

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Echinacea purpurea

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	ALUMINUM	Root	197.0	786.0	0.10925347177124488	--
6	ARABINO GALACTAN	Tissue Culture				Jim Duke's personal files.
6	ARABINO GALACTAN	Shoot				Jim Duke's personal files.
112	ASCORBIC-ACID	Root	212.0	843.0	-0.16407727962118843	--
53	BETA-CAROTENE	Root	0.6	2.2	-0.4223548942066434	--
47	BETA-SITOSTEROL	Root				Jim Duke's personal files.
14	BETAINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	BETAINE	Root				Jim Duke's personal files.
35	BORNEOL	Shoot				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	BORNYL-ACETATE	Shoot				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	CALCIUM	Root	826.0	3290.0	-0.4504262877394521	--
31	CARYOPHYLLENE	Shoot				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
6	CARYOPHYLLENE-EPOXIDE	Shoot				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
24	CHROMIUM	Root	0.5	1.9	-0.18124589408844657	--
14	CICHORIC-ACID	Root	123.0	21000.0		--
14	CICHORIC-ACID	Flower	12000.0	31000.0		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	CICHORIC-ACID	Shoot				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Root	4.0	14.8	-0.2239738444132915	--
5	CYANIN	Flower				Jim Duke's personal files.
1	ECHINACIN-B	Root				Jim Duke's personal files.
10	ECHINACOSIDE	Root				Jim Duke's personal files.
2	GERMACRENE-D	Shoot		120.0	-0.3032170149983238	--
12	GLYCINE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	HETEROXYLAN	Shoot				Jim Duke's personal files.
19	INULIN	Root	42670.0	170000.0	-0.5352651016442753	--
6	IRON	Root	18.0	70.0	-0.3399578709623491	--
65	MAGNESIUM	Root	467.0	1860.0	-0.3732958440640499	--
14	MANGANESE	Root	3.0	10.1	-0.4252699671884822	--
39	NIACIN	Root	17.0	68.0	0.5147577614900641	--
25	P-COUMARIC-ACID	Fruit Juice				Jim Duke's personal files.
4	PHOSPHORUS	Root	198.0	790.0	-0.47928982526561387	--
14	POTASSIUM	Root	2031.0	8090.0	-0.5629990790704673	--
176	QUERCETIN	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	RIBOFLAVIN	Root	3.0	12.0	1.734423986242379	--
87	RUTIN	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	RUTOSIDE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
60	SELENIUM	Root	0.5	2.1	-0.21306605490417255	--
4	SILICON	Root	8.0	30.1	-0.20463462833135423	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Root	23.0	90.0	-0.4708671369343761	--
5	STARCH	Root	30120.0	120000.0	-0.818804895582863	--
14	SUCROSE	Root		34000.0	-0.9160418188104167	Jim Duke's personal files.
4	TIN	Root	4.3	17.0	0.05222691114208539	--
1	TUSSILAGINE	Root	15.0	60.0		--
28	VANILLIN	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	VANILLIN	Shoot		2.4		Jim Duke's personal files.
77	ZINC	Root	1.3	5.1	-0.8355779101426338	--