-D-GLUCOSIDE-3-O-BETA-D-(6-SUCCINYL-GLUCOSIDE)	Inflorescence				Jim Duke's personal files.
0	CYANIDIN-3-(6'-MALONYL-GLUCOSIDE)	Stem				Jim Duke's personal files.
0	CYANIDIN-3,5-DIGLUCOSIDE	Flower				--
0	COSMOSSIIN	Shoot				Jim Duke's personal files.
10	CNICIN	Flower				Wealth of India.
0	CIS-SINAPIC-ACID	Flower				Jim Duke's personal files.
0	CIS-CAFFEIC-ACID	Flower				Jim Duke's personal files.
3	CICHORIIN	Flower				--
77	CHLOROGENIC-ACID	Shoot				Jim Duke's personal files.
77	CHLOROGENIC-ACID	Flower				Jim Duke's personal files.
0	CENTAURUCYANIN	Flower				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CENTAUR-Y-2	Shoot				Jim Duke's personal files.
0	CENTAUR-Y-1	Shoot				Jim Duke's personal files.
0	CENTAUR-Y	Plant				Wealth of India.
0	CENTAUR-Y	Shoot				Jim Duke's personal files.
0	CENTAUR-X-3	Shoot				Jim Duke's personal files.
0	CENTAUR-X-1	Shoot				Jim Duke's personal files.
0	CENTAUR-X	Shoot				Jim Duke's personal files.
0	CENTAUR-X	Plant				Wealth of India.
102	CAFFEIC-ACID	Shoot				Jim Duke's personal files.
102	CAFFEIC-ACID	Flower				Jim Duke's personal files.
0	C-GLYCOSYL-FLAVONE-7-O-METHYL-VITEXIN	Flower				Wealth of India.
47	BETA-SITOSTEROL	Flower				Jim Duke's personal files.
20	BENZOIC-ACID	Flower				Jim Duke's personal files.
1	ARNIDIOL	Flower				Jim Duke's personal files.
4	APIIN	Shoot				Jim Duke's personal files.
4	APIIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	APIGENIN-7-GLUCOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	APIGENIN-4'-O-BETA-D-GLUCOSIDE-7-O-BETA-D-GLUCURONIDE	Flower				--
0	APIGENIN-4'-O-BETA-D-GLUCOSIDE	Shoot				Jim Duke's personal files.
0	APIGENIN-4'-O-(6-O-MALONYL-BETA-D-GLUCOSIDE)-7-O-BETA-D-GLUCURONIDE	Flower				--
101	APIGENIN	Shoot				Jim Duke's personal files.
5	ALUMINUM	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	ACETIC-ACID	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.