

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Panax ginseng

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	(+)-AROMADENDRENE	Shoot				--
0	(+)-BETA-BISABOLENE	Shoot				--
0	(+)-CAMPHENE	Shoot				--
0	(-)-BETA-PANASINSENE	Root Essent. Oil				--
0	1,3-DIMETHYL-BENZENE	Shoot				--
0	1,8-CINEOL	Root Essent. Oil				--
0	1-1-DIETHOXY-ETHANE	Shoot				--
0	1-2-DIBUTYL-PHENYL-FORMATE	Shoot				--
0	1-ETHOXY-BUTANE	Shoot				--
0	1-ETHOXY-PENTANE	Shoot				--
0	1-O-ALPHA-GLUCOSIDE-PROPAN-2-ON-1-OL	Root				--
0	10-ACETYL-PANAXYTRIOL	Root				--
0	2-3-3-TRIMETHYL-PENTA-1-4-DIENE	Shoot				--
0	2-5-DIMETHYL-TRIDECANE	Root Essent. Oil				--
0	2-5-DIMETHYL-TRIDECANE	Plant				--
0	2-6-DIETHYL-PYRAZINE	Root				--
0	2-6-DIMETHYL-6-(4-METHYL-3-PENTENYL)-BICYCLO-(3.1.1)-HEPT-2-ENE	Flower Essent. Oil				--
0	2-6-DITERT-BUTYL-4-METHYL-PHENOL	Flower Essent. Oil		14000.0		--
0	2-6-DITERT-BUTYL-4-METHYL-PHENOL	Root Essent. Oil		14000.0		--
0	2-ACETYL-PYRROLE	Shoot				--
0	2-ETHANOYL-FURAN	Shoot				--
0	2-ETHYL-5-METHYL-PYRAZINE	Root				--
0	2-ETHYL-6-METHYL-PYRAZINE	Root				--
0	2-GLUCOGINSENOSIDE-RF	Root		50.0		Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-ISO-BUTYL-3-METHOXY-PYRAZINE	Root				--
0	2-ISO-PROPYL-3-METHOXY-PYRAZINE	Root				--
0	2-ISO-PROPYL-5-METHYL-ANISOLE	Root				--
0	2-KETO-OCTA-TRANS-3-TRANS-5-DIENE	Shoot				--
0	2-METHYL-3-O-BETA-D-GLUCOSIDE-PYR-4-ONE	Plant				--
0	2-METHYL-HEXANOIC-ACID-EHTYL-ESTER	Root				--
0	2-METHYL-TETRADECANE	Root Essent. Oil		29000.0		--
0	2-SEC-BUTYL-3-METHOXY-PYRAZINE	Root				--
0	20(R)-GINSENSIDE-RG-3	Fruit				--
0	20(R)-GINSENSIDE-RH-1	Fruit				--
0	20(R)-GINSENSIDE-RH-1	Rhizome				--
0	20(R)-GINSENSIDE-RH-2	Leaf	6.7	10.0		--
0	20(R)-GINSENSIDE-RH-2	Shoot				--
0	20(R)-PROTOPANAXADIOL	Leaf	0.1	1.4		--
0	20(R)-PROTOPANAXATRIOL	Leaf	1.4	12.5		--
0	20(R)-PROTOPANAXATRIOL	Fruit				--
0	20(S)-GINSENSIDE-RH-2	Leaf		7.0		--
0	20(S)-PROTOPANAXADIOL-3-O-BETA-D-GLUCOPYRANOSIDE	Root		10.0		--
0	20-(S)-DIHYDRO-PROTOPANAXATRIONE	Root				--
0	20-GLUCO-GINSENSIDE	Leaf				--
0	20-GLUCOSYL-GINSENSIDE	Flower				--
0	20-GLUCOSYL-GINSENSIDE	Root		50.0		--
0	22-TRANS-DEHYDRO-24-METHYL-CHOLESTEROL	Seed Oil				--
0	24-ETHYL-22-TRANS-DEHYDRO-CHOLESTEROL	Seed Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	24-ETHYL-24(25)-DEHYDRO-CHOLESTEROL	Seed Oil				--
0	24-ETHYL-CHOLESTEROL	Seed Oil				--
0	24-METHYL-CHOLESTEROL	Seed Oil				--
0	24-METHYLENE-24-DIHYDRO-LANOSTEROL	Seed Oil				--
5	24-METHYLENE-CYCLOARTANOL	Seed Oil				--
0	28-ISOFUCOSTEROL	Seed Oil				--
0	3-12-DIETHYL-TETRADECA-2-5-9-TRIENE	Shoot				--
0	3-9-10-TRIACETOXY-HEPTADECA-1-16-DIENE-4-6-DIYNE	Root				--
0	3-DIHYDRO-PANAXACOL	Tissue Culture		2.5		--
0	3-ISO-PROPYL-2-METHOXY-5-METHYL-PYRAZINE	Root				--
0	3-SEC-BUTYL-2-METHOXY-5-METHYL-PYRAZINE	Root				--
0	4-METHYL-METHOXY-BENZENE	Shoot				--
0	4-METHYL-THIAZOLE-5-ETHANOL	Root				--
0	4-OXY-OCT-6-ENOIC-ACID-METHYL-ESTER	Root				--
0	5-ETHYL-2-3-DIMETHYL-PYRAZINE	Root				--
0	6-ALKYNE-HEXADEC-4-TRANS-ENE	Shoot				--
0	6-METHYL-2-KETO-HEPTA-3-5-DIENE	Shoot				--
0	6-METHYL-HEPT-6-EN-2-ONE	Shoot				--
0	7-ALKYNE-2-HYDROXY-NONA-TRANS-3-TRANS-5-DIENE	Shoot				--
0	9-10-EPOXY-HEPTADEC-1-16-DIENE-4-6-DIYN-3-ONE	Root				--
0	9-10-EPOXY-HEPTADECA-1-16-DIENE-4-6-DIYN	Root				--
16	ACETIC-ACID	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ACETIC-ACID-ETHYL-ESTER	Shoot				--
0	ACETYL-PANAXYDOL	Root		2.1	-1.0000000000000002	--
0	ACIDIC-PEPTIDES	Flower				--
11	ADENINE	Root				--
28	ADENOSINE	Root		90.0	1.0	--
28	ADENOSINE	Rhizome				--
0	ADENYL-CYCLASE	Root				--
3	ALANINE	Leaf				--
3	ALANINE	Root				--
0	ALLO-AROMADENDRENE	Shoot Essent. Oil				--
0	ALLO-AROMADENDRENE	Shoot				--
0	ALLO-AROMADENDRENE	Flower Essent. Oil				--
0	ALLO-AROMADENDRENE	Plant				--
0	ALLO-AROMADENDRENE	Root Essent. Oil				--
0	ALPHA-AMYLASE	Root				--
0	ALPHA-BERGAMOTENE	Shoot				--
0	ALPHA-COPAENE	Flower Essent. Oil				--
0	ALPHA-COPAENE	Shoot Essent. Oil				--
0	ALPHA-CUBEBENE	Shoot				--
0	ALPHA-CUBEBENE	Flower Essent. Oil				--
0	ALPHA-FARNESENE	Flower Essent. Oil		14000.0		--
0	ALPHA-FRUCTOSE	Root				--
0	ALPHA-GAMMA-DIPALMITIN	Root				--
0	ALPHA-GLUCOSE	Root				--
0	ALPHA-GUAIENE	Flower Essent. Oil		55000.0		--
0	ALPHA-GUAIENE	Root				--
0	ALPHA-GUAIENE	Root Essent. Oil		40000.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ALPHA-HUMULENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	ALPHA-HUMULENE	Root Essent. Oil				--
0	ALPHA-MALTOSE	Root				--
0	ALPHA-MALTOSYL-BETA-D-FRUCTOFURANOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-NEOCLOVENE	Root Essent. Oil				--
