

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Tanacetum parthenium*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-EPOXYARTEMORIN	Leaf				--
2	(-)-CAMPHOR	Plant				--
0	(-)-EPOXYARTEMORIN	Leaf				--
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	Leaf				--
0	1-BETA-HYDROXYARBUSCULIN	Plant				--
0	10-EPICANIN	Leaf				--
0	10-EPICANIN	Shoot		0.4		--
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Root		100.0		--
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		1.2		--
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-TRANS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		0.6		--
0	2-METHYLPENTA-2,4-DIENE	Fruit Essent. Oil		2000.0		--
0	3,4-BETA-EPOXY-8-DEOXYCUMAMBRIN-B	Flower		485.0		--
0	3-BETA-HYDROXYCOSTUNOLIDE	Leaf				--
0	3-BETA-HYDROXYCOSTUNOLIDE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	3-BETA-HYDROXYCOSTUNOLIDE	Shoot		4.0		--
1	3-BETA-HYDROXYPARTHENOLIDE	Leaf				--
1	3-BETA-HYDROXYPARTHENOLIDE	Shoot		1.2		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4-BETA-ACETOXY-CHRYSANTHENONE	Shoot		1.2		--
0	5-BETA-HYDROXYREYNOSIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	8-ALPHA-ANGELOYL-OXYESTAFIATIN	Shoot		3.0		--
0	8-ALPHA-HYDROXYESTAFIATIN	Shoot		0.4		--
0	8-ALPHA-ISOBUTYRYL-OXYESTAFIATIN	Shoot		2.0		--
0	8-BETA-HYDROXYREYNOSIN	Plant				--
0	8-BETA-HYDROXYREYNOSIN	Leaf				--
0	8-BETA-REYNOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-EPIPECTACHOL	Root		143.0		--
36	ALANTOLACTONE	Leaf				--
0	ALPHA-COPAENE	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	ALPHA-FARNESENE	Fruit Essent. Oil				--
2	ALPHA-HUMULENE	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.
11	ALPHA-PHELLANDRENE	Essential Oil		6000.0	-0.4769076636125325	--
28	ALPHA-PINENE	Shoot		15.0	-0.14595252753743698	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	ALPHA-PINENE	Essential Oil		10000.0	-0.47207505752571344	--
28	ALPHA-PINENE	Fruit Essent. Oil		2000.0	-0.8225046812392973	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	ALPHA-TERPINENE	Shoot		45.0	-0.35510895262369646	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	ALPHA-TERPINENE	Plant				--
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.
23	ALPHA-TERPINEOL	Plant				--
0	ALPHA-THUJENE	Shoot		15.0	-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.
0	ALPHA-THUJENE	Essential Oil		6000.0	-0.36186369670280605	--
0	ALPHA-THUJENE	Fruit Essent. Oil		2000.0	-0.7397616687333448	--
5	ALUMINUM	Plant		6.0	-0.7451443685154636	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	APIGENIN-7-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	APIGENIN-7-GLUCURONIDE	Leaf				--
4	ARTECANIN	Shoot		0.4		--
4	ARTECANIN	Leaf				--
4	ARTECANIN	Plant				--
1	ARTEMORIN	Shoot		4.0		--
112	ASCORBIC-ACID	Plant		330.0	-0.5162152379862993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ASH	Plant		171000.0	0.9030718561913528	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	BENZYL-2-METHYL-BUTYRATE	Fruit Essent. Oil		5000.0		--
9	BENZYL-ALCOHOL	Fruit Essent. Oil				--
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	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BETA-CARYOPHYLLENE	Essential Oil				--
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		12.0	-0.39419791087988254	--
0	BETA-FARNESENE	Essential Oil		8000.0		--
0	BETA-FARNESENE	Root		40.0	1.4074654870795833	--
13	BETA-PINENE	Essential Oil				--
13	BETA-PINENE	Fruit Essent. Oil		1000.0	-0.7715573703107804	--

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.
47	BETA-SITOSTEROL	Leaf Essent. Oil		16000.0		--
47	BETA-SITOSTEROL	Fruit Essent. Oil				--
0	BICYCLOGERMACRENE	Root		4.0		--
35	BORNEOL	Essential Oil		10000.0	-0.8168042453042687	--
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.
35	BORNEOL	Fruit Essent. Oil		1300.0		--
0	BORNEOL-ACETATE	Shoot		1.2		--
0	BORNEOL-ACETATE	Essential Oil		7000.0	-0.6918807209736767	--
0	BORNEOL-ACETATE	Fruit Essent. Oil		7000.0		--
0	BORNEOL-ANGELATE	Shoot		0.8		--
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.
