

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Echinacea pallida*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	3,5-DI-O-CAFFEOYLQUINIC-ACID	Flower	--	--		Jim Duke's personal files.
3	3,5-DI-O-CAFFEOYLQUINIC-ACID	Leaf	--	--		Jim Duke's personal files.
3	3,5-DI-O-CAFFEOYLQUINIC-ACID	Root	--	--		Jim Duke's personal files.
47	BETA-SITOSTEROL	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.
3	CAFTARIC-ACID	Leaf	--	--		Jim Duke's personal files.
3	CAFTARIC-ACID	Root	--	--		Jim Duke's personal files.
3	CAFTARIC-ACID	Flower	--	--		Jim Duke's personal files.
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.
10	CHICORIC-ACID	Leaf	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
10	CHICORIC-ACID	Root	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
10	CHICORIC-ACID	Flower	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Flower	--	--		Jim Duke's personal files.
77	CHLOROGENIC-ACID	Leaf	--	--		
77	CHLOROGENIC-ACID	Root	--	--		Jim Duke's personal files.
14	CICHORIC-ACID	Root	--	--		Jim Duke's personal files.
14	CICHORIC-ACID	Shoot	--	--		Jim Duke's personal files.
14	CICHORIC-ACID	Flower	--	--		Jim Duke's personal files.
14	CICHORIC-ACID	Leaf	--	--		Jim Duke's personal files.
5	CYANIN	Flower	--	--		Jim Duke's personal files.
3	ECHINACEIN	Root	--	10	-1.414213562373095	Jim Duke's personal files.
10	ECHINACOSIDE	Root	4000	17000	0.7071067811865469	
10	ECHINACOSIDE	Flower	--	--		
10	ECHINACOSIDE	Leaf	--	--		Jim Duke's personal files.
2	GERMACRENE-D	Shoot	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	ISOCHLOROGENIC-ACID	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.
20	VERBASCOSIDE	Flower	--	--		Jim Duke's personal files.
20	VERBASCOSIDE	Leaf	--	--		Jim Duke's personal files.
20	VERBASCOSIDE	Root	--	--		Jim Duke's personal files.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	VERBASCOSIDE	Plant	--	--		