0	ALPHA-NEOCLOVENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ALPHA-PANASINSENE	Root		17.6		--
0	ALPHA-PANASINSENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ALPHA-PANASINSENE	Root Essent. Oil				--
11	ALPHA-PHELLANDRENE	Root				--
11	ALPHA-PHELLANDRENE	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.
11	ALPHA-PHELLANDRENE	Root Essent. Oil				--
28	ALPHA-PINENE	Root Essent. Oil				--
28	ALPHA-PINENE	Root				--
0	ALPHA-PYRROLIDONE	Root				--
0	ALPHA-SANTALENE	Shoot Essent. Oil				--
0	ALPHA-SANTALENE	Flower Essent. Oil				--
0	ALPHA-SANTALENE	Root Essent. Oil				--
3	ALPHA-SELINENE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALPHA-SELINENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ALPHA-SELINENE	Flower Essent. Oil				--
3	ALPHA-SELINENE	Root Essent. Oil				--
5	ALUMINUM	Root	5.0	22.0	-0.30067595885157333	--
0	AMINO-ACIDS	Flower				--
0	AMINO-ACIDS	Tissue Culture				--
0	AMINO-ACIDS	Root				--
0	ARACHIDIC-ACID	Root				--
14	ARGININE	Leaf				--
14	ARGININE	Root				--
0	AROMADENDRANE-4-BETA-10-ALPHA-DIOL	Plant		3.0		--
3	AROMADENDRENE	Plant				--
3	AROMADENDRENE	Root Essent. Oil				--
3	AROMADENDRENE	Flower Essent. Oil				--
2	ARSENIC	Root				--
112	ASCORBIC-ACID	Leaf				--
112	ASCORBIC-ACID	Root		0.0	-0.6459735820044326	--
0	ASH	Root	10600.0	50000.0	-0.5013998487298318	--
0	ASPARTASE	Root				--
3	ASPARTIC-ACID	Leaf				--
3	ASPARTIC-ACID	Root				--
0	AVENASTEROL	Seed Oil				--
10	AZULENE	Shoot				--
1	BEHENIC-ACID	Root				--
24	BENZALDEHYDE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	BENZYL-BETA-PRIMEVEROSIDE	Root		47.0		--
0	BETA-AMYLASE	Root				--
9	BETA-AMYRIN	Seed Oil				--
6	BETA-BISABOLENE	Plant				--
6	BETA-BISABOLENE	Root Essent. Oil				--
0	BETA-BOURBONENE	Shoot				--
0	BETA-BOURBONENE	Flower Essent. Oil				--
53	BETA-CAROTENE	Root				--
0	BETA-CARYOPHYLLENE	Flower Essent. Oil				--
0	BETA-CARYOPHYLLENE	Shoot				--
0	BETA-CUBEBENE	Shoot				--
0	BETA-CUBEBENE	Flower Essent. Oil				--
5	BETA-ELEMENE	Flower Essent. Oil		29000.0		--
5	BETA-ELEMENE	Shoot				--
5	BETA-ELEMENE	Root Essent. Oil		150000.0	1.0	--
5	BETA-ELEMENE	Root				--
0	BETA-ELEMENENE	Flower Essent. Oil				--
13	BETA-EUDESOL	Root Essent. Oil				--
13	BETA-EUDESOL	Plant				--
0	BETA-FARNES-(3-CIS-6-TRANS)-ENE	Shoot				--
0	BETA-FARNES-CIS-ENE	Shoot				--
0	BETA-FARNESENE	Stem		1000.0		--
0	BETA-FARNESENE	Leaf		1000.0	0.3101066332955471	--
0	BETA-FARNESENE	Root Essent. Oil		85000.0	-1.0	--
0	BETA-FARNESENE	Flower Essent. Oil		43000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-FARNESENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BETA-FARNESENE	Root				--
0	BETA-FRUCTOSE	Root				--
0	BETA-GLUCOSE	Root				--
0	BETA-GUAIENE	Plant				--
0	BETA-GUAIENE	Root Essent. Oil				--
0	BETA-GURJUNENE	Root Essent. Oil		60000.0	-1.0	--
0	BETA-GURJUNENE	Plant				--
0	BETA-HUMULENE	Root Essent. Oil				--
0	BETA-HUMULENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BETA-MAALIENE	Shoot				--
0	BETA-MAALIENE	Root				--
0	BETA-MAALIENE	Flower Essent. Oil				--
0	BETA-MALTOSE	Root				--
0	BETA-NEOCLOVENE	Root Essent. Oil				--
0	BETA-NEOCLOVENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BETA-PANASINSENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BETA-PANASINSENE	Root		10.2		--
0	BETA-PATCHOULENE	Root				--
0	BETA-PATCHOULENE	Root Essent. Oil				--
2	BETA-SANTALENE	Flower Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	BETA-SELINENE	Root Essent. Oil		80000.0		--
3	BETA-SELINENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
47	BETA-SITOSTEROL	Rhizome				--
47	BETA-SITOSTEROL	Fruit				--
47	BETA-SITOSTEROL	Root				--
0	BETA-SITOSTEROL-3-O-BETA-D-GLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	BETA-SITOSTERYL-GLUCOSIDE	Plant				--
0	BICYCLO-(2.1.0)-PENTANE-5-CARBOXYLIC-ACID-1-METHYL-ETHYL-ESTER	Shoot				--
0	BICYCLOGERMACRENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	BICYCLOGERMACRENE	Root				--
4	BIOTIN	Root		0.9		--
0	BISABOLENE	Flower Essent. Oil				--
0	BUTYROSPERMOL	Seed Oil				--
4	CADINENE	Shoot				--
102	CAFFEIC-ACID	Root				--
28	CALCIUM	Root	611.0	2880.0	-0.4953286858004708	--
2	CAMPESTEROL	Root				--
0	CAMPESTEROL-6'-LINOLENYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	CAMPESTEROL-6'-LINOLYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	CAMPESTEROL-6'-OLEYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	CAMPESTEROL-6'-PALMITYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	CAMPESTEROL-6'-STEARYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAPROIC-ACID-BUTYL-ESTER	Root				--
0	CAPROIC-ACID-PROPYL-ESTER	Root				--
0	CARBOHYDRATES	Root	176808.0	834000.0	0.050849387570411526	--
0	CARBON-DISULFIDE	Root		1500.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	CARYOPHYLLENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
31	CARYOPHYLLENE	Root Essent. Oil				--
1	CARYOPHYLLENE-ALCOHOL	Root Essent. Oil				--
1	CATALASE	Root				--
0	CELLULASE	Root				--
0	CEREBROSIDE	Root				--
0	CHLORO-PANAXYDIOL	Tissue Culture		3.0		--
21	CHLOROPHYLL	Leaf				--
0	CHOLESTA-3-5-DIENE	Shoot				--
1	CHOLESTEROL	Seed Oil				--
20	CHOLINE	Root	1000.0	2000.0	-0.17667432573797054	--
24	CHROMIUM	Root	0.2	1.1	-0.34069526376445175	--
0	CINEOLE	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-CARYOPHYLLENE	Plant				--
0	CIS-CARYOPHYLLENE	Root Essent. Oil				--
53	CITRAL	Root Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	CITRAL	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
23	CITRIC-ACID	Root				--
1	CITROSTADIENOL	Seed Oil				--
2	COBALT	Root	0.7	3.1	-0.477922970663694	--
12	COPPER	Fruit				--
12	COPPER	Leaf				--
12	COPPER	Flower				--
12	COPPER	Root		17.0	0.5844884448285068	--
12	COPPER	Inflorescence				--
12	COPPER	Stem				--
7	CYCLOARTENOL	Seed Oil				--
3	CYCLOEUCALENOL	Seed Oil				--
13	CYSTEINE	Root				--
2	CYSTINE	Leaf				--
2	CYSTINE	Root				--
0	D-FRUCTOSE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
1	D-GLUCOSE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	D-SUCROSE	Root				--
0	DAMMARAN-3-BETA-6-ALPHA-12-BETA-20(R)-25-PENTAOL	Shoot		2.0		--
0	DAMMARAN-3-BETA-6-ALPHA-12-BETA-20(R)-25-PENTAOL-6-O-ALPHA-L-RHAMNOPYRANOSYL(1-2)-O-BETA-D-GLUCOPYRANOSIDE	Shoot		10.0		--
