

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	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.
27	PARTHENOLIDE	Leaf	130.0	300000.0		--
27	PARTHENOLIDE	Shoot	80.0	8700.0		--
23	MELATONIN	Leaf	6.0	3500.0	1.4142114910611014	--
27	PARTHENOLIDE	Flower	0.0	2424.0		--
15	FIBER	Plant		143000.0	-0.5900378792839802	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	LIMONENE	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				--
1	ELEUTHEROSIDE-B-1	Shoot				--
2	CHRYSANTHENYL-ACETATE	Shoot		360.0		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.
14	MANGANESE	Plant		8.1	-0.6368507291246737	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BORNEOL-ANGELATE	Shoot		0.8		--
0	SABINENE-HYDRATE	Fruit Essent. Oil				--
13	ALPHA-TERPINENE	Plant				--
0	MICHEFUSCALIDE	Leaf				--
37	CARVACROL	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	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-CHRYSANTHENOL-ANGELATE	Shoot		1.0		--
0	TRANS-CHRYSANTHENOL-ACETATE	Fruit Essent. Oil		155000.0		--
0	GERMACRENE	Plant		14900.0		--
0	BETA-FARNESENE	Essential Oil		8000.0		--
1	PINOCARVONE	Fruit Essent. Oil		2000.0		--
0	CHRYSARTEN-A	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	L-BORNEOL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4-BETA-ACETOXY-CHRYSANTHENONE	Shoot		1.2		--
2	GERMACRENE-D	Essential Oil		46000.0	-1.0	--
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.
1	REYNOSIN	Leaf				--
0	CAR-3-ENE	Fruit Essent. Oil				--
0	TANACETIN	Shoot		15800.0		--
0	FAT	Seed		312000.0	0.24552423015523567	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
0	(-)-EPOXYARTEMORIN	Leaf				--
0	DOCOS-3-ENE	Fruit Essent. Oil		60000.0		--
0	CHRYSANTHENOL	Shoot		2.0	-1.0	--
65	MAGNESIUM	Plant		2400.0	-0.5172740870337147	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BORNEOL-ACETATE	Essential Oil		7000.0	-0.6918807209736767	--
5	SABINENE	Essential Oil				--
28	ALPHA-PINENE	Essential Oil		10000.0	-0.47207505752571344	--
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	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Leaf				--
0	CIS-CHRYSANTHENOL-ACETATE	Shoot		1.0		--
9	TERPINOLENE	Plant				--
0	BETA-FARNESENE	Root		40.0	1.4074654870795833	--
27	PARTHENOLIDE	Plant				--
0	CHRYSARTHEMIN-B	Plant				--
0	ASH	Plant		171000.0	0.9030718561913528	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	3-BETA-HYDROXYPARTHENOLIDE	Shoot		1.2		--
2	GERMACRENE-D	Leaf Essent. Oil		31000.0	-0.5383216002693361	--
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	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.
5	CANIN	Shoot		0.8		--
12	STIGMASTEROL	Fruit Essent. Oil				--
0	FAT	Plant		48000.0	-0.05468700183087534	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	PARTHENOLIDES	Plant		9000.0		--
9	DELTA-CADINENE	Essential 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.
0	KILOCALORIES	Plant		2860.0	-0.40616652820501614	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BORNEOL-ACETATE	Fruit Essent. Oil		7000.0		--
5	SABINENE	Fruit Essent. Oil		1000.0	-0.7138066475051742	--
0	MAGNOLIALIDE	Plant				--
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.
0	TANAPARTHIN	Leaf				--
0	CIS-CHRYSANTHENOL-ACETATE	Leaf				--
23	TERPINEN-4-OL	Essential Oil		28000.0	-0.3450735894935254	--
0	BETA-CARYOPHYLLENE	Essential Oil				--
27	PARTHENOLIDE	Seed		15200.0		--
0	CHRYSARTHEMIN-A	Plant				--
28	ALPHA-PINENE	Fruit Essent. Oil		2000.0	-0.8225046812392973	--
112	ASCORBIC-ACID	Plant		330.0	-0.5162152379862993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	3-BETA-HYDROXYCOSTUNOLIDE	Shoot		4.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GERMACRENE-D	Tissue Culture				--
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	PROTEIN	Seed		222000.0	-0.10493212955134139	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	CANIN	Leaf				--
0	SECOTANAPARTHOLIDE-B	Shoot		0.8		--
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	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	ORTHOCARSIINE	Plant				Tramil
0	DEHYDROSAUSSUREALAC TONE	Fruit Essent. Oil		6000.0		--
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.
