P Artemisia dracunculus

Common Name(s)

Tarragon

How Used

G

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	(E)-2-DIHYDROXY-4-METHOXY-4-METHOXYCINNAMIC-ACID-METHYL-ETHER	Plant	--	--		
0	(E)-ARTEMIDIN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(Z)-ARTEMIDIN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	1,2-DIMETHOXY-4-ALLYL-BENZENE	Shoot	--	--		
0	1,8-CINEOL	Essential Oil	--	68800	-0.23220200822943154	
0	1,8-CINEOL	Leaf Essent. Oil	--	50000	-0.6071044965246614	
67	1,8-CINEOLE	Shoot	50	500	-0.12842761628622745	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	1-(BUT-2-YNYL)-ISOCOUMARIN	Root	270	270		
0	1-(BUT-2-YNYL)-ISOCOUMARIN	Shoot	--	42		
0	2,4,6-TRIMETHOXYCINNAMYL-ALCOHOL	Shoot	--	11		
0	2-CARBOXYARABINITOL	Leaf	--	903	1.9532419928562945	Moore, B. D., Isidoro, E., Seemann, J. R. 1993. Distribution of 2-Carboxyarabinitol Among Plants. Phytochemistry 34 3: 703-707. Dept. Biochem. Univ. Nevada Reno 89557, USA.
0	2-HEPTANONE	Plant	--	--		
0	2-HYDROXY-4-METHOXY-TRANS-CINNAMIC-ACID	Leaf	143	143		
0	3',5'-DIHYDROXY-4',7-DIMETHOXY-FLAVANONE	Shoot	16	16		
0	3,4',5-TRIHYDROXY-3',7-DIMETHOXY-FLAVANONE	Shoot	312	312		
0	3,4',5-TRIHYDROXY-7-METHOXY-FLAVANONE	Shoot	250	250		
0	3-(BUT-CIS-1-YNYL)-ISOCOUMARIN	Root	--	1500		
0	3-(BUT-TRANS-1-YNYL)-5-HYDROXY-ISOCOUMARIN	Root	--	50		
0	3-(BUT-TRANS-1-YNYL)-8-HYDROXY-ISOCOUMARIN	Root	--	15		
0	3-(BUT-TRANS-1-YNYL)-ISOCOUMARIN	Root	--	100		
0	3-BUT-CIS-1-ENYL-ISOCOUMARIN	Root	1500	1500		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-BUT-TRANS-1-ENYL-5-HYDROXY-ISOCOUMARIN	Root	50	50	
0	3-BUT-TRANS-1-ENYL-8-HYDROXY-ISOCOUMARIN	Root	15	15	
0	3-BUT-TRANS-1-ENYL-ISOCOUMARIN	Root	100	100	
0	4-ALLYL-1,2-DIMETHOXYBENZENE	Shoot Essent. Oil	--	--	
0	4-HYDROXY-BENZOIC-ACID	Leaf	--	14	
0	4-METHOXYCINNAMALDEHYDE	Plant	--	--	
1	6,7-DIMETHOXYCOUMARIN	Shoot	--	--	Wealth of India.
0	7-(ALPHA-D-GALACTOPYRANOSIDE)-P-HYDROXYBENZOATE-ISORHAMNETIN	Shoot	--	--	
3	7-METHOXYCOUMARIN	Shoot	--	--	Wealth of India.