0	BUTYL-BENZENE	Fruit Essent. Oil				--
28	CALCIUM	Plant		5810.0	-0.8321353407836742	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	CAMPHENE	Leaf Essent. Oil		30000.0	0.1899278105662218	--
9	CAMPHENE	Essential Oil		54000.0	0.9292841063141826	--
9	CAMPHENE	Fruit Essent. Oil		7000.0	-0.3352780859890732	--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
41	CAMPHOR	Leaf Essent. Oil		201000.0	0.40766428831174817	--
41	CAMPHOR	Essential Oil		442000.0	1.342251919291669	--
41	CAMPHOR	Fruit Essent. Oil		189000.0		--
41	CAMPHOR	Shoot		24.0	-0.15638075587436032	--
5	CANIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	CANIN	Shoot		0.8		--
5	CANIN	Leaf				--
0	CAR-3-ENE	Fruit Essent. Oil				--
0	CARBOHYDRATES	Plant		514000.0	-1.0198824234248682	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
31	CARYOPHYLLENE	Fruit Essent. Oil				--
6	CARYOPHYLLENE-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.
8	CARYOPHYLLENE-OXIDE	Fruit Essent. Oil		4000.0	-1.0	--
24	CHROMIUM	Plant		1.7	-0.7046051474035722	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CHRYSANTH-TRANS-ENYL-ACETATE	Essential Oil		235000.0		--
0	CHRYSANTHEMOLIDE	Leaf				--
0	CHRYSANTHEMOMIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CHRYSANTHEMUM-PARTHENIUM-EN-YNE-BICLCLO-ETHER	Root		3.0		--
0	CHRYSANTHEMUM-SESQUITERPENE-LACTONE	Leaf				--
0	CHRYSANTHENOL	Shoot		2.0	-1.0	--
0	CHRYSANTHENOL-4-ACETATE	Shoot		1.2		--
0	CHRYSANTHENOL-4-BETA-HYDROXY	Shoot		3.0		--
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				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CHRYSARTEN-B	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CHRYSARTHEMIN-A	Plant				--
0	CHRYSARTHEMIN-B	Plant				--
0	CHRYSOERIOL-7-GLUCURONIDE	Leaf				--
0	CIS-CHRYSANTHENOL-ACETATE	Shoot		1.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-CHRYSANTHENOL-ACETATE	Leaf				--
0	CIS-CHRYSANTHENOL-ANGELATE	Shoot		1.0		--
0	CIS-CHRYSANTHENOL-ISOVALERATE	Shoot		0.8		--
0	CIS-DENDRANTHEMA-SPIROFURAN-A	Shoot		8.0		--
0	CIS-SPIROKETOL-ENOL-ETHER	Root Essent. Oil		575000.0		--
2	COBALT	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	COSMOSIIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	COSTIC-ACID-METHYL-ESTER	Shoot		0.8		--
9	COSTUNOLIDE	Shoot		6.0	-1.0	--
9	COSTUNOLIDE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
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.
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.
3	CYNAROSIDE	Leaf				--
0	D-FRIEDOOLEAN-14-EN-3-OL	Root Essent. Oil		53000.0		--
0	DEHYDROSAUSSUREALAC TONE	Fruit Essent. Oil		6000.0		--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
9	DELTA-CADINENE	Essential Oil				--
0	DOCOS-3-ENE	Fruit Essent. Oil		60000.0		--
1	ELEUTHEROSIDE-B-1	Shoot				--
0	EO	Plant	200.0	700.0	-0.686929830421695	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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	EPOXYARTEMORIN	Leaf				--
0	EPOXYSANTAMARINE	Flower		30.0		--
0	EUDESMANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
76	EUGENOL	Essential Oil				--
76	EUGENOL	Fruit Essent. Oil		1000.0		--
2	FARNESENE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	FAT	Seed		312000.0	0.24552423015523567	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Plant		48000.0	-0.05468700183087534	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	FIBER	Plant		143000.0	-0.5900378792839802	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Essential Oil		10000.0	-0.6855735643465313	--
11	GAMMA-TERPINENE	Fruit Essent. Oil		1000.0	-1.0164567396291118	--
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.
0	GERMACRENE	Plant		14900.0		--
0	GERMACRENE-A	Tissue Culture				--
2	GERMACRENE-D	Shoot		4.0	-0.36824936936969666	--
2	GERMACRENE-D	Essential Oil		46000.0	-1.0	--
2	GERMACRENE-D	Leaf Essent. Oil		31000.0	-0.5383216002693361	--
2	GERMACRENE-D	Tissue Culture				--
0	GERMACRONOLIDES	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	GUAIANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	HEX-CIS-3-EN-1-OL	Fruit Essent. Oil				--
0	HEX-TRANS-2-EN-1-AL	Fruit Essent. Oil				--
0	HEXAN-1-AL	Fruit Essent. Oil				--
6	IRON	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ISOAMYL-ISOVALERATE	Fruit Essent. Oil		2000.0		--
5	ISOFRAXIDIN	Root		122.0	1.0	--
0	KILOCALORIES	Plant		2860.0	-0.40616652820501614	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

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0	L-BORNEOL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
60	LIMONENE	Essential Oil		5000.0	-0.7082860385987012	--
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.
