

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Tanacetum parthenium*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	WATER	Plant		895000.0	0.5311464179022468	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	TRANS-SPIROKETAL-ENOL-ETHER	Root Essent. Oil		51000.0		--
0	TRANS-SPIROKETAL-ENOL-ETHER	Fruit Essent. Oil		61000.0		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Shoot		0.6		--
0	TRANS-DENDRANTHEMA-SPIROFURAN-A	Root		2000.0		--
0	TRANS-CHRYSANTHENOL-ACETATE	Leaf Essent. Oil		47000.0		--
0	TRANS-CHRYSANTHENOL-ACETATE	Fruit Essent. Oil		155000.0		--
4	TIN	Plant		21.0	0.00964806037643002	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
71	THYMOL	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	THUJOPSENE	Shoot		1.5	-0.7071067811865476	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.
31	THIAMIN	Plant		4.1	-0.2974931626940486	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
9	TERPINOLENE	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.
9	TERPINOLENE	Plant				--
23	TERPINEN-4-OL	Essential Oil		28000.0	-0.3450735894935254	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Fruit Essent. Oil		1000.0	-0.7441224268433381	--
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	TANETIN	Leaf				--
0	TANETIN	Flower				--
0	TANAPARTHIN-PEROXIDE	Leaf				--
0	TANAPARTHIN-BETA-PEROXIDE	Shoot		4.0		--
0	TANAPARTHIN-BETA-PEROXIDE	Leaf				--
0	TANAPARTHIN-ALPHA-PEROXIDE	Shoot		1.6		--
0	TANAPARTHIN-ALPHA-PEROXIDE	Leaf				--
0	TANAPARTHIN-1BETA,4BETA-EPOXIDE	Leaf				--
0	TANAPARTHIN-1ALPHA,4ALPHA-EPOXIDE	Leaf				--
0	TANAPARTHIN	Leaf				--
0	TANACETIN	Shoot		15800.0		--
0	TANACETIN	Plant				Tramil
12	STIGMASTEROL	Fruit Essent. Oil				--
1	SODIUM	Plant		48.0	-0.3014209590315537	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.
60	SELENIUM	Plant		1.7	-0.3516547080519198	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SECOTANAPARTHOLIDE-B	Shoot		0.8		--
0	SECOTANAPARTHOLIDE-B	Leaf				--
0	SECOTANAPARTHOLIDE-A	Leaf				--
0	SECOTANAPARTHOLIDE-A	Shoot		0.2		--
0	SECOTANAPARTHENOLID E	Plant				--
0	SECOTANAPARTHOLIDE	Leaf				--
0	SANTIN	Plant				--
3	SANTAMARINE	Flower		424.0		--
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	Plant				--
5	SANTAMARIN	Flower				--
5	SABINOL	Fruit Essent. Oil		1300.0		--
0	SABINENE-HYDRATE	Fruit Essent. Oil				--
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	SABINENE	Essential Oil				--
5	SABINENE	Fruit Essent. Oil		1000.0	-0.7138066475051742	--
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.
15	RIBOFLAVIN	Plant		2.5	-0.6210248948087893	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	REYNOSIN	Leaf				--
1	REYNOSIN	Shoot		0.4		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	REYNOSIN	Flower		1485.0		--
1	REYNOSIN	Plant				--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Leaf				--
0	QUERCETAGETIN-3,7-DIMETHYL-ETHER	Flower				--
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Leaf				--
0	QUERCETAGETIN-3,3',7-TRIMETHYL-ETHER	Flower				--
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	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.
14	POTASSIUM	Plant		22500.0	0.04901058337072094	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
4	PHOSPHORUS	Plant		5010.0	0.683008160317236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PARTHOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	PARTHENOLIDES	Plant		9000.0		--
27	PARTHENOLIDE	Plant				--
27	PARTHENOLIDE	Seed		15200.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	PARTHENOLIDE	Shoot	80.0	8700.0		--
27	PARTHENOLIDE	Leaf Essent. Oil		61000.0		--
27	PARTHENOLIDE	Leaf	130.0	300000.0		--
27	PARTHENOLIDE	Fruit Essent. Oil		284000.0		--
27	PARTHENOLIDE	Flower	0.0	2424.0		--
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	P-METHYL-ISO-PROPENYLBENZENE	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.
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.