0	7-O-METHYLAROMADENDRIN	Shoot	--	250	
0	9-HYDROXYGERANIOL	Shoot	--	54	
0	AESCULETIDIN-DIMETHYL-ETHER	Plant	--	--	
0	AESCULETIDIN-DIMETHYL-ETHER	Essential Oil	--	--	
32	AESCULETIN	Shoot	--	--	
3	ALANINE	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
1	ALLO-OCIMENE	Shoot	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
1	ALLO-OCIMENE	Essential Oil	--	--		
0	ALPHA-ALANINE	Root	--	--		
0	ALPHA-ALANINE	Leaf	--	--		
3	ALPHA-CEDRENE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
11	ALPHA-PHELLANDRENE	Plant	--	--		
11	ALPHA-PHELLANDRENE	Essential Oil	--	--		
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil	--	--		
28	ALPHA-PINENE	Shoot	100	1000	-0.04771656404793942	
28	ALPHA-PINENE	Leaf Essent. Oil	--	--		
28	ALPHA-PINENE	Root Essent. Oil	--	--		
28	ALPHA-PINENE	Essential Oil	--	10000	-0.47207505752571344	
0	ALPHA-PROSTAGLANDIN-F-2	Plant	--	--		Stitt, Paul. Why George should eat broccoli.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
36	ANETHOLE	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
36	ANETHOLE	Essential Oil	--	--	
7	ANISALDEHYDE	Essential Oil	--	--	
6	ANISIC-ACID	Shoot	8	80	
6	ANISIC-ACID	Essential Oil	--	--	
0	ANISIC-ALCOHOL	Shoot	--	--	
0	ANISIC-ALCOHOL	Essential Oil	--	--	
4	ANISOLE	Shoot	10	100	
0	ANNAGENIN	Shoot	--	--	
101	APIGENIN	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
14	ARGININE	Leaf	--	--	
14	ARGININE	Root	--	--	
0	ARTEMEDINAL	Shoot	--	--	
0	ARTEMEDINOL	Root	--	--	
0	ARTEMIDIN	Plant	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	ARTEMIDIN	Shoot	--	--		
0	ARTEMIDIN	Root	--	--		
0	ARTEMIDINAL	Shoot	--	--		
0	ARTEMIDINAL	Plant	--	--		
0	ARTEMIDINOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ARTEMIDINOL	Root	--	--		
0	ARTEMIDIOL	Root	--	--		
0	ARTEMISIA-KETONE	Leaf	50	500	-1	
0	ARTEMISIA-KETONE	Leaf Essent. Oil	--	50000		
0	ARTIMIDINAL	Shoot	--	--		
0	ARTIMIDINAL	Plant	--	--		
0	ARTIMIDINE	Shoot	--	--		
0	ARTIMIDINE	Plant	--	--		
112	ASCORBIC-ACID	Leaf	588	588	-0.3893611896312945	
2	ASPARAGINE	Leaf	--	--		
2	ASPARAGINE	Root	--	--		
3	ASPARTIC-ACID	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
3	ASPARTIC-ACID	Root	--	--		
0	ATEMITIN	Shoot	--	--		
0	BENZYL-DIACETYLENE	Root	--	--		
0	BENZYL-DIACETYLENE	Root Essent. Oil	--	--		
53	BETA-CAROTENE	Leaf	2	74	-0.8156731064057301	
2	BETA-MYRCENE	Shoot	--	--		
3	BETA-PHELLANDRENE	Shoot	100	1070	4.04416490771926	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	BETA-PINENE	Shoot	--	--		
13	BETA-PINENE	Leaf Essent. Oil	--	--		
13	BETA-PINENE	Essential Oil	--	--		
47	BETA-SITOSTEROL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
47	BETA-SITOSTEROL	Shoot	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
47	BETA-SITOSTEROL	Leaf	--	--		
0	BIOQUERCETIN	Shoot	--	--		
6	BUTYRIC-ACID	Plant	--	--		
