

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Chrysanthemum parthenium*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	1-BETA-HYDROXYARBUSCULIN	Plant				--
0	10-EPICANIN	Plant				--
0	8-BETA-REYNOSIN	Plant				--
0	ALPHA-COPAENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
2	ALPHA-HUMULENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
28	ALPHA-PINENE	Shoot		15.0	-0.14595252753743698	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
13	ALPHA-TERPINENE	Shoot		45.0	-0.35510895262369646	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
23	ALPHA-TERPINEOL	Shoot		2.5	-0.2832600201311504	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	ALPHA-THUJENE	Shoot		15.0	-0.2864465102156434	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of <i>Tanacetum parthenium</i> (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
5	ALUMINUM	Leaf	1.1	6.2	-0.7739201621517691	--
5	ALUMINUM	Plant		6.0	-0.7451443685154636	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	APIGENIN-7-GLUCOSIDE	Plant				--
112	ASCORBIC-ACID	Leaf	59.0	330.0	-0.4133003020377577	--
112	ASCORBIC-ACID	Plant		330.0	-0.5162152379862993	--
0	ASH	Plant		171000.0	0.9030718561913528	--
0	ASH	Leaf	3060.0	17000.0	-1.7945017791514293	--
24	BENZALDEHYDE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
1	BENZYL-ISOBUTYRATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
1	BENZYL-ISOVALERATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
2	BENZYL-PROPIONATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
53	BETA-CAROTENE	Plant		14.0	-0.6513567486971203	--
53	BETA-CAROTENE	Leaf	2.5	14.0	-1.0769698969992798	--
0	BETA-CARYOPHYLLENE	Shoot		8.0	-0.39375252938120847	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	BETA-FARNESENE	Shoot		38.0	-0.24708098720222307	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-PINENE	Shoot		4.0	-0.12082019397820601	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
35	BORNEOL	Shoot		9.0	-0.3900888401961888	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
12	BORNYL-ACETATE	Shoot		28.0	-0.36126712188937815	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
28	CALCIUM	Plant		5810.0	-0.8321353407836742	--
28	CALCIUM	Leaf	1046.0	5810.0	-0.8627855213639186	--
9	CAMPHENE	Shoot		95.0	-0.1255113105525119	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
41	CAMPHOR	Shoot		640.0	-0.13323257181495227	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	CARBOHYDRATES	Plant		514000.0	-1.0198824234248682	--
0	CARBOHYDRATES	Leaf	92520.0	514000.0	-0.7781607360165105	--
37	CARVACROL	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
6	CARYOPHYLENE-EPOXIDE	Shoot		31.0	1.6391694335729892	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
24	CHROMIUM	Plant		17.0	0.7215583160252136	--
24	CHROMIUM	Leaf	0.3	1.7	-0.5014979759508905	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CHRYSANTHEMOLIDE	Plant				--
0	CHRYSANTHEMOMIN	Plant				--
0	CHRYSANTHENOL	Shoot		21.0	1.0	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
2	CHRYSANTHENYL-ACETATE	Shoot		360.0		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	CHRYSANTHENYL-ANGELATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	CHRYSANTHENYL-ISOVALERATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	CHRYSANTHENYL-PROPIONATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	CHRYSARTEN-A	Plant				--
0	CHRYSARTEN-B	Plant				--
2	COBALT	Leaf				--
2	COBALT	Plant				--
4	COSMOSIIN	Flower				--
10	CUMINALDEHYDE	Shoot		0.0	-0.32576507180696485	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CURCUMENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