6	IRON	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BORNEOL-ACETATE	Shoot		1.2		--
1	REYNOSIN	Shoot		0.4		--
3	LUTEOLIN-7-GLUCURONIDE	Leaf				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TANACETIN	Plant				Tramil
0	CHRYSOERIOL-7-GLUCURONIDE	Leaf				--
23	TERPINEN-4-OL	Fruit Essent. Oil		1000.0	-0.7441224268433381	--
9	BENZYL-ALCOHOL	Fruit Essent. Oil				--
0	CHRYSANTHEMOMIN	Leaf				--
11	ALPHA-PHELLANDRENE	Essential Oil		6000.0	-0.4769076636125325	--
4	ARTECANIN	Plant				--
0	3-BETA-HYDROXYCOSTUNOLIDE	Leaf				--
0	GERMACRENE-A	Tissue Culture				--
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.
0	PROTEIN	Plant		267000.0	0.7665154169276235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
41	CAMPHOR	Leaf Essent. Oil		201000.0	0.40766428831174817	--
0	SECOTANAPARTHOLIDE-B	Leaf				--
0	EUDESMANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	ARTEMORIN	Shoot		4.0		--
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.
0	8-BETA-REYNOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	D-FRIEDOOLEAN-14-EN-3-OL	Root Essent. Oil		53000.0		--
41	CAMPHOR	Shoot		24.0	-0.15638075587436032	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	8-BETA-HYDROXYREYNOSIN	Leaf				--
35	BORNEOL	Essential Oil		10000.0	-0.8168042453042687	--
1	REYNOSIN	Flower		1485.0		--
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	SODIUM	Plant		48.0	-0.3014209590315537	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CHRYSANTHENOL-4-BETA-HYDROXY	Shoot		3.0		--
0	TANETIN	Leaf				--
0	BENZYL-2-METHYL-BUTYRATE	Fruit Essent. Oil		5000.0		--
27	PARTHENOLIDE	Leaf Essent. Oil		61000.0		--
0	CHRYSANTHEMOLIDE	Leaf				--
0	ALPHA-FARNESENE	Fruit Essent. Oil				--
53	LINALOOL	Essential Oil		13000.0	-0.5248552467846653	--
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	3,4-BETA-EPOXY-8-DEOXYCUMAMBRIN-B	Flower		485.0		--
11	GAMMA-TERPINENE	Essential Oil		10000.0	-0.6855735643465313	--
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.
14	POTASSIUM	Plant		22500.0	0.04901058337072094	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
41	CAMPHOR	Essential Oil		442000.0	1.342251919291669	--
0	SECOTANAPARTHOLIDE-A	Shoot		0.2		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	10-EPICANIN	Leaf				--
4	ARTECANIN	Shoot		0.4		--
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.
77	ZINC	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	CYNAROSIDE	Leaf				--
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.
0	(+)-EPOXYARTEMORIN	Leaf				--
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.
35	BORNEOL	Fruit Essent. Oil		1300.0		--
1	REYNOSIN	Plant				--
4	SILICON	Plant		4.6	-0.5184035386753152	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CHRYSANTHENOL-4-ACETATE	Shoot		1.2		--
0	TANETIN	Flower				--
24	CHROMIUM	Plant		1.7	-0.7046051474035722	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
36	ALANTOLACTONE	Leaf				--
60	LIMONENE	Essential Oil		5000.0	-0.7082860385987012	--



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.
5	ALUMINUM	Plant		6.0	-0.7451443685154636	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2-METHYLPENTA-2,4-DIENE	Fruit Essent. Oil		2000.0		--
11	GAMMA-TERPINENE	Fruit Essent. Oil		1000.0	-1.0164567396291118	--
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.
4	PHOSPHORUS	Plant		5010.0	0.683008160317236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
41	CAMPHOR	Fruit Essent. Oil		189000.0		--
0	SECOTANAPARATHOLIDE	Leaf				--
4	ARTECANIN	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	WATER	Plant		895000.0	0.5311464179022468	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	COSTUNOLIDE	Shoot		6.0	-1.0	--
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	TRANS-SPIROKETAL-ENOL-ETHER	Root Essent. Oil		51000.0		--
1	3-BETA-HYDROXYPARTHENOLIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BICYCLOGERMACRENE	Root		4.0		--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Leaf				--
60	SELENIUM	Plant		1.7	-0.3516547080519198	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CHRYSANTHEMUM-SESQUITERPENE-LACTONE	Leaf				--
0	TANAPARTHIN-PEROXIDE	Leaf				--
27	PARTHENOLIDE	Fruit Essent. Oil		284000.0		--
53	BETA-CAROTENE	Plant		14.0	-0.6513567486971203	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	9-EPIPECTACHOL	Root		143.0		--
5	ISOFRAXIDIN	Root		122.0	1.0	--
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.
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-TRANS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		0.6		--
76	EUGENOL	Essential Oil				--
2	GERMACRENE-D	Shoot		4.0	-0.36824936936969666	--
0	PARTHOLIDE	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
9	CAMPHENE	Leaf Essent. Oil		30000.0	0.1899278105662218	--
0	SANTIN	Plant				--

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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.
