

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Chrysanthemum parthenium*

Activity 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	-0.14595252753743698	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	-0.35510895262369646	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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Shoot	--	2.5	-0.2832600201311504	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	ALPHA-THUJENE	Shoot	--	15	-0.2864465102156434	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	ALUMINUM	Leaf	1.1	6.2	-0.7739201621517691	
5	ALUMINUM	Plant	--	6	-0.7451443685154636	
0	APIGENIN-7-GLUCOSIDE	Plant	--	--		
112	ASCORBIC-ACID	Leaf	59	330	-0.4133003020377577	
112	ASCORBIC-ACID	Plant	--	330	-0.5162152379862993	
0	ASH	Leaf	3060	17000	-1.7945017791514293	
0	ASH	Plant	--	171000	0.9030718561913528	
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Leaf	2.5	14	-1.0769698969992798	
53	BETA-CAROTENE	Plant	--	14	-0.6513567486971203	
0	BETA-CARYOPHYLLENE	Shoot	--	8	-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	-0.24708098720222307	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.
13	BETA-PINENE	Shoot	--	4	-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	-0.3900888401961888	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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	BORNYL-ACETATE	Shoot	--	28	-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	-0.8321353407836742	
28	CALCIUM	Leaf	1046	5810	-0.8627855213639186	
9	CAMPHENE	Shoot	--	95	-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	-0.13323257181495227	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	-1.0198824234248682	
0	CARBOHYDRATES	Leaf	92520	514000	-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	CARYOPHYLLENE-EPOXIDE	Shoot	--	31	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	Leaf	0.3	1.7	-0.5014979759508905	
24	CHROMIUM	Plant	--	17	0.7215583160252136	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CHRYSANTHEMOLIDE	Plant	--	--		
0	CHRYSANTHEMOMIN	Plant	--	--		
0	CHRYSANTHENOL	Shoot	--	21	1	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		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	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	COSMOSIIN	Flower	--	--		
10	CUMINALDEHYDE	Shoot	--	--	-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.
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	Shoot	--	1500	-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	EO	Plant	200	700	-0.686929830421695	
0	FAT	Plant	--	48000	-0.05468700183087534	
0	FAT	Seed	--	312000	0.24552423015523567	
0	FAT	Leaf	8640	48000	-0.16862267810970435	
15	FIBER	Plant	--	143000	-0.5900378792839802	
0	FIBER(CRUDE)	Leaf	--	143000	0.4073212431936249	
0	FIBER(DIETARY)	Leaf	--	390000	0.1864056874270924	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Shoot	--	28	-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	-0.3452637958418838	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	Leaf	--	--		
6	IRON	Plant	--	--		
0	KILOCALORIES	Plant	--	2860	-0.40616652820501614	
0	L-BORNEOL	Plant	--	--		
0	L-CAMPHOR	Essential Oil	--	--		
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	Leaf	432	2400	-0.6663684293483372	
65	MAGNESIUM	Plant	--	2400	-0.5172740870337147	
14	MANGANESE	Leaf	1.5	8.1	-0.4464199708972928	
14	MANGANESE	Plant	--	81	-0.11436285896481094	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MANGOLIOLIDE	Plant	--	--		
39	NIACIN	Plant	--	--		
39	NIACIN	Leaf	69	385	3.4970225601256777	
16	P-CYMENE	Shoot	--	9	-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	--	--		
4	PHOSPHORUS	Plant	--	5010	0.683008160317236	
4	PHOSPHORUS	Leaf	902	5010	0.0070918616587032435	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PINOCARVONE	Shoot	--	2	-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	Leaf	4050	22500	-0.34637690026129236	
14	POTASSIUM	Plant	--	22500	0.04901058337072094	
0	PROTEIN	Leaf	48060	267000	0.550223924536316	
0	PROTEIN	Plant	--	267000	0.7665154169276235	
0	PROTEIN	Seed	--	222000	-0.10493212955134139	
1	REYNOSIN	Plant	--	--		
15	RIBOFLAVIN	Leaf	0.5	2.5	-0.16614280918315402	
15	RIBOFLAVIN	Plant	--	2.5	-0.6210248948087893	
5	SABINENE	Shoot	--	5	-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	Flower	--	--		
5	SANTAMARIN	Leaf	--	--		
60	SELENIUM	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	SELENIUM	Leaf	0.3	1.7	-0.251928089645715	
4	SILICON	Plant	--	46	-0.2687912012116913	
4	SILICON	Leaf	0.8	4.6	-0.3995099669647397	
1	SODIUM	Leaf	9	48	-0.6387597714851067	
1	SODIUM	Plant	--	48	-0.3014209590315537	
0	TANAPARTHIN	Plant	--	--		
0	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Plant	--	--		
0	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Plant	--	--		
23	TERPINEN-4-OL	Shoot	--	4	-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.

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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	21	0.6450694378363876	
4	TIN	Plant	--	21	0.00964806037643002	
0	WATER	Plant	--	895000	0.5311464179022468	
0	WATER	Leaf	--	820000	0.0616753912432856	
77	ZINC	Leaf	--	--		
77	ZINC	Plant	--	--		