53	LINALOOL	Essential Oil		13000.0	-0.5248552467846653	--
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.
3	LUTEOLIN-7-GLUCURONIDE	Leaf				--
65	MAGNESIUM	Plant		2400.0	-0.5172740870337147	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	MAGNOLIALIDE	Plant				--
14	MANGANESE	Plant		8.1	-0.6368507291246737	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	MANGOLIOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
23	MELATONIN	Leaf	6.0	3500.0	1.4142114910611014	--
0	MICHEFUSCALIDE	Leaf				--
22	MYRCENE	Fruit Essent. Oil				--
39	NIACIN	Plant		285.0	2.918886504988539	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	OCTANOIC-ACID-ETHYL-ESTER	Fruit Essent. Oil		1000.0		--
0	ORTHO-CARSINE	Plant				Tramil

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
16	P-CYMENE	Essential Oil		31000.0	-0.3774568610491117	--
16	P-CYMENE	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
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-METHYL-ISO-PROPENYLBENZENE	Fruit Essent. Oil				--
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	Shoot	80.0	8700.0		--
27	PARTHENOLIDE	Leaf Essent. Oil		61000.0		--
27	PARTHENOLIDE	Flower	0.0	2424.0		--
27	PARTHENOLIDE	Leaf	130.0	300000.0		--
27	PARTHENOLIDE	Fruit Essent. Oil		284000.0		--
27	PARTHENOLIDE	Plant				--
27	PARTHENOLIDE	Seed		15200.0		--
0	PARTHENOLIDES	Plant		9000.0		--
0	PARTHOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
4	PHOSPHORUS	Plant		5010.0	0.683008160317236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PINOCARVONE	Essential Oil				--
1	PINOCARVONE	Fruit Essent. Oil		2000.0		--
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	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PROTEIN	Seed		222000.0	-0.10493212955134139	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Plant		267000.0	0.7665154169276235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PYRETHRIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Leaf				--
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Flower				--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Leaf				--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Flower				--
1	REYNOSIN	Shoot		0.4		--
1	REYNOSIN	Flower		1485.0		--
1	REYNOSIN	Plant				--
1	REYNOSIN	Leaf				--
15	RIBOFLAVIN	Plant		2.5	-0.6210248948087893	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
5	SABINENE	Essential Oil				--
5	SABINENE	Fruit Essent. Oil		1000.0	-0.7138066475051742	--
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.
0	SABINENE-HYDRATE	Fruit Essent. Oil				--
5	SABINOL	Fruit Essent. Oil		1300.0		--
5	SANTAMARIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	SANTAMARIN	Flower				--
5	SANTAMARIN	Plant				--
3	SANTAMARINE	Flower		424.0		--
0	SANTIN	Plant				--
0	SECOTANAPARATHOLIDE	Leaf				--
0	SECOTANAPARTHENOLID E	Plant				--
0	SECOTANAPARTHOLIDE-A	Shoot		0.2		--
0	SECOTANAPARTHOLIDE-A	Leaf				--
0	SECOTANAPARTHOLIDE-B	Shoot		0.8		--
0	SECOTANAPARTHOLIDE-B	Leaf				--
60	SELENIUM	Plant		1.7	-0.3516547080519198	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Plant		4.6	-0.5184035386753152	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Plant		48.0	-0.3014209590315537	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
12	STIGMASTEROL	Fruit Essent. Oil				--
0	TANACETIN	Shoot		15800.0		--
0	TANACETIN	Plant				Tramil
0	TANAPARTHIN	Leaf				--
0	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Leaf				--
0	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Leaf				--
0	TANAPARTHIN-ALPHA-PEROXIDE	Shoot		1.6		--
0	TANAPARTHIN-ALPHA-PEROXIDE	Leaf				--
0	TANAPARTHIN-BETA-PEROXIDE	Shoot		4.0		--
0	TANAPARTHIN-BETA-PEROXIDE	Leaf				--
0	TANAPARTHIN-PEROXIDE	Leaf				--
0	TANETIN	Leaf				--
0	TANETIN	Flower				--
0	TANNINS	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
23	TERPINEN-4-OL	Fruit Essent. Oil		1000.0	-0.7441224268433381	--
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.
23	TERPINEN-4-OL	Essential Oil		28000.0	-0.3450735894935254	--
9	TERPINOLENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	0.00964806037643002	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	TRANS-CHRYSANTHENOL-ACETATE	Leaf Essent. Oil		47000.0		--
0	TRANS-CHRYSANTHENOL-ACETATE	Fruit Essent. Oil		155000.0		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Root		2000.0		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Shoot		0.6		--
0	TRANS-SPIROKETAL-ENOL-ETHER	Root Essent. Oil		51000.0		--
0	TRANS-SPIROKETAL-ENOL-ETHER	Fruit Essent. Oil		61000.0		--
0	WATER	Plant		895000.0	0.5311464179022468	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	ZINC	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.