102	CAFFEIC-ACID	Shoot	--	--		
102	CAFFEIC-ACID	Leaf	7640	7640	0.34397264551688544	
28	CALCIUM	Plant	11390	12340	-0.1336433279618558	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CAMPESTEROL	Shoot	--	30	1	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
9	CAMPHENE	Leaf	--	--		
9	CAMPHENE	Leaf Essent. Oil	--	--		
9	CAMPHENE	Essential Oil	--	--		
41	CAMPHOR	Shoot	20	200	-0.14976698900024374	
41	CAMPHOR	Essential Oil	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
41	CAMPHOR	Leaf Essent. Oil	--	20000	-0.7174269876896714	
2	CAPILLARIN	Shoot	920	920		
0	CAPILLENE	Shoot	--	108		
0	CAPILLENE	Shoot Essent. Oil	--	--		
5	CAPILLIN	Root	--	--		
5	CAPILLIN	Root Essent. Oil	--	--		
0	CAR-3-ENE	Shoot	--	--		
0	CAR-3-ENE	Essential Oil	--	--		
0	CAR-4-ENE	Shoot	--	--		
0	CAR-4-ENE	Leaf Essent. Oil	--	--		
0	CARBOHYDRATES	Plant	502000	544000	-0.8267191461120625	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Root	--	--	
19	CARVONE	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	CHAVICOL-METHYL-ETHER	Shoot	--	--	
77	CHLOROGENIC-ACID	Shoot	--	--	
7	CHRYSOERIOL	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	CINNAMIC-ACID-ACETATE	Shoot	--	--	
0	CINNAMIC-ACID-ACETATE	Essential Oil	--	--	
1	CINNAMIC-ACID-ETHYL-ESTER	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
10	CIRSILINEOL	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	CIRSIMARITRIN	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	CIS-ALLO-OCIMENE	Shoot	--	--	
0	CIS-ALLO-OCIMENE	Shoot Essent. Oil	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	CIS-ALPHA-OCIMENE	Leaf Essent. Oil	--	--		
0	CIS-ALPHA-OCIMENE	Root Essent. Oil	--	--		
0	CIS-BETA-OCIMENE	Essential Oil	--	--		
0	CIS-BETA-OCIMENE	Leaf	--	--		
0	CIS-LINALOOL-OXIDE	Shoot Essent. Oil	--	--		
3	CIS-OCIMENE	Shoot	--	--		
3	CIS-OCIMENE	Shoot Essent. Oil	--	--		
3	CIS-OCIMENE	Essential Oil	--	--		
53	CITRAL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
12	COPPER	Plant	7	7	-0.7770348996753241	USDA's Ag Handbook 8 and sequelae)
9	COSTUNOLIDE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
57	COUMARIN	Plant	--	--		
0	CYCLOHEXENONE	Shoot	--	--		
5	DEHYDROFALCARINDIOL	Root	--	--		
0	DEHYDROFALCARINOL	Root	100	100		
0	DEHYDROFALCARINONE	Root	--	--		
0	DEHYDROFALCARINONOL	Root	--	--		
1	DI-O-CAFFEOYL-QUINIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	DIACETYLEN	Shoot	--	--		
0	DIACETYLENE	Shoot Essent. Oil	--	--		
2	DIHYDROCOUMARIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	DIPHENYL-GLYOXAL	Shoot	--	--		
0	DIPHENYL-GLYOXAL	Shoot Essent. Oil	--	--		
16	ELEMICIN	Essential Oil	--	--		
16	ELEMICIN	Shoot	--	18.4	1	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	ELEMICINE	Shoot	227	2770		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EO	Plant	1000	10000	0.019853678703787233	