0	DAUCOSTERINE	Root				--
0	DAUCOSTERINE	Leaf		3.8		--
5	DAUCOSTEROL	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	DAUCOSTEROL	Root				--
5	DAUCOSTEROL	Tissue Culture				--
5	DAUCOSTEROL	Rhizome				--
0	DECA-TRANS-2,TRANS-4-DIEN-1-AL	Shoot				--
0	DECA-TRANS-2-CIS-4-DIEN-1-AL	Shoot				--
9	DELTA-CADINENE	Root				--
0	DENDROLASIN	Shoot				--
0	DENSICHINE	Root				--
0	DI-ISO-PROPYL-SULFIDE	Root				--
0	DIGLYCOSYL-DIGLYCERIDE	Root				--
0	DIHYDROACTINIDIOLIDE	Shoot				--
1	DIHYDROPANAXACOL	Tissue Culture		2.0		--
0	DISACCHARIDES	Root		33000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ELEMENE	Root				--
0	EO	Root	100.0	500.0	-0.631241020868696	--
0	EPSILON-MUUROLENE	Root Essent. Oil				--
0	EPSILON-MUUROLENE	Plant				--
0	EREMOPHIL-1-(10)-11-ENE	Shoot				--
0	EREMOPHILA-1-(10)-11-DIENE	Flower Essent. Oil				--
0	EREMOPHILENE	Plant				--
0	EREMOPHILENE	Root Essent. Oil		23000.0		--
2	ERUCIC-ACID	Root				--
3	ESTRADIOL	Root				--
6	ESTRIOL	Root				--
8	ESTRONE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	ETHANOL	Shoot				--
0	ETHYLBENZENE	Shoot				--
1	ETHYLENE	Plant				--
13	EUCALYPTOL	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.
76	EUGENOL	Root Essent. Oil				--
16	FALCARINOL	Rhizome				--
16	FALCARINOL	Root	0.9	310.0	1.4051395916147116	--
0	FAT	Root	3752.0	17700.0	-0.172739674548991	--
61	FERULIC-ACID	Root				--
15	FIBER	Root		72000.0	-0.35781867764508235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Root		72000.0	-1.1616741196232196	--
0	FIBER(DIETARY)	Root		301000.0	-1.0640221212316432	--
3	FLUORIDE	Root		26.3	1.7190337938896858	--
23	FOLIC-ACID	Root				--
0	FORMIC-ACID-METHYL-ESTER	Shoot				--
8	FRUCTOSE	Stem		1800.0		--
8	FRUCTOSE	Leaf		6500.0	-1.351589051251948	--
8	FRUCTOSE	Tissue Culture				--
8	FRUCTOSE	Root	200.0	6000.0	-0.4913954846191467	--
7	FUMARIC-ACID	Root				--
0	FURALDEHYDE	Shoot				--
0	GADOLEIC-ACID	Root				--
1	GALACTOSE	Root				--
0	GALANIN	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	GAMMA-AMINOBUTYRIC-ACID	Root				--
0	GAMMA-CADINENE	Flower Essent. Oil				--
0	GAMMA-ELEMENE	Plant				--
0	GAMMA-ELEMENE	Root Essent. Oil	60000.0	100000.0	1.0	--
0	GAMMA-PATCHOULENE	Plant				--
0	GAMMA-PATCHOULENE	Root Essent. Oil				--
0	GAMMA-SELINENE	Root Essent. Oil				--
0	GAMMA-SELINENE	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	GE	Root				--
0	GENSENOSIDE-RD	Root				--
8	GENTISIC-ACID	Root				--
0	GERMANIUM	Root	0.12	320.0	1.0	--
0	GINSENAN-PA	Root		235.0		--
0	GINSENAN-PB	Root		170.0		--
0	GINSENAN-S-I-A	Root		106.6		--
0	GINSENAN-S-II-A	Root		90.0		--
0	GINSENG-POLYPEPTIDE	Root				--
0	GINSENG-POLYPEPTIDE-GPP	Root				--
0	GINSENL	Root		9.6		--
0	GINSENOSIDE	Plant				--
0	GINSENOSIDE	Root		47000.0		--
0	GINSENOSIDE-F	Leaf		12.5		--
0	GINSENOSIDE-F-1	Leaf		4000.0		--
0	GINSENOSIDE-F-1	Shoot		4000.0		--
0	GINSENOSIDE-F2	Shoot		2000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	GINSENOSIDE-F2	Fruit		5000.0		--
0	GINSENOSIDE-F2	Leaf	2000.0	18400.0		--
0	GINSENOSIDE-F3	Shoot		2000.0		--
0	GINSENOSIDE-F3	Flower		300.0		--
0	GINSENOSIDE-F3	Leaf		2000.0		--
0	GINSENOSIDE-F4	Leaf		746.2		--
0	GINSENOSIDE-FC-3	Flower				--
0	GINSENOSIDE-FD-2	Flower				--
0	GINSENOSIDE-FD-3	Flower				--
0	GINSENOSIDE-K	Root				--
0	GINSENOSIDE-L-A	Leaf	2.0	6.5		--
0	GINSENOSIDE-M-3	Flower				--
0	GINSENOSIDE-M-4	Flower				--
0	GINSENOSIDE-M-5	Flower				--
0	GINSENOSIDE-M-6	Flower				--
0	GINSENOSIDE-M-7	Flower		300.0		--
0	GINSENOSIDE-M-7-A	Flower				--
0	GINSENOSIDE-M-7-B	Flower				--
0	GINSENOSIDE-M-7-CD	Flower				--
0	GINSENOSIDE-M-7-ED	Flower		10.0		--
0	GINSENOSIDE-NG-R-2	Root				--
4	GINSENOSIDE-R-O	Rhizome	18000.0	34000.0		--
4	GINSENOSIDE-R-O	Root	100.0	11000.0	1.0	--
4	GINSENOSIDE-R-O	Flower				--
0	GINSENOSIDE-RA	Shoot				--
0	GINSENOSIDE-RA	Root	100.0	300.0		--
0	GINSENOSIDE-RA-1	Root	100.0	300.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	GINSENOSIDE-RA-2	Root		300.0		--
