

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.
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.
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.
5	ALUMINUM	Plant	--	6	-0.7451443685154636	
5	ALUMINUM	Leaf	1.1	6.2	-0.7739201621517691	
112	ASCORBIC-ACID	Leaf	59	330	-0.4133003020377577	
112	ASCORBIC-ACID	Plant	--	330	-0.5162152379862993	
24	BENZALDEHYDE	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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Leaf	2.5	14	-1.0769698969992798	
53	BETA-CAROTENE	Plant	--	14	-0.6513567486971203	
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.
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	Leaf	1046	5810	-0.8627855213639186	
28	CALCIUM	Plant	--	5810	-0.8321353407836742	
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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	Plant	--	17	0.7215583160252136	
24	CHROMIUM	Leaf	0.3	1.7	-0.5014979759508905	
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.
2	COBALT	Leaf	--	--		
2	COBALT	Plant	--	--		
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.
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.
15	FIBER	Plant	--	143000	-0.5900378792839802	

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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	Plant	--	--		
6	IRON	Leaf	--	--		
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.
65	MAGNESIUM	Plant	--	2400	-0.5172740870337147	
65	MAGNESIUM	Leaf	432	2400	-0.6663684293483372	
14	MANGANESE	Plant	--	81	-0.11436285896481094	
14	MANGANESE	Leaf	1.5	8.1	-0.4464199708972928	
39	NIACIN	Leaf	69	385	3.4970225601256777	
39	NIACIN	Plant	--	--		
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.
27	PARTHENOLIDE	Flower	--	--		
4	PHOSPHORUS	Plant	--	5010	0.683008160317236	
4	PHOSPHORUS	Leaf	902	5010	0.0070918616587032435	

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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	Plant	--	22500	0.04901058337072094	
14	POTASSIUM	Leaf	4050	22500	-0.34637690026129236	
1	REYNOSIN	Plant	--	--		
15	RIBOFLAVIN	Plant	--	2.5	-0.6210248948087893	
15	RIBOFLAVIN	Leaf	0.5	2.5	-0.16614280918315402	
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.
5	SANTAMARIN	Flower	--	--		
5	SANTAMARIN	Leaf	--	--		
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	-0.2687912012116913	
1	SODIUM	Plant	--	48	-0.3014209590315537	
1	SODIUM	Leaf	9	48	-0.6387597714851067	
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.

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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	
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	Plant	--	21	0.00964806037643002	
4	TIN	Leaf	4	21	0.6450694378363876	
77	ZINC	Plant	--	--		
77	ZINC	Leaf	--	--		