0	EO	Shoot	1000	10000	-0.027439288511147023	
0	EO	Leaf	--	--		
10	ERIODICTYOL	Shoot	--	75	-1	
30	ESCULETIN	Plant	--	--		
30	ESCULETIN	Shoot	--	--		Wealth of India.
0	ESCULETIN-DIMETHYL-ETHER	Plant	--	--		
0	ESCULETIN-DIMETHYL-ETHER	Shoot	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	ESTRAGOLE	Shoot	100	7763	1.3723679658914105	
12	ESTRAGOLE	Shoot Essent. Oil	750000	814000		
12	ESTRAGOLE	Essential Oil	100000	776300	0.4414359501836876	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	ESTRAGOLE	Leaf Essent. Oil	--	690000	0.31496006507489993
12	ESTRAGOLE	Seed Essent. Oil	--	650000	1.2260811936910665
12	ESTRAGOLE	Root Essent. Oil	--	--	
12	ESTRAGOLE	Leaf	--	--	
0	ESTRAGONOSIDE	Shoot	--	--	
76	EUGENOL	Shoot	--	--	
76	EUGENOL	Essential Oil	--	--	
76	EUGENOL	Shoot Essent. Oil	--	--	
0	EUGENOL-4-O-BETA-D-GLUCOSIDE	Shoot	--	8	
5	EUGENOL-METHYL-ETHER	Shoot	--	--	
5	EUGENOL-METHYL-ETHER	Essential Oil	--	5300	-0.5830399519329805
5	EUGENOL-METHYL-ETHER	Shoot Essent. Oil	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	FAT	Seed	381000	381000	0.6089719113994524	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Shoot	72000	78000	0.5948537047979354	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
61	FERULIC-ACID	Leaf	38	38	2.436082828712669	
15	FIBER	Plant	74000	80000	-1.0558199017143965	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	FRUCTOSE	Leaf	--	--		
8	FRUCTOSE	Root	--	--		
22	GABA	Shoot	--	--		
62	GALLIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
22	GAMMA-AMINOBUTYRIC-ACID	Root	--	--		
22	GAMMA-AMINOBUTYRIC-ACID	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
11	GAMMA-TERPINENE	Shoot	105	1040	0.32423748484074105	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
11	GAMMA-TERPINENE	Essential Oil	--	56900	-0.04515870825045456	
8	GENTISIC-ACID	Leaf	150	150	1	
35	GERANIOL	Shoot	--	--		
35	GERANIOL	Shoot Essent. Oil	--	--		
7	GLUCOSE	Leaf	--	--		
7	GLUCOSE	Root	--	--		
8	GLUTAMIC-ACID	Shoot	--	--		
8	GLUTAMIC-ACID	Root	--	--		
8	GLUTAMIC-ACID	Leaf	--	--		
5	GLUTAMINE	Shoot	--	--		
5	GLUTAMINE	Leaf	--	--		
5	GLUTAMINE	Root	--	--		
12	GLYCINE	Shoot	--	--		
12	GLYCINE	Root	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
12	GLYCINE	Leaf	--	--		
0	HEPTA-4,6-DIYNE-1,3-DIOL	Shoot	--	22		
12	HERNIARIN	Leaf	--	--		
12	HERNIARIN	Shoot	--	--		
12	HERNIARIN	Essential Oil	--	--		
12	HERNIARIN	Plant	--	--		
8	HESPERETIN	Shoot	--	75		
0	HEX-CIS-3-EN-1-OL-BETA-D-GLUCOSIDE	Shoot	--	20		
7	HISPIDULIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
30	HYPEROSIDE	Shoot	--	--		
0	INULOBIOSE	Root	--	--		
6	IRON	Plant	320	350	-0.3261303905390022	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
16	ISOEUGENOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
5	ISOFRAXIDIN	Shoot	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
11	ISORHAMNETIN	Plant	7	7		Stitt, Paul. Why George should eat broccoli.
0	ISOTHUJONE	Shoot	20	200		