0	GINSENOSIDE-RA-3	Root		50.0		--
0	GINSENOSIDE-RA-O	Root				--
1	GINSENOSIDE-RB	Tissue Culture	13100.0	15900.0		--
1	GINSENOSIDE-RB	Rhizome				--
1	GINSENOSIDE-RB	Root	11300.0	40000.0		--
14	GINSENOSIDE-RB-1	Root Bark				--
14	GINSENOSIDE-RB-1	Root	1700.0	83000.0	1.0	--
14	GINSENOSIDE-RB-1	Shoot		1000.0		--
14	GINSENOSIDE-RB-1	Leaf	9.0	8000.0	1.0	--
14	GINSENOSIDE-RB-1	Seed				--
14	GINSENOSIDE-RB-1	Bud		2000.0		--
14	GINSENOSIDE-RB-1	Flower		2000.0		--
14	GINSENOSIDE-RB-1	Tissue Culture				--
14	GINSENOSIDE-RB-1	Embryo				--
14	GINSENOSIDE-RB-1	Rhizome	8800.0	14000.0		--
14	GINSENOSIDE-RB-1	Fruit				--
8	GINSENOSIDE-RB-2	Leaf	11.0	58300.0	1.0	--
8	GINSENOSIDE-RB-2	Rhizome	4500.0	5700.0		--
8	GINSENOSIDE-RB-2	Fruit	200.0	29500.0		--
8	GINSENOSIDE-RB-2	Root Bark				--
8	GINSENOSIDE-RB-2	Flower		2000.0		--
8	GINSENOSIDE-RB-2	Seed				--
8	GINSENOSIDE-RB-2	Tissue Culture				--
8	GINSENOSIDE-RB-2	Embryo				--
8	GINSENOSIDE-RB-2	Shoot		4000.0	1.0	--
8	GINSENOSIDE-RB-2	Root	100.0	23000.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
8	GINSENOSIDE-RB-2	Stem		3970.0		--
0	GINSENOSIDE-RB-2-C	Root				--
2	GINSENOSIDE-RB-3	Root		50.0	-1.0	--
2	GINSENOSIDE-RB-3	Flower		136.0		--
0	GINSENOSIDE-RB-C	Root Bark		24000.0		--
0	GINSENOSIDE-RB-C	Root		14000.0		--
0	GINSENOSIDE-RB-GROUP	Tissue Culture				--
0	GINSENOSIDE-RB-GROUP	Root				--
6	GINSENOSIDE-RC	Seed				--
6	GINSENOSIDE-RC	Pt		1900.0		--
6	GINSENOSIDE-RC	Embryo				--
6	GINSENOSIDE-RC	Root Bark				--
6	GINSENOSIDE-RC	Rhizome		4700.0		--
6	GINSENOSIDE-RC	Root	500.0	25000.0	1.0	--
6	GINSENOSIDE-RC	Leaf	3.5	37700.0	1.0	--
6	GINSENOSIDE-RC	Fruit	1000.0	36700.0		--
6	GINSENOSIDE-RC	Flower	672.0	2000.0		--
6	GINSENOSIDE-RC	Tissue Culture				--
6	GINSENOSIDE-RC	Shoot		2000.0		--
0	GINSENOSIDE-RC-2	Root				--
3	GINSENOSIDE-RD	Fruit	1000.0	68800.0		--
3	GINSENOSIDE-RD	Tissue Culture				--
3	GINSENOSIDE-RD	Pt	100.0	1070.0		--
3	GINSENOSIDE-RD	Shoot		15000.0	1.0	--
3	GINSENOSIDE-RD	Flower	1000.0	5000.0		--
3	GINSENOSIDE-RD	Seed				--
3	GINSENOSIDE-RD	Root Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
3	GINSENOSIDE-RD	Rhizome	700.0	1600.0	-1.0	--
3	GINSENOSIDE-RD	Embryo				--
3	GINSENOSIDE-RD	Root	380.0	21200.0	1.0	--
3	GINSENOSIDE-RD	Leaf	11.0	65800.0	1.0	--
0	GINSENOSIDE-RD-2	Embryo				--
0	GINSENOSIDE-RD-2	Root				--
5	GINSENOSIDE-RE	Tissue Culture				--
5	GINSENOSIDE-RE	Stem		700.0		--
5	GINSENOSIDE-RE	Root	680.0	84800.0	1.0	--
5	GINSENOSIDE-RE	Fruit Juice				--
5	GINSENOSIDE-RE	Shoot		15000.0	1.0	--
5	GINSENOSIDE-RE	Leaf	15.0	151200.0	1.0	--
5	GINSENOSIDE-RE	Seed				--
5	GINSENOSIDE-RE	Fruit	25000.0	60000.0		--
5	GINSENOSIDE-RE	Rhizome	4700.0	5700.0		--
5	GINSENOSIDE-RE	Flower	25000.0	60000.0		--
5	GINSENOSIDE-RE	Pt	600.0	1410.0		--
0	GINSENOSIDE-RE-2	Root				--
0	GINSENOSIDE-RE-3	Root				--
4	GINSENOSIDE-RF	Rhizome		1500.0		--
4	GINSENOSIDE-RF	Flower				--
4	GINSENOSIDE-RF	Root	200.0	9200.0		--
4	GINSENOSIDE-RF	Tissue Culture				--
4	GINSENOSIDE-RF	Shoot				--
4	GINSENOSIDE-RF	Fruit		6900.0		--
4	GINSENOSIDE-RF	Leaf	24100.0	38300.0		--
1	GINSENOSIDE-RG	Root	4600.0	16300.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
1	GINSENOSIDE-RG	Root Bark		34000.0		--
1	GINSENOSIDE-RG	Tissue Culture	12200.0	17300.0		--
1	GINSENOSIDE-RG	Stem		700.0		--
13	GINSENOSIDE-RG-1	Root	320.0	58400.0	1.0	--
13	GINSENOSIDE-RG-1	Stem		2920.0		--
13	GINSENOSIDE-RG-1	Leaf	5.0	72200.0	1.0	--
13	GINSENOSIDE-RG-1	Shoot		15000.0	1.0	--
13	GINSENOSIDE-RG-1	Fruit	400.0	287200.0		--
13	GINSENOSIDE-RG-1	Flower	400.0	3000.0		--
13	GINSENOSIDE-RG-1	Embryo				--
13	GINSENOSIDE-RG-1	Tissue Culture				--
13	GINSENOSIDE-RG-1	Root Bark				--
13	GINSENOSIDE-RG-1	Rhizome	3800.0	4500.0		--
13	GINSENOSIDE-RG-1	Pt	1000.0	3270.0		--
3	GINSENOSIDE-RG-2	Shoot				--
3	GINSENOSIDE-RG-2	Flower				--
3	GINSENOSIDE-RG-2	Rhizome				--
3	GINSENOSIDE-RG-2	Root	100.0	26700.0	1.0	--
3	GINSENOSIDE-RG-2	Leaf	67.0	317.5		--