16	P-CYMENE	Fruit Essent. Oil		5000.0	-0.9962725072187498	--
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	--
0	ORTHO-CARSINE	Plant				Tramil
0	OCTANOIC-ACID-ETHYL-ESTER	Fruit Essent. Oil		1000.0		--
39	NIACIN	Plant		285.0	2.918886504988539	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
22	MYRCENE	Fruit Essent. Oil				--
0	MICHEFUSCALIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	MELATONIN	Leaf	6.0	3500.0	1.4142114910611014	--
0	MANGOLIOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
14	MANGANESE	Plant		8.1	-0.6368507291246737	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	MAGNOLIALIDE	Plant				--
65	MAGNESIUM	Plant		2400.0	-0.5172740870337147	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	LUTEOLIN-7-GLUCURONIDE	Leaf				--
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.
53	LINALOOL	Essential Oil		13000.0	-0.5248552467846653	--
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.
60	LIMONENE	Essential Oil		5000.0	-0.7082860385987012	--
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	KILOCALORIES	Plant		2860.0	-0.40616652820501614	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ISOFRAXIDIN	Root		122.0	1.0	--
0	ISOAMYL-ISOVALERATE	Fruit Essent. Oil		2000.0		--
6	IRON	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	HEXAN-1-AL	Fruit Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEX-TRANS-2-EN-1-AL	Fruit Essent. Oil				--
0	HEX-CIS-3-EN-1-OL	Fruit Essent. Oil				--
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	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.
2	GERMACRENE-D	Shoot		4.0	-0.368249369369666	--
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	GERMACRENE-A	Tissue Culture				--
0	GERMACRENE	Plant		14900.0		--
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.
11	GAMMA-TERPINENE	Essential Oil		10000.0	-0.6855735643465313	--
11	GAMMA-TERPINENE	Fruit Essent. Oil		1000.0	-1.0164567396291118	--
15	FIBER	Plant		143000.0	-0.5900378792839802	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
76	EUGENOL	Essential Oil				--
76	EUGENOL	Fruit Essent. Oil		1000.0		--
0	EUDESMANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	EPOXYSANTAMARINE	Flower		30.0		--
0	EPOXYARTEMORIN	Leaf				--
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	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.
1	ELEUTHEROSIDE-B-1	Shoot				--
0	DOCOS-3-ENE	Fruit Essent. Oil		60000.0		--
9	DELTA-CADINENE	Essential Oil				--
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	DEHYDROSAUSSUREALAC TONE	Fruit Essent. Oil		6000.0		--
0	D-FRIEDOOLEAN-14-EN-3-OL	Root Essent. Oil		53000.0		--
3	CYNAROSIDE	Leaf				--
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
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.
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.
0	COSTIC-ACID-METHYL-ESTER	Shoot		0.8		--
4	COSMOSIIN	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COBALT	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CIS-SPIROKETOL-ENOL-ETHER	Root Essent. Oil		575000.0		--
0	CIS-DENDRANTHEMA-SPIROFURAN-A	Shoot		8.0		--
0	CIS-CHRYSANTHENOL-ISOVALERATE	Shoot		0.8		--
0	CIS-CHRYSANTHENOL-ANGELATE	Shoot		1.0		--
0	CIS-CHRYSANTHENOL-ACETATE	Shoot		1.0		--
0	CIS-CHRYSANTHENOL-ACETATE	Leaf				--
0	CHRYSOERIOL-7-GLUCURONIDE	Leaf				--
0	CHRYSARTHEMIN-B	Plant				--
0	CHRYSARTHEMIN-A	Plant				--
0	CHRYSARTEN-B	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CHRYSARTEN-A	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	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-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.
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	CHRYSANTHENOL-4-BETA-HYDROXY	Shoot		3.0		--
0	CHRYSANTHENOL-4-ACETATE	Shoot		1.2		--
0	CHRYSANTHENOL	Shoot		2.0	-1.0	--
0	CHRYSANTHEMUM-SESQUITERPENE-LACTONE	Leaf				--
0	CHRYSANTHEMUM-PARTHENIUM-EN-YNE-BICLCLO-ETHER	Root		3.0		--
0	CHRYSANTHEMOMIN	Leaf				--
0	CHRYSANTHEMOLIDE	Leaf				--
0	CHRYSANTH-TRANS-ENYL-ACETATE	Essential Oil		235000.0		--
24	CHROMIUM	Plant		1.7	-0.7046051474035722	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
8	CARYOPHYLENE-OXIDE	Fruit Essent. Oil		4000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
31	CARYOPHYLLENE	Fruit Essent. Oil				--
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.