0	ISOTHUJONE	Leaf Essent. Oil	--	20000		
4	ISOVITEXIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	KAEMPFEROL-3-O-RHAMNOGLUCOSIDE	Plant	--	--		
0	KILOCALORIES	Shoot	2950	2950	0.15669724536673543	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	L-PINITOL	Leaf	--	--		
2	LEUCINE	Shoot	--	--		
2	LEUCINE	Root	--	--		
2	LEUCINE	Leaf	--	--		
60	LIMONENE	Shoot	25	270	-0.19099565776190747	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Essential Oil	--	--	
60	LIMONENE	Root Essent. Oil	--	--	
0	LINALOL	Shoot	--	--	
53	LINALOOL	Shoot Essent. Oil	--	--	
53	LINALOOL	Essential Oil	--	--	
53	LINALOOL	Leaf Essent. Oil	--	--	
0	LINOLENIC-ACID	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
78	LUTEOLIN	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	LUTEOLIN-7-O-BETA-D-GLUCOSIDE	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
4	LYSINE	Shoot	--	--	
4	LYSINE	Root	--	--	
4	LYSINE	Leaf	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
65	MAGNESIUM	Plant	3470	3470	-0.1851096725134359	
2	MALTOSE	Leaf	1490	4000		
14	MANGANESE	Plant	80	80	-0.1215300451124085	USDA's Ag Handbook 8 and sequelae)
63	MENTHOL	Shoot	50	500	0.10999266642586884	
63	MENTHOL	Essential Oil	--	--		
30	MENTHONE	Shoot	--	--		
30	MENTHONE	Essential Oil	--	--		
0	METHYL-AMYL-KETONE	Shoot	--	--		
6	METHYL-CHAVICOL	Plant	172	7000	0.4586478149797617	
20	METHYL-EUGENOL	Plant	290	2900	2.732417724171957	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	METHYL-ISOEUGENOL	Shoot	--	--		
15	METHYL-ISOEUGENOL	Essential Oil	--	--		
22	MYRCENE	Shoot	80	1000	0.799029445609138	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
22	MYRCENE	Essential Oil	--	--		
3	N-HENTRIACONTANE	Shoot	--	--		
56	NARINGENIN	Shoot	44	97	1	
10	NEROL	Shoot	670	6700	3.4616488061589012	
10	NEROL	Leaf Essent. Oil	--	670000	1	
11	NEROLIDOL	Shoot	--	238	0.31301240869615476	
39	NIACIN	Plant	90	90	0.18616654712916966	USDA's Ag Handbook 8 and sequelae)
6	O-CRESOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
2	OCIMENE	Shoot Essent. Oil	--	--		
2	OCIMENE	Essential Oil	--	--		
18	OLEIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
25	P-COUMARIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
8	P-CRESOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
16	P-CYMENE	Shoot	--	--		
16	P-CYMENE	Essential Oil	--	24700	-0.4294696002319138	
13	P-HYDROXY-BENZOIC-ACID	Leaf	14	14	-0.6391623440007327	
0	P-HYDROXYCOUMARIC-ACID	Leaf	4	4		
0	P-MENTHA-1,8-DIENE	Shoot	--	--		
0	P-MENTHA-1,8-DIENE	Shoot Essent. Oil	--	--		
2	P-METHOXYCINNAMALDEHYDE	Seed	45	450		
2	P-METHOXYCINNAMALDEHYDE	Shoot	5	450		
2	P-METHOXYCINNAMALDEHYDE	Shoot Essent. Oil	--	6000		
2	P-METHOXYCINNAMALDEHYDE	Seed Essent. Oil	--	45000		
2	P-METHOXYCINNAMALDEHYDE	Leaf Essent. Oil	5000	45000		
2	P-METHOXYCINNAMALDEHYDE	Essential Oil	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-METHOXYCINNAMYL-ALCOHOL	Shoot	--	--	