2	GINSENOSIDE-RG-3	Leaf	25.0	195.0		--
2	GINSENOSIDE-RG-3	Root	3.0	30.0		--
2	GINSENOSIDE-RG-3	Shoot				--
0	GINSENOSIDE-RG-4	Leaf	0.16	4.5		--
0	GINSENOSIDE-RH	Shoot				--
0	GINSENOSIDE-RH	Root				--
0	GINSENOSIDE-RH-2	Root				--
0	GINSENOSIDE-RH-2	Shoot		0.4		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GINSENOSE-RH-3	Shoot				--
0	GINSENOSE-RH-3	Leaf	2.9	5.0		--
2	GINSENOSE-RH1	Shoot				--
2	GINSENOSE-RH1	Root		15.0		--
2	GINSENOSE-RH1	Tissue Culture				--
2	GINSENOSE-RH1	Leaf	12.5	135.0		--
0	GINSENOSE-Z-R-1	Root				--
18	GINSENOSE	Root	10720.0	30000.0	-0.8754149693562976	--
18	GINSENOSE	Plant				--
18	GINSENOSE	Shoot				--
18	GINSENOSE	Tissue Culture				--
0	GINSENOYNE-A	Root		12.8		--
0	GINSENOYNE-A-LINOLEATE	Root		2.8		--
0	GINSENOYNE-B	Root		1.5		--
0	GINSENOYNE-C	Root		1.1		--
0	GINSENOYNE-D	Root		7.1		--
0	GINSENOYNE-E	Root		7.1		--
0	GINSENOYNE-F	Root		2.6		--
0	GINSENOYNE-G	Root		0.176	-1.0	--
0	GINSENOYNE-H	Root		1.47		--
0	GINSENOYNE-I	Root		2.6		--
0	GINSENOYNE-J	Root		3.5		--
0	GINSENOYNE-K	Root		14.1		--
0	GINSENOYNES	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
7	GLUCOSE	Root	100.0	9000.0	-0.5544082656198722	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	GLUCOSE	Tissue Culture				--
7	GLUCOSE	Stem		14700.0		--
7	GLUCOSE	Leaf		5800.0	-0.5922731387025567	--
8	GLUTAMIC-ACID	Leaf				--
8	GLUTAMIC-ACID	Root				--
0	GLY-ARG-GAMMA-GLU-VAL-NH2	Root				--
12	GLYCINE	Root				--
12	GLYCINE	Leaf				--
0	GLYCO-CHENODEOXYCHOLIC-ACID	Root				--
0	GLYCO-DEOXY-CHOLIC-ACID	Root				--
0	GLYCOCHOLIC-ACID	Root				--
0	GOMSEMPISODE-RB-2	Root				--
1	GUANINE	Root				--
0	GUM	Root	27560.0	130000.0	0.9757626125530419	--
0	GYPENOSIDE-XVII	Tissue Culture		960.0		--
7	HARMAN	Root				--
0	HENEICOSANOIC-ACID	Root				--
0	HEPTADEC-1-EN-4,6-DIYN-3,9,10-TRIOL	Root				--
0	HEPTADEC-1-EN-4,6-DIYNE-3,9,10-TRIOL	Root				--
0	HEPTADEC-1-EN-4,6-DIYNE-3,9-DIOL	Root		150.0		--
0	HEPTADECA-1-4-DIENE-6-8-DIYNE-3-10-DIOL	Root				--
0	HEPTADECA-1-8-DIEN-4-6-DIYN-3-10-DIOL	Root				--
0	HEPTADECA-1-8-DIENE-4-6-DIYN-10-OL-3-ONE	Root				--
0	HEPTADECA-1-8-DIENE-4-6-DIYN-3-10-DIONE	Root				--
0	HEPTADECA-1-8-DIENE-4-6-DIYNE-3-10-DIOL	Root		14.6	-1.0000000000000067	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	HEPTADECA-1-9-DIEN-4-6-DIYN-3-OL	Root				--
0	HEPTADECA-1-EN-4,6-DIYN-3,9-DIOL	Root		150.0		Chemical Constituents of Oriental Herbs (3 diff. books)
0	HEPTADECA-1-ENE-4-6-DIYNE-3-9-10-TRIOL	Root		1.5		--
0	HEPTADECA-1-TRANS-8-DIENE-4-6-DIYNE-3-10-DIOL	Root		5.2		--
0	HEPTADECAN-1-OL	Root Essent. Oil		19000.0		--
0	HEPTADECAN-2-ONE	Leaf Essent. Oil		20000.0		--
0	HEPTADECAN-2-ONE	Stem Essent. Oil		20000.0		--
0	HEPTADECAN-2-ONE	Root Essent. Oil		43000.0		--
1	HEPTADECANOIC-ACID	Root				--
0	HETEROGLYCAN-F	Fruit				--
0	HEXADECANOIC-ACID	Shoot				--
0	HEXAN-1-AL	Shoot				--
7	HISTIDINE	Leaf				--
7	HISTIDINE	Root		20.0	-1.7257014002319866	--
2	HUMULENE	Root Essent. Oil		24000.0	1.0	--
2	HUMULENE	Stem Essent. Oil				--
2	HUMULENE	Leaf Essent. Oil				--
7	INDOLE-3-ACETIC-ACID	Tissue Culture				--
0	INDOLE-3-ACETYL-ASPARTATE	Tissue Culture				--
1	INDOLE-ACETIC-ACID	Tissue Culture				--
0	INVERTASE	Root				--
6	IRON	Fruit				--
6	IRON	Stem				--
6	IRON	Root				--
6	IRON	Pt				--
6	IRON	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ISO-BUTYL-PROPIONATE	Root				--
0	ISO-PROPYL-PROPIONATE	Root				--
3	ISOLEUCINE	Leaf				--
3	ISOLEUCINE	Root				--
75	KAEMPFEROL	Shoot				--
75	KAEMPFEROL	Leaf				--
0	KARUSAN-A	Root				--
0	KARUSAN-B	Root				--
0	KARUSAN-C	Root				--
0	KARUSAN-D	Root				--
0	KARUSAN-E	Root				--
0	KETOGLUTARIC-ACID	Root				--
0	KILOCALORIES	Root		2740.0	-1.3796935435329993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	KINETIN	Tissue Culture				--
2	LEUCINE	Leaf				--
2	LEUCINE	Root				--
1	LIGNOCERIC-ACID	Root				--
3	LIGUSTRAZINE	Root				--
60	LIMONENE	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
