

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	KILOCALORIES	Plant		2860.0	-0.40616652820501614	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	GERMACRENE-D	Tissue Culture				--
5	CANIN	Leaf				--
0	CHRYSARTHEMIN-B	Plant				--
9	DELTA-CADINENE	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.
23	TERPINEN-4-OL	Fruit Essent. Oil		1000.0	-0.7441224268433381	--
0	PARTHENOLIDES	Plant		9000.0		--
0	BORNEOL-ACETATE	Shoot		1.2		--
0	ASH	Plant		171000.0	0.9030718561913528	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	SABINENE-HYDRATE	Shoot		1.5		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	SECOTANAPARTHOLIDE-B	Leaf				--
28	ALPHA-PINENE	Fruit Essent. Oil		2000.0	-0.8225046812392973	--
0	TANAPARTHIN	Leaf				--
0	DEHYDROSAUSSUREALAC TONE	Fruit Essent. Oil		6000.0		--
1	REYNOSIN	Flower		1485.0		--
0	3-BETA-HYDROXYCOSTUNOLIDE	Shoot		4.0		--
0	PROTEIN	Seed		222000.0	-0.10493212955134139	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	LUTEOLIN-7-GLUCURONIDE	Leaf				--
0	CHRYSOERIOL-7-GLUCURONIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FAT	Plant		48000.0	-0.05468700183087534	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	BENZYL-ALCOHOL	Fruit Essent. Oil				--
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.
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	GERMACRENE-A	Tissue Culture				--
41	CAMPHOR	Leaf Essent. Oil		201000.0	0.40766428831174817	--
0	CHRYSARTHEMIN-A	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	TANETIN	Leaf				--
27	PARTHENOLIDE	Leaf Essent. Oil		61000.0		--
0	ORTHOCARSINE	Plant				Tramil
6	IRON	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
35	BORNEOL	Essential Oil		10000.0	-0.8168042453042687	--
112	ASCORBIC-ACID	Plant		330.0	-0.5162152379862993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	SECOTANAPARTHOLIDE-A	Shoot		0.2		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Essential Oil		6000.0	-0.4769076636125325	--
0	TANACETIN	Plant				Tramil
0	D-FRIEDOOLEAN-14-EN-3-OL	Root Essent. Oil		53000.0		--
1	REYNOSIN	Plant				--
0	3-BETA-HYDROXYCOSTUNOLIDE	Leaf				--
0	PROTEIN	Plant		267000.0	0.7665154169276235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	LINALOOL	Essential Oil		13000.0	-0.5248552467846653	--
0	CHRYSANTHENOL-4-BETA-HYDROXY	Shoot		3.0		--
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	BENZYL-2-METHYL-BUTYRATE	Fruit Essent. Oil		5000.0		--
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	(+)-EPOXYARTEMORIN	Leaf				--
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.
11	GAMMA-TERPINENE	Essential Oil		10000.0	-0.6855735643465313	--
41	CAMPHOR	Essential Oil		442000.0	1.342251919291669	--
0	CHRYSANTHEMOMIN	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	TANETIN	Flower				--
1	ARTEMORIN	Shoot		4.0		--
0	8-BETA-REYNOSIN	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	8-BETA- HYDROXYREYNOSIN	Leaf				--
4	ARTECANIN	Plant				--
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	SECOTANAPARATHOLIDE	Leaf				--
0	ALPHA-FARNESENE	Fruit Essent. Oil				--
1	SODIUM	Plant		48.0	-0.3014209590315537	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	CYNAROSIDE	Leaf				--
35	BORNEOL	Fruit Essent. Oil		1300.0		--
0	QUERCETAGETIN-3,7- DIMETHYL-ETHER	Leaf				--
0	3,4-BETA-EPOXY-8- DEOXYCUMAMBRIN-B	Flower		485.0		--
14	POTASSIUM	Plant		22500.0	0.04901058337072094	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	LIMONENE	Essential Oil		5000.0	-0.7082860385987012	--
0	CHRYSANTHENOL-4- ACETATE	Shoot		1.2		--
0	EUDESMANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-SPIROKETAL-ENOL-ETHER	Root Essent. Oil		51000.0		--
41	CAMPHOR	Shoot		24.0	-0.15638075587436032	--
11	GAMMA-TERPINENE	Fruit Essent. Oil		1000.0	-1.0164567396291118	--
41	CAMPHOR	Fruit Essent. Oil		189000.0		--
0	CHRYSANthemolide	Leaf				--
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.