0	P-METHOXYCINNAMYL-ALCOHOL	Essential Oil	--	--	
0	PATULETIN-3-O-GLUCOSIDE	Plant	--	--	
0	PATULETIN-3-O-RHAMNOGLUCOSIDE	Plant	120	120	
2	PECTOLINARIGENIN	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	PEROXIDASE	Leaf	--	--	
0	PEROXIDASE	Plant	--	--	
4	PHELLANDRENE	Shoot Essent. Oil	--	--	
26	PHENOL	Plant	--	--	Stitt, Paul. Why George should eat broccoli.
0	PHENOLASE	Plant	--	--	
7	PHENYLALANINE	Root	--	--	
8	PHLOROGLUCINOL	Plant	--	--	Stitt, Paul. Why George should eat broccoli.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
4	PHOSPHORUS	Plant	3130	3391	-0.09498138262187504	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	PHYTOSTEROLS	Plant	89	810	-0.5460622792095707	
9	PINOCEMBRIN	Shoot	--	--		
0	POLYACETYLENES	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	POLYPHENOL-OXIDASE	Leaf	--	--		
0	POLYPHENOL-OXIDASE	Plant	--	--		
14	POTASSIUM	Plant	30020	32719	0.7616746965990568	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROLINE	Leaf	--	--		
0	PROLINE	Root	--	--		
0	PROTEIN	Plant	228000	247009	0.6026897753752032	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
0	PROTEIN	Seed	315000	315000	0.7223510331064014	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Shoot	228000	247000	0.32677337755744273	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
43	PROTOCATECHUIC-ACID	Leaf	3	17	-0.8777778451667783	
176	QUERCETIN	Shoot	--	--		
2	QUERCETIN-3'-METHYLETHER	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	QUERCETIN-3-(BETA-D-GALACTOFURANOSYL-6-BETA-L-RHAMNOPYRANOSIDE)	Shoot	--	--		
0	QUERCETIN-3-(D-GALACTOFURANOSYL-6-BETA-L-RHAMNOPYRANOSIDE	Shoot	--	--		
0	QUERCETIN-3-(D-GLUCOFURANOSYL-6-BETA-L-RHAMNOPYRANOSIDE	Shoot	--	--		
0	QUERCETIN-3-GLYCO-GALACTOSIDE	Plant	--	--		
2	QUERCETIN-3-O-BETA-D-GLUCOSIDE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
18	RHAMNETIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	RHAMNOSE	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
15	RIBOFLAVIN	Plant	13	14	0.18036366581905444	USDA's Ag Handbook 8 and sequelae)
0	RIBOSE	Leaf	--	--		
57	ROSMARINIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
87	RUTIN	Shoot	100	560	-0.5313186017977898	
87	RUTIN	Leaf	--	--		
5	SABINENE	Shoot	370	3700	3.643649749310963	
7	SALICYLATES	Leaf	35	350	0.1847218753406517	
34	SALICYLIC-ACID	Leaf	3	3	-1	
2	SCOPARIN	Leaf	--	--		
22	SCOPARONE	Shoot	8	8		
44	SCOPOLETIN	Shoot	--	--		
44	SCOPOLETIN	Leaf	--	--		
44	SCOPOLETIN	Plant	--	--		
1	SERINE	Shoot	--	--		
1	SERINE	Root	--	--		
1	SERINE	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
9	SINAPIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
1	SODIUM	Plant	620	620	-0.2697571581103508	
0	SPATHULENOL	Shoot	--	108	0.18161421122163604	
0	SPATHULENOL	Shoot Essent. Oil	--	--		
10	SQUALENE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
12	STIGMASTEROL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
14	SUCROSE	Leaf	--	--		
14	SUCROSE	Root	--	--		
6	SYRINGIC-ACID	Leaf	8	8		
35	TANNIN	Plant	--	--		
0	TANNINS	Shoot	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	TANNINS	Leaf	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
31	THIAMIN	Plant	2	3	-0.3909910138264638	
17	THUJONE	Shoot	60	600	1.3555286119343917	
17	THUJONE	Leaf Essent. Oil	--	60000		
0	TRANS-ALLO-OCIMENE	Shoot	--	--		
0	TRANS-ALLO-OCIMENE	Shoot Essent. Oil	--	--		
0	TRANS-ALPHA-OCIMENE	Root Essent. Oil	--	--		
8	TRANS-ANETHOLE	Shoot	100	10000	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-BETA-OCIMENE	Essential Oil	--	--		
0	TRANS-BETA-OCIMENE	Leaf	--	--		
0	TRANS-ISOELEMICIN	Essential Oil	--	--		
0	TRANS-ISOELEMICINE	Shoot	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-LINALOOL-OXIDE	Shoot Essent. Oil	--	--	
0	TRANS-METHYL-ETHER-ISOEUGENOL	Shoot	--	--	
0	TRANS-METHYL-ETHER-ISOEUGENOL	Essential Oil	--	--	
0	TRANS-METHYL-ISOEUGENOL	Shoot	--	--	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	TRANS-OCIMENE	Shoot	--	--	
0	TRANS-OCIMENE	Shoot Essent. Oil	--	--	
0	TRANS-OCIMENE	Leaf Essent. Oil	--	--	
0	TRANS-OCIMENE	Essential Oil	--	--	
8	TYROSINE	Shoot	--	--	
8	TYROSINE	Root	--	--	
8	TYROSINE	Leaf	--	--	

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation	
22	UMBELLIFERONE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	VALDINOL-F	Shoot	--	12		
3	VALINE	Leaf	--	--		
3	VALINE	Root	--	--		
24	VANILLIC-ACID	Leaf	18	18	0.8117220703723087	
3	XYLOSE	Leaf	--	--		
3	XYLOSE	Root	--	--		
77	ZINC	Plant	--	--		