60	LIMONENE	Root Essent. Oil				--
53	LINALOOL	Root Essent. Oil				--
27	LINOLEIC-ACID	Root		140.0	-1.1111121238776438	--
0	LINOLEIN	Root				--
0	LINOLENIC-ACID	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINOLEOYL-BETA-D-GLUCOSIDE	Tissue Culture				--
21	LUPEOL	Seed Oil				--
15	LUTEIN	Leaf				--
7	LUTEOLIN-7-GLUCOSIDE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
4	LYSINE	Root				--
4	LYSINE	Leaf				--
0	LYSOPHOSPHATIDYL-INOSITOL	Root				--
0	LYSOPHOSPHATIDYLCHOLINE	Root				--
65	MAGNESIUM	Root	102.0	481.0	-1.107068199242284	--
0	MALEIC-ACID	Root				--
15	MALIC-ACID	Root				--
0	MALONYL-GINSENOSE-RB-1	Rhizome	6900.0	13000.0		--
0	MALONYL-GINSENOSE-RB-1	Root	2730.0	13000.0		--
0	MALONYL-GINSENOSE-RB-2	Rhizome	4000.0	4200.0		--
0	MALONYL-GINSENOSE-RB-2	Root	1370.0	11000.0		--
0	MALONYL-GINSENOSE-RC	Rhizome	3400.0	3500.0		--
0	MALONYL-GINSENOSE-RC	Root	1000.0	8400.0		--
0	MALONYL-GINSENOSE-RD	Rhizome				--
0	MALONYL-GINSENOSE-RD	Root	400.0	1200.0		--
11	MALTOL	Root				--
2	MALTOSE	Stem		1300.0		--
2	MALTOSE	Root	5100.0	199600.0	1.0	--
14	MANGANESE	Stem				--
14	MANGANESE	Fruit				--
14	MANGANESE	Pt				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	MANGANESE	Leaf				--
14	MANGANESE	Root	0.4	1.9	-0.5231856000816221	--
18	MANNITOL	Root				--
0	MAYURONE	Plant				--
0	MAYURONE	Root Essent. Oil				--
15	METHIONINE	Root				--
15	METHIONINE	Leaf				--
0	METHYL-6,9-DIALKYNE-OCTADECATE	Shoot				--
2	MOLYBDENUM	Stem				--
2	MOLYBDENUM	Pt				--
2	MOLYBDENUM	Fruit				--
2	MOLYBDENUM	Leaf				--
2	MOLYBDENUM	Root				--
0	MONOSACCHARIDES	Root		15000.0		Chemical Constituents of Oriental Herbs (3 diff. books)
0	MORETENOL	Seed Oil				--
6	MYRISTIC-ACID	Root				--
0	N-9-FORMYL-HARMAN	Root		0.1		--
0	N-FORMYL-HARMAN	Root				--
1	N-NONACOSANE	Root				--
1	N-NONACOSANE	Rhizome				--
1	N-NONACOSANE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	N-PENTADECANE	Root Essent. Oil		18000.0		--
0	N-PENTADECANE	Plant				--
0	NEO-INTERMEDEOL	Plant		10.4		--
0	NEOCLOVENE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	NEOXANTHIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	NEROLIDOL	Shoot				--
0	NERVONIC-ACID	Root				--
39	NIACIN	Root	17.0	80.0	0.8625453013144426	--
2	NICOTINAMIDE	Root				--
11	NICOTINIC-ACID	Root				--
2	NORHARMAN	Root				--
0	NOTOGINSENSIDE-R-1	Root		20.0		--
0	O-ALPHA-D-GLUCOPYRANOSYL...FRUCTOFURANOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	O-ALPHA-D-GLUCOPYRANOSYL...GLUCOPYRANOSE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OBTUSIFOLIOL	Seed Oil				--
0	OCTACOSAN-1-OL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
64	OLEANOLIC-ACID	Root	150.0	700.0	0.845493216306878	--
18	OLEIC-ACID	Root				--
0	OXALIC-ACID-ETHYL-ESTER	Root				--
25	P-COUMARIC-ACID	Root				--
1	P-HYDROXYCINNAMIC-ACID	Root		26.0		--
13	PALMITIC-ACID	Plant				--
13	PALMITIC-ACID	Root				--
13	PALMITIC-ACID	Leaf Essent. Oil		160000.0		--
13	PALMITIC-ACID	Stem Essent. Oil		160000.0		--
13	PALMITIC-ACID	Root Essent. Oil		86000.0	1.2911413065205417	--
2	PALMITOLEIC-ACID	Root				--
0	PALMITOYL-BETA-D-GLUCOSIDE	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PANACENE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANASENOSIDE	Shoot				--
0	PANASENOSIDE	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANASINSANOL-A	Root		2.3		--
0	PANASINSANOL-B	Root		12.5		--
0	PANAX-GINSENG-20(S)-PROSAPOGENIN	Root				--
0	PANAX-GINSENG-GENIN-F-1	Root				--
0	PANAX-GINSENG-GENIN-F-2	Root				--
0	PANAX-GINSENG-GENIN-F-4	Root				--
0	PANAX-GINSENG-GLYCOPROTEIN	Root				--
0	PANAX-GINSENG-GLYCOSIDE-P-1	Root				--
0	PANAX-GINSENG-LIPOLYTIC-PEPTIDE	Root				--
0	PANAX-GINSENG-POLYACETYLENE-C	Root				--
0	PANAX-GINSENG-POLYACETYLENE-D	Root				--
0	PANAX-GINSENG-POLYACETYLENE-E	Root				--
0	PANAX-GINSENG-POLYACETYLENE-F	Root				--
0	PANAX-GINSENG-POLYACETYLENE-G	Root				--
0	PANAX-GINSENG-PROTEIN	Root				--