0	TANAPARTHIN-PEROXIDE	Leaf				--
4	ARTECANIN	Shoot		0.4		--
27	PARTHENOLIDE	Fruit Essent. Oil		284000.0		--
77	ZINC	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	APIGENIN-7-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
0	SANTIN	Plant				--
36	ALANTOLACTONE	Leaf				--
4	SILICON	Plant		4.6	-0.5184035386753152	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	COSTUNOLIDE	Shoot		6.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BICYCLOGERMACRENE	Root		4.0		--
0	2-METHYLPENTA-2,4-DIENE	Fruit Essent. Oil		2000.0		--
4	PHOSPHORUS	Plant		5010.0	0.683008160317236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ISOFRAXIDIN	Root		122.0	1.0	--
0	CHRYSANTHEMUM-SESQUITERPENE-LACTONE	Leaf				--
0	10-EPICANIN	Leaf				--
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	TRANS-SPIROKETAL-ENOL-ETHER	Fruit Essent. Oil		61000.0		--
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	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Flower				--
76	EUGENOL	Essential Oil				--
9	CAMPHENE	Leaf Essent. Oil		30000.0	0.1899278105662218	--
24	CHROMIUM	Plant		1.7	-0.7046051474035722	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	TANAPARTHIN-BETA-PEROXIDE	Shoot		4.0		--
4	ARTECANIN	Leaf				--
0	P-METHYL-ISO-PROPENYLBENZENE	Fruit Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WATER	Plant		895000.0	0.5311464179022468	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	3-BETA-HYDROXYPARTHENOLID	Leaf				--
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.
3	SANTAMARINE	Flower		424.0		--
0	9-EPIPECTACHOL	Root		143.0		--
60	SELENIUM	Plant		1.7	-0.3516547080519198	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	COSTIC-ACID-METHYL-ESTER	Shoot		0.8		--
47	BETA-SITOSTEROL	Leaf Essent. Oil		16000.0		--
5	ALUMINUM	Plant		6.0	-0.7451443685154636	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-TRANS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		0.6		--
0	PARTHOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ISOAMYL-ISOVALERATE	Fruit Essent. Oil		2000.0		--
0	CHRYSANTHEMUM-PARTHENIUM-EN-YNE-BICLCLO-ETHER	Root		3.0		--
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	TRANS-DENDRANTHEMA-SPIROFURAN-A	Root		2000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Leaf				--
76	EUGENOL	Fruit Essent. Oil		1000.0		--
9	CAMPHENE	Essential Oil		54000.0	0.9292841063141826	--
53	BETA-CAROTENE	Plant		14.0	-0.6513567486971203	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.
0	TANAPARTHIN-BETA-PEROXIDE	Leaf				--
0	APIGENIN-7-GLUCURONIDE	Leaf				--
16	P-CYMENE	Essential Oil		31000.0	-0.3774568610491117	--
4	TIN	Plant		21.0	0.00964806037643002	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
2	GERMACRENE-D	Shoot		4.0	-0.36824936936969666	--
5	SANTAMARIN	Plant				--
0	8-BETA-HYDROXYREYNOSIN	Plant				--
0	SECOTANAPARTHENOLID E	Plant				--
16	P-CYMENE	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
0	CIS-SPIROKETOL-ENOL-ETHER	Root Essent. Oil		575000.0		--
47	BETA-SITOSTEROL	Fruit Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Root		100.0		--
0	HEXAN-1-AL	Fruit Essent. Oil				--
0	CHRYSANTH-TRANS-ENYL-ACETATE	Essential Oil		235000.0		--
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.
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.
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Shoot		0.6		--
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	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Flower				--
0	EPOXYSANTAMARINE	Flower		30.0		--
9	CAMPHENE	Fruit Essent. Oil		7000.0	-0.3352780859890732	--
0	CARBOHYDRATES	Plant		514000.0	-1.0198824234248682	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	TANAPARTHIN-ALPHA-PEROXIDE	Shoot		1.6		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-THUJENE	Essential Oil		6000.0	-0.36186369670280605	--
31	THIAMIN	Plant		4.1	-0.2974931626940486	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	1-BETA-HYDROXYARBUSCULIN	Leaf				--
0	BETA-FARNESENE	Shoot		12.0	-0.39419791087988254	--
5	SABINOL	Fruit Essent. Oil		1300.0		--
0	8-ALPHA-ISOBUTYRYL-OXYESTAFIATIN	Shoot		2.0		--
5	SANTAMARIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OCTANOIC-ACID-ETHYL-ESTER	Fruit Essent. Oil		1000.0		--
0	CIS-DENDRANTHEMA-SPIROFURAN-A	Shoot		8.0		--
13	BETA-PINENE	Essential Oil				--
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.
39	NIACIN	Plant		285.0	2.918886504988539	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	HEX-TRANS-2-EN-1-AL	Fruit Essent. Oil				--
8	CARYOPHYLLENE-OXIDE	Fruit Essent. Oil		4000.0	-1.0	--
4	COSMOSIIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	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	TRANS-CHRYSANTHENOL-ACETATE	Leaf Essent. Oil		47000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PINOCARVONE	Essential Oil				--
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		1.2		--
0	EPOXYARTEMORIN	Leaf				--
0	BUTYL-BENZENE	Fruit Essent. Oil				--
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.
