Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Panax ginseng

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference 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	Plant	--	--		
0	2-5-DIMETHYL-TRIDECANE	Root Essent. Oil	--	--		
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	Root Essent. Oil	--	14000		
0	2-6-DITERT-BUTYL-4-METHYL-PHENOL	Flower Essent. Oil	--	14000		
0	2-ACETYL-PYRROLE	Shoot	--	--		
0	2-ETHANOYL-FURAN	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-ETHYL-5-METHYL-PYRAZINE	Root	--	--		
0	2-ETHYL-6-METHYL-PYRAZINE	Root	--	--		
0	2-GLUCOGINSENOSIDE-RF	Root	50	50		Chemical Constituents of Oriental Herbs (3 diff. books)
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	2-SEC-BUTYL-3-METHOXY-PYRAZINE	Root	--	--		
0	20(R)-GINSENOSIDE-RG-3	Fruit	--	--		
0	20(R)-GINSENOSIDE-RH-1	Rhizome	--	--		
0	20(R)-GINSENOSIDE-RH-1	Fruit	--	--		
0	20(R)-GINSENOSIDE-RH-2	Shoot	--	--		
0	20(R)-GINSENOSIDE-RH-2	Leaf	6.7	10		
0	20(R)-PROTOPANAXADIOL	Leaf	0.1	1.4		
0	20(R)-PROTOPANAXATRIOL	Fruit	--	--		
0	20(R)-PROTOPANAXATRIOL	Leaf	1.4	12.5		
0	20(S)-GINSENOSIDE-RH-2	Leaf	--	7		
0	20(S)-PROTOPANAXADIOL-3-O-BETA-D-GLUCOPYRANOSIDE	Root	--	10		
0	20-(S)-DIHYDRO-PROTOPANAXATRIONE	Root	--	--		
0	20-GLUCO-GINSENOSIDE	Leaf	--	--		
0	20-GLUCOSYL-GINSENOSIDE	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	20-GLUCOSYL-GINSENOSIDE	Root	--	50		
0	22-TRANS-DEHYDRO-24-METHYL-CHOLESTEROL	Seed Oil	--	--		
0	24-ETHYL-22-TRANS-DEHYDRO-CHOLESTEROL	Seed Oil	--	--		
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	--	--		
0	ACETIC-ACID-ETHYL-ESTER	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ACETYL-PANAXYDOL	Root	--	2.1	-1.0000000000000002	
0	ACIDIC-PEPTIDES	Flower	--	--		
11	ADENINE	Root	--	--		
28	ADENOSINE	Rhizome	--	--		
28	ADENOSINE	Root	--	90	1	
0	ADENYL-CYCLASE	Root	--	--		
3	ALANINE	Root	--	--		
3	ALANINE	Leaf	--	--		
0	ALLO-AROMADENDRENE	Root Essent. Oil	--	--		
0	ALLO-AROMADENDRENE	Plant	--	--		
0	ALLO-AROMADENDRENE	Flower Essent. Oil	--	--		
0	ALLO-AROMADENDRENE	Shoot	--	--		
0	ALLO-AROMADENDRENE	Shoot 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	Flower Essent. Oil	--	--		
0	ALPHA-CUBEBENE	Shoot	--	--		
0	ALPHA-FARNESENE	Flower Essent. Oil	--	14000		
0	ALPHA-FRUCTOSE	Root	--	--		
0	ALPHA-GAMMA-DIPALMITIN	Root	--	--		
0	ALPHA-GLUCOSE	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-GUAIENE	Root Essent. Oil	--	40000	1	
0	ALPHA-GUAIENE	Root	--	--		
0	ALPHA-GUAIENE	Flower Essent. Oil	--	55000		
2	ALPHA-HUMULENE	Root Essent. Oil	--	--		
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.
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	Root Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
11	ALPHA-PHELLANDRENE	Root	--	--		
11	ALPHA-PHELLANDRENE	Root Essent. Oil	--	--		
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.
28	ALPHA-PINENE	Root	--	--		
28	ALPHA-PINENE	Root Essent. Oil	--	--		
0	ALPHA-PYRROLIDONE	Root	--	--		
0	ALPHA-SANTALENE	Root Essent. Oil	--	--		
0	ALPHA-SANTALENE	Flower Essent. Oil	--	--		
0	ALPHA-SANTALENE	Shoot Essent. Oil	--	--		
3	ALPHA-SELINENE	Root Essent. Oil	--	--		
3	ALPHA-SELINENE	Flower Essent. Oil	--	--		
3	ALPHA-SELINENE	Shoot	--	--		

Activity 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.
5	ALUMINUM	Root	5	22	-0.30067595885157333	
0	AMINO-ACIDS	Root	--	--		
0	AMINO-ACIDS	Tissue Culture	--	--		
0	AMINO-ACIDS	Flower	--	--		
0	ARACHIDIC-ACID	Root	--	--		
14	ARGININE	Root	--	--		
14	ARGININE	Leaf	--	--		
0	AROMADENDRANE-4-BETA-10-ALPHA-DIOL	Plant	--	3		
3	AROMADENDRENE	Flower Essent. Oil	--	--		
3	AROMADENDRENE	Root Essent. Oil	--	--		
3	AROMADENDRENE	Plant	--	--		
2	ARSENIC	Root	--	--		
112	ASCORBIC-ACID	Root	--	--	-0.6459735820044326	
112	ASCORBIC-ACID	Leaf	--	--		
0	ASH	Root	10600	50000	-0.5013998487298318	
0	ASPARTASE	Root	--	--		