0	PANAX-GLYCOPROTEIN	Root				--
0	PANAX-HETEROGLYCAN-GL-P-I	Leaf				--
0	PANAX-HETEROGLYCAN-GL-P-II	Leaf				--
0	PANAX-HETEROGLYCAN-GL-P-IV	Leaf				--
0	PANAX-OLIGOSACCHARIDE	Tissue Culture				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PANAX-PECTIC-HETEROGLYCAN-GL-4-II-B-1-III	Leaf				--
0	PANAX-POLYPEPTIDE	Root				--
0	PANAX-POLYPHENOLIC-PERMETHYL-ETHER	Root				--
0	PANAX-POLYSACCHARIDE	Tissue Culture				--
0	PANAX-POLYSACCHARIDE	Root	30000.0	40000.0		--
0	PANAX-POLYSACCHARIDE-GH-1	Root				--
0	PANAX-POLYSACCHARIDE-GL-4	Root				--
0	PANAX-POLYSACCHARIDE-GL-4-II-B-1-II	Root				--
0	PANAX-POLYSACCHARIDE-GL-AI-A	Leaf				--
0	PANAX-POLYSACCHARIDE-GL-AI-B	Leaf				--
0	PANAX-POLYSACCHARIDE-GL-B-III	Leaf				--
0	PANAX-POLYSACCHARIDE-GL-NI-A	Leaf				--
0	PANAX-POLYSACCHARIDE-GL-NI-B	Leaf				--
0	PANAX-POLYSACCHARIDE-P-N	Leaf				--
0	PANAX-POLYSACCHARIDE-S-2-A	Stem				--
0	PANAX-PROTEIN	Root				--
0	PANAX-SAPONIN-A	Root				--
0	PANAX-SAPONIN-C	Root				--
0	PANAX-TRITERPENE-GF-VI	Fruit				--
0	PANAX-TRITERPENE-GF-VII	Fruit				--
1	PANAXACOL	Tissue Culture	37.0	50.0		--
1	PANAXACOL	Root				--
0	PANAXADIOL	Root	700.0	6500.0	-1.0	--
0	PANAXADIOL-SAPONIN	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PANAXAN-A	Root				--
1	PANAXAN-B	Root				--
1	PANAXAN-C	Root				--
1	PANAXAN-D	Root				--
1	PANAXAN-E	Root				--
0	PANAXAN-F	Root				--
0	PANAXAN-G	Root				--
0	PANAXAN-H	Root				--
0	PANAXAN-I	Root				--
0	PANAXAN-J	Root				--
0	PANAXAN-K	Root				--
0	PANAXAN-L	Root				--
0	PANAXAN-M	Root				--
0	PANAXAN-N	Root				--
0	PANAXAN-O	Root				--
0	PANAXAN-P	Root				--
0	PANAXAN-Q	Root				--
0	PANAXAN-R	Root				--
0	PANAXAN-S	Root				--
0	PANAXAN-T	Root				--
0	PANAXAN-U	Root				--
0	PANAXATRIOL	Root	700.0	7700.0	-1.0	--
0	PANAXATRIOL	Leaf				--
0	PANAXATRIOL-GLYCOSIDE	Root				--
0	PANAXATRIOL-SAPONIN	Shoot				--
4	PANAXIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	PANAXIN	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANAXOSIDE-A	Root				--
0	PANAXOSIDE-A-PROGENIN-I	Root				--
0	PANAXOSIDE-B	Root				--
0	PANAXOSIDE-C	Root				--
0	PANAXOSIDE-D	Root				--
0	PANAXOSIDE-E	Root				--
0	PANAXOSIDE-F	Root				--
1	PANAXYDOL	Root	357.1	440.0	-1.0	--
1	PANAXYDOL	Tissue Culture		8.0		--
0	PANAXYDOL-CHLOROHYDRIN	Root		13.5		--
0	PANAXYDOL-LINOLEATE	Root		8.1		--
0	PANAXYNE	Root				--
0	PANAXYNE-EPOXIDE	Root	1.8	9.0		--
3	PANAXYNOL	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANAXYNOL-LINOLEATE	Root		1.3		--
1	PANAXYTRIOL	Root	14.2	250.0	0.9999999999999999	--
11	PANTOTHENIC-ACID	Root		6.6	-1.5734087317737453	--
2	PATCHOULENE	Root Essent. Oil		20000.0		--
24	PECTIN	Plant				--
24	PECTIN	Root				--
0	PELARGONIDIN-3-MONOGLUCOSIDE	Fruit Epidermis				--
1	PENTADECANOIC-ACID	Root				--
0	PERLARGONIDIN-3-O-BETA-D-GLUCOSIDE	Root				--
0	PERLOLYRINE	Root		1.6		--
0	PHENOLASE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHENYL-ACETALDEHYDE	Shoot				--
7	PHENYLALANINE	Leaf				--
7	PHENYLALANINE	Root				--
0	PHENYLETHANOL	Shoot				--
0	PHEOPHYTIN	Leaf				--
0	PHOSPHATIDIC-ACID	Root				--
2	PHOSPHATIDYL-CHOLINE	Root				--
0	PHOSPHATIDYL-ETHANOLAMINE	Root				--
0	PHOSPHATIDYL-GLYCEROL	Root				--
0	PHOSPHATIDYL-INOSITOL	Root				--
4	PHOSPHORUS	Root	112.0	528.0	-0.5253256654441569	--
0	POLYACETYLENES	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
0	POLYSACCHARIDE	Rhizome				--
0	POLYSACCHARIDE	Root				--
0	POLYSACCHARIDE	Tissue Culture				--
0	POLYSACCHARIDE-GL-P-I	Leaf		5.0		--
0	POLYSACCHARIDE-GL-P-II	Leaf		8.0		--
0	POLYSACCHARIDE-GL-P-III	Leaf		2.2		--
0	POLYSACCHARIDE-GL-P-IV	Leaf		2.4		--
0	POLYSACCHARIDE-SA	Root				--
0	POLYSACCHARIDE-SB	Root				--
14	POTASSIUM	Root	515.0	2430.0	-0.9774436969784575	--
0	PRO-RENIN	Root				--
0	PROLINE	Leaf				--
0	PROLINE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	PROTEIN	Root	23108.0	109000.0	-0.10570538573840164	--
0	PROTOPANAXADIOL	Root				--
0	PROTOPANAXADIOL-GLYCOSIDES	Root				--