0	CARBOHYDRATES	Plant		514000.0	-1.0198824234248682	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CAR-3-ENE	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.
5	CANIN	Shoot		0.8		--
5	CANIN	Leaf				--
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	--
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
28	CALCIUM	Plant		5810.0	-0.8321353407836742	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BUTYL-BENZENE	Fruit Essent. Oil				--
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	BORNEOL-ANGELATE	Shoot		0.8		--
0	BORNEOL-ACETATE	Essential Oil		7000.0	-0.6918807209736767	--
0	BORNEOL-ACETATE	Fruit Essent. Oil		7000.0		--
0	BORNEOL-ACETATE	Shoot		1.2		--
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	Essential Oil		10000.0	-0.8168042453042687	--
35	BORNEOL	Fruit Essent. Oil		1300.0		--
0	BICYCLOGERMACRENE	Root		4.0		--
47	BETA-SITOSTEROL	Leaf Essent. Oil		16000.0		--
47	BETA-SITOSTEROL	Fruit Essent. Oil				--
13	BETA-PINENE	Fruit Essent. Oil		1000.0	-0.7715573703107804	--
13	BETA-PINENE	Essential Oil				--
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	BETA-FARNESENE	Essential Oil		8000.0		--
0	BETA-FARNESENE	Root		40.0	1.4074654870795833	--
0	BETA-FARNESENE	Shoot		12.0	-0.39419791087988254	--
0	BETA-CARYOPHYLLENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
53	BETA-CAROTENE	Plant		14.0	-0.6513567486971203	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
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.
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.
9	BENZYL-ALCOHOL	Fruit Essent. Oil				--
0	BENZYL-2-METHYL-BUTYRATE	Fruit Essent. Oil		5000.0		--
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	ASH	Plant		171000.0	0.9030718561913528	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
112	ASCORBIC-ACID	Plant		330.0	-0.5162152379862993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	ARTEMORIN	Shoot		4.0		--
4	ARTECANIN	Shoot		0.4		--
4	ARTECANIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	ARTECANIN	Plant				--
0	APIGENIN-7-GLUCURONIDE	Leaf				--
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.
5	ALUMINUM	Plant		6.0	-0.7451443685154636	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ALPHA-THUJENE	Fruit Essent. Oil		2000.0	-0.7397616687333448	--
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	--
23	ALPHA-TERPINEOL	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.
13	ALPHA-TERPINENE	Plant				--
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.
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	--
11	ALPHA-PHELLANDRENE	Essential Oil		6000.0	-0.4769076636125325	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	ALPHA-FARNESENE	Fruit Essent. Oil				--
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.
36	ALANTOLACTONE	Leaf				--
0	9-EPIPECTACHOL	Root		143.0		--
0	8-BETA-REYNOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	8-BETA-HYDROXYREYNOSIN	Leaf				--
0	8-BETA-HYDROXYREYNOSIN	Plant				--
0	8-ALPHA-ISOBUTYRYL-OXYESTAFIATIN	Shoot		2.0		--
0	8-ALPHA-HYDROXYESTAFIATIN	Shoot		0.4		--
0	8-ALPHA-ANGELOYL-OXYESTAFIATIN	Shoot		3.0		--
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	4-BETA-ACETOXY-CHRYSANTHENONE	Shoot		1.2		--
1	3-BETA-HYDROXYPARTHENOLIDE	Shoot		1.2		--
1	3-BETA-HYDROXYPARTHENOLIDE	Leaf				--
0	3-BETA-HYDROXYCOSTUNOLIDE	Shoot		4.0		--
0	3-BETA-HYDROXYCOSTUNOLIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	3,4-BETA-EPOXY-8-DEOXYCUMAMBRIN-B	Flower		485.0		--
0	2-METHYLPENTA-2,4-DIENE	Fruit Essent. Oil		2000.0		--
0	2-(HEXA-2',4'-DIYNYLIDENE)-1,6-TRANS-DIOXASPIRO-(4,5)-DEC-3-ENE	Shoot		0.6		--
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-CIS-DIOXASPIRO-(4,5)-DEC-3-ENE	Root		100.0		--
0	10-EPICANIN	Shoot		0.4		--
0	10-EPICANIN	Leaf				--
0	1-BETA-HYDROXYARBUSCULIN	Plant				--
0	1-BETA-HYDROXYARBUSCULIN	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.
0	(-)-EPOXYARTEMORIN	Leaf				--
2	(-)-CAMPHOR	Plant				--
0	(+)-EPOXYARTEMORIN	Leaf				--