0	APIGENIN-7-GLUCURONIDE	Leaf				--
67	1,8-CINEOLE	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	COSTIC-ACID-METHYL-ESTER	Shoot		0.8		--
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.
0	TRANS-SPIROKETAL-ENOL-ETHER	Fruit Essent. Oil		61000.0		--
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.
47	BETA-SITOSTEROL	Leaf Essent. Oil		16000.0		--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Flower				--
0	CHRYSANTHEMUM-PARTHENIUM-EN-YNE-BICLCLO-ETHER	Root		3.0		--
0	TANAPARTHIN-BETA-PEROXIDE	Shoot		4.0		--
0	P-METHYL-ISO-PROPENYLBENZENE	Fruit Essent. Oil				--
0	CARBOHYDRATES	Plant		514000.0	-1.0198824234248682	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	8-BETA-HYDROXYREYNOSIN	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISOAMYL-ISOVALERATE	Fruit Essent. Oil		2000.0		--
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	SECOTANAPARTHENOLID E	Plant				--
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.
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Root		100.0		--
76	EUGENOL	Fruit Essent. Oil		1000.0		--
0	BETA-FARNESENE	Shoot		12.0	-0.39419791087988254	--
9	CAMPHENE	Essential Oil		54000.0	0.9292841063141826	--
3	SANTAMARINE	Flower		424.0		--
4	COSMOSIIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-THUJENE	Essential Oil		6000.0	-0.36186369670280605	--
16	P-CYMENE	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
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.
31	THIAMIN	Plant		4.1	-0.2974931626940486	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CIS-SPIROKETOL-ENOL-ETHER	Root Essent. Oil		575000.0		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Root		2000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1-BETA-HYDROXYARBUSCULIN	Leaf				--
47	BETA-SITOSTEROL	Fruit Essent. Oil				--
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Leaf				--
0	CHRYSANTH-TRANS-ENYL-ACETATE	Essential Oil		235000.0		--
0	TANAPARTHIN-BETA-PEROXIDE	Leaf				--
16	P-CYMENE	Essential Oil		31000.0	-0.3774568610491117	--
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.
0	8-ALPHA-ISOBUTYRYL-OXYESTAFIATIN	Shoot		2.0		--
0	HEXAN-1-AL	Fruit Essent. Oil				--
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.
5	SANTAMARIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		1.2		--
0	EPOXYSANTAMARINE	Flower		30.0		--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Plant		285.0	2.918886504988539	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	CAMPHENE	Fruit Essent. Oil		7000.0	-0.3352780859890732	--
5	SANTAMARIN	Plant				--
2	COBALT	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ALPHA-THUJENE	Fruit Essent. Oil		2000.0	-0.7397616687333448	--
0	OCTANOIC-ACID-ETHYL-ESTER	Fruit Essent. Oil		1000.0		--
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	SECOTANAPARTHOLIDE-A	Leaf				--
0	CIS-DENDRANTHEMA-SPIROFURAN-A	Shoot		8.0		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Shoot		0.6		--
0	GUAIANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	BETA-PINENE	Essential Oil				--
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Flower				--
0	TANAPARTHIN-ALPHA-PEROXIDE	Shoot		1.6		--
2	(-)-CAMPHOR	Plant				--
0	8-ALPHA-HYDROXYESTAFIATIN	Shoot		0.4		--
0	HEX-TRANS-2-EN-1-AL	Fruit Essent. Oil				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SANTAMARIN	Flower				--
8	CARYOPHYLENE-OXIDE	Fruit Essent. Oil		4000.0	-1.0	--
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.
0	10-EPICANIN	Shoot		0.4		--
0	EPOXYARTEMORIN	Leaf				--
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	MANGOLIOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	BUTYL-BENZENE	Fruit Essent. Oil				--
5	SABINOL	Fruit Essent. Oil		1300.0		--
0	CHRYSARTEN-B	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
23	ALPHA-TERPINEOL	Plant				--
22	MYRCENE	Fruit Essent. Oil				--
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	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.
0	CIS-CHRYSANTHENOL-ISOVALERATE	Shoot		0.8		--
0	TRANS-CHRYSANTHENOL-ACETATE	Leaf Essent. Oil		47000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
13	BETA-PINENE	Fruit Essent. Oil		1000.0	-0.7715573703107804	--
1	PINOCARVONE	Essential Oil				--
0	TANAPARTHIN-ALPHA-PEROXIDE	Leaf				--
28	CALCIUM	Plant		5810.0	-0.8321353407836742	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	8-ALPHA-ANGELOYL-OXYESTAFIATIN	Shoot		3.0		--
0	HEX-CIS-3-EN-1-OL	Fruit Essent. Oil				--
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.
15	RIBOFLAVIN	Plant		2.5	-0.6210248948087893	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
31	CARYOPHYLLENE	Fruit Essent. Oil				--