0	PUTRESCINE	Root				--
2	PYROGLUTAMIC-ACID	Root				--
1	PYRUVIC-ACID	Root				--
0	QUINQUENOSIDE-R-1	Root		20.0	-1.0	--
0	RHAMNOSE	Tissue Culture				--
0	RHAMNOSE	Root				--
15	RIBOFLAVIN	Root	0.4	1.8	-0.49776655351897503	--
34	SALICYLIC-ACID	Root		3.4	-1.0	--
0	SANTALENE	Shoot				--
0	SAPONIN-II	Root				--
0	SAPONIN-II	Plant				--
0	SAPONIN-II	Tissue Culture				--
0	SAPONIN-III	Tissue Culture				--
0	SAPONIN-III	Root				--
0	SAPONIN-III	Plant				--
0	SAPONIN-IV	Plant				--
0	SAPONIN-IV	Root				--
0	SAPONIN-IV	Tissue Culture				--
0	SAPONIN-V	Tissue Culture				--
0	SAPONIN-V	Plant				--
0	SAPONIN-V	Root				--
5	SAPONINS	Stem	16000.0	40000.0		--
5	SAPONINS	Shoot				--
5	SAPONINS	Root		20000.0	-0.6445017907060011	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SAPONINS	Leaf		128000.0	1.3249298643249272	--
5	SAPONINS	Flower		69000.0		--
60	SELENIUM	Root	0.5	2.5	-0.18461140397934853	--
0	SELINA-4(14),7(11)-DIENE	Root Essent. Oil				--
0	SENECRASSIDIOL	Root				--
1	SERINE	Leaf				--
1	SERINE	Root				--
0	SESQUITERPENEDIOL	Root				--
4	SILICON	Root				--
0	SITOSTEROL-6'-LINOLENYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	SITOSTEROL-6'-LINOLYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	SITOSTEROL-6'-OLEYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	SITOSTEROL-6'-PALMITYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	SITOSTEROL-6'-STEARYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
1	SODIUM	Root	5.0	24.0	-0.5015977269170404	--
0	SPATHULENOL	Plant		15.9	-0.5352938495785399	--
1	SPERMIDINE	Root				--
1	SPERMINE	Root				--
0	SPINACINE	Root		33.3		--
10	SQUALENE	Seed Oil				--
0	SQUALENE-2-3-OXIDE	Seed Oil				--
5	STARCH	Root	25440.0	120000.0	-0.818804895582863	--
5	STARCH	Rhizome				--
8	STEARIC-ACID	Root				--
12	STIGMASTEROL	Root				--
0	STIGMASTEROL-6'-LINOLENYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	STIGMASTEROL-6'-LINOLYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	STIGMASTEROL-6'-OLEYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	STIGMASTEROL-6'-PALMITYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	STIGMASTEROL-6'-STEARYLGLUCOSIDE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
7	SUCCINIC-ACID	Root				--
14	SUCROSE	Root	1300.0	226000.0	1.0351788500330728	--
14	SUCROSE	Stem		3500.0		--
14	SUCROSE	Leaf		6400.0	-0.9162072066569106	--
14	SUCROSE	Rhizome				--
0	SUGARS	Root	19080.0	90000.0	-0.13436730873315797	--
5	SUPEROXIDE-DISMUTASE	Root				--
41	TANNIC-ACID	Leaf				--
6	TARTARIC-ACID	Root				--
18	TERPINEOL	Root Essent. Oil				--
18	TERPINEOL	Root				Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp.
31	THIAMIN	Root		1.7	-0.4425168354864589	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Root	0.4	1.7	-0.5227719246853555	--
4	THREONINE	Root				--
4	THREONINE	Leaf				--
0	THUJ-4(10)-ENE	Root				--
4	TIN	Root	3.4	16.0	-0.0494227816847916	--
1	TOLUENE	Shoot				--
0	TRACE-ELEMENTS	Root				--
2	TRANS-BETA-FARNESENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	TRANS-BETA-FARNESENE	Root Essent. Oil		80000.0	0.947568920739301	--
0	TRANS-CARYOPHYLLENE	Plant				--
0	TRANS-CARYOPHYLLENE	Root Essent. Oil				--
0	TRICOSANOIC-ACID	Root				--
2	TRIFOLIN	Leaf				--
2	TRIFOLIN	Shoot				--
0	TRIMETHYL-PYRAZINE	Root				--
0	TRIPALMITIN	Root				--
0	TRIPALMITIN	Rhizome				--
8	TYROSINE	Leaf				--
8	TYROSINE	Root				--
0	URACIL	Root				--
0	URIDINE	Root				--
3	VALINE	Root				--
3	VALINE	Leaf				--
24	VANILLIC-ACID	Root		55.0	0.9214964116563734	--
24	VANILLIC-ACID	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	VICILIN	Endosperm				--
2	VIOLAXANTHIN	Leaf				--
0	VITAMIN-B12	Root				--
0	WATER	Root		788000.0	0.12275678708782596	--
3	XYLOSE	Tissue Culture				--
3	XYLOSE	Root				--
77	ZINC	Leaf				--
77	ZINC	Stem				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
77	ZINC	Petiole				--
77	ZINC	Root				--
77	ZINC	Fruit				--