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	TANAPARTHIN-ALPHA-PEROXIDE	Leaf				--
0	ALPHA-THUJENE	Fruit Essent. Oil		2000.0	-0.7397616687333448	--
0	SECOTANAPARTHOLIDE-A	Leaf				--
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	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	SABINENE-HYDRATE	Fruit Essent. Oil				--
0	8-ALPHA-HYDROXYESTAFIATIN	Shoot		0.4		--
5	SANTAMARIN	Flower				--
22	MYRCENE	Fruit Essent. Oil				--
0	CIS-CHRYSANTHENOL-ISOVALERATE	Shoot		0.8		--
13	BETA-PINENE	Fruit Essent. Oil		1000.0	-0.7715573703107804	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	MANGOLIOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	HEX-CIS-3-EN-1-OL	Fruit Essent. Oil				--
31	CARYOPHYLLENE	Fruit Essent. Oil				--
2	COBALT	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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	TRANS-CHRYSANTHENOL-ACETATE	Fruit Essent. Oil		155000.0		--
1	PINOCARVONE	Fruit Essent. Oil		2000.0		--
0	10-EPICANIN	Shoot		0.4		--
0	BORNEOL-ANGELATE	Shoot		0.8		--
2	(-)-CAMPHOR	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.
0	TANACETIN	Shoot		15800.0		--
23	ALPHA-TERPINEOL	Plant				--
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.

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.
1	ELEUTHEROSIDE-B-1	Shoot				--
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.
5	SABINENE	Essential Oil				--
0	8-ALPHA-ANGELOYL-OXYESTAFIATIN	Shoot		3.0		--
15	RIBOFLAVIN	Plant		2.5	-0.6210248948087893	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	MICHEFUSCALIDE	Leaf				--
0	CIS-CHRYSANTHENOL-ANGELATE	Shoot		1.0		--
0	BETA-FARNESENE	Essential Oil		8000.0		--
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.
14	MANGANESE	Plant		8.1	-0.6368507291246737	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	GERMACRENE-D	Essential Oil		46000.0	-1.0	--
0	CAR-3-ENE	Fruit Essent. Oil				--
0	CHRYSARTEN-B	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
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.
9	TERPINOLENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	PARTHENOLIDE	Plant				--
0	1-BETA-HYDROXYARBUSCULIN	Plant				--
0	BORNEOL-ACETATE	Essential Oil		7000.0	-0.6918807209736767	--
28	CALCIUM	Plant		5810.0	-0.8321353407836742	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
12	STIGMASTEROL	Fruit Essent. Oil				--
13	ALPHA-TERPINENE	Plant				--
0	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Leaf				--
0	GERMACRENE	Plant		14900.0		--
0	DOCOS-3-ENE	Fruit Essent. Oil		60000.0		--
5	SABINENE	Fruit Essent. Oil		1000.0	-0.7138066475051742	--
0	4-BETA-ACETOXY-CHRYSANTHENONE	Shoot		1.2		--
1	REYNOSIN	Leaf				--
0	CIS-CHRYSANTHENOL-ACETATE	Shoot		1.0		--
15	FIBER	Plant		143000.0	-0.5900378792839802	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BETA-FARNESENE	Root		40.0	1.4074654870795833	--
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.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Plant		2400.0	-0.5172740870337147	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	GERMACRENE-D	Leaf Essent. Oil		31000.0	-0.5383216002693361	--
5	CANIN	Shoot		0.8		--
0	CHRYSARTEN-A	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
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.
23	TERPINEN-4-OL	Essential Oil		28000.0	-0.3450735894935254	--
27	PARTHENOLIDE	Seed		15200.0		--
0	(-)-EPOXYARTEMORIN	Leaf				--
0	BORNEOL-ACETATE	Fruit Essent. Oil		7000.0		--
0	L-BORNEOL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
0	SECOTANAPARTHOLIDE-B	Shoot		0.8		--
28	ALPHA-PINENE	Essential Oil		10000.0	-0.47207505752571344	--
0	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Leaf				--
9	DELTA-CADINENE	Essential Oil				--
1	REYNOSIN	Shoot		0.4		--
1	3-BETA-HYDROXYPARTHENOLIDE	Shoot		1.2		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	MAGNOLIALIDE	Plant				--
0	CIS-CHRYSANTHENOL-ACETATE	Leaf				--
0	FAT	Seed		312000.0	0.24552423015523567	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BETA-CARYOPHYLLENE	Essential 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.
0	CHRYSANTHENOL	Shoot		2.0	-1.0	--
27	PARTHENOLIDE	Flower	0.0	2424.0		--
23	MELATONIN	Leaf	6.0	3500.0	1.4142114910611014	--
27	PARTHENOLIDE	Shoot	80.0	8700.0		--
27	PARTHENOLIDE	Leaf	130.0	300000.0		--
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.