9	DELTA-CADINENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	EO	Plant	200.0	700.0	-0.686929830421695	--
0	EO	Shoot		1500.0	-0.8141965329475307	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	FAT	Seed		312000.0	0.24552423015523567	--
0	FAT	Plant		48000.0	-0.05468700183087534	--
0	FAT	Leaf	8640.0	48000.0	-0.16862267810970435	--
15	FIBER	Plant		143000.0	-0.5900378792839802	--
0	FIBER(CRUDE)	Leaf		143000.0	0.4073212431936249	--
0	FIBER(DIETARY)	Leaf		390000.0	0.1864056874270924	--
11	GAMMA-TERPINENE	Shoot		28.0	-0.3749884139681809	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
2	GERMACRENE-D	Shoot		45.0	-0.3452637958418838	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
6	IRON	Plant				--
6	IRON	Leaf				--
0	KILOCALORIES	Plant		2860.0	-0.40616652820501614	--
0	L-BORNEOL	Plant				--
0	L-CAMPHOR	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	LINALYL-PROPIONATE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
65	MAGNESIUM	Plant		2400.0	-0.5172740870337147	--
65	MAGNESIUM	Leaf	432.0	2400.0	-0.6663684293483372	--
14	MANGANESE	Plant		81.0	-0.11436285896481094	--
14	MANGANESE	Leaf	1.5	8.1	-0.4464199708972928	--
0	MANGOLIOLIDE	Plant				--
39	NIACIN	Plant				--
39	NIACIN	Leaf	69.0	385.0	3.4970225601256777	--
16	P-CYMENE	Shoot		9.0	-0.49426810257944204	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	P-CYMENENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	P-ETHYLBENZALDEHYDE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	P-METHYLBENZALDEHYDE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
27	PARTHENOLIDE	Flower				--
0	PARTHOLIDE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Plant		5010.0	0.683008160317236	--
4	PHOSPHORUS	Leaf	902.0	5010.0	0.0070918616587032435	--
1	PINOCARVONE	Shoot		2.0	-0.6307569440575539	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
14	POTASSIUM	Plant		22500.0	0.04901058337072094	--
14	POTASSIUM	Leaf	4050.0	22500.0	-0.34637690026129236	--
0	PROTEIN	Leaf	48060.0	267000.0	0.550223924536316	--
0	PROTEIN	Seed		222000.0	-0.10493212955134139	--
0	PROTEIN	Plant		267000.0	0.7665154169276235	--
1	REYNOSIN	Plant				--
15	RIBOFLAVIN	Leaf	0.5	2.5	-0.16614280918315402	--
15	RIBOFLAVIN	Plant		2.5	-0.6210248948087893	--
5	SABINENE	Shoot		5.0	-0.29059831881924897	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
0	SABINENE-HYDRATE	Shoot		1.5		Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
5	SANTAMARIN	Leaf				--
5	SANTAMARIN	Flower				--
60	SELENIUM	Leaf	0.3	1.7	-0.251928089645715	--
60	SELENIUM	Plant				--
4	SILICON	Leaf	0.8	4.6	-0.3995099669647397	--
4	SILICON	Plant		46.0	-0.2687912012116913	--
1	SODIUM	Plant		48.0	-0.3014209590315537	--
1	SODIUM	Leaf	9.0	48.0	-0.6387597714851067	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TANAPARTHIN	Plant				--
0	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Plant				--
0	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Plant				--
23	TERPINEN-4-OL	Shoot		4.0	-0.16552235945768073	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
9	TERPINOLENE	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
31	THIAMIN	Plant		4.1	-0.2974931626940486	--
0	THIAMINE	Leaf	0.7	4.1	-0.26811729173866755	--
2	THUJOPSENE	Shoot		1.5	-0.7071067811865476	Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
71	THYMOL	Shoot				Hendriks, H., Bos, R., and Woerdenbag, H. J. 1996. The Essential Oil of Tanacetum parthenium (L.) Schultz-Bip. Flavor and Fragrance Journal 11(6): 367-71.
4	TIN	Leaf	4.0	21.0	0.6450694378363876	--
4	TIN	Plant		21.0	0.00964806037643002	--
0	WATER	Leaf		820000.0	0.0616753912432856	--
0	WATER	Plant		895000.0	0.5311464179022468	--
77	ZINC	Leaf				--
77	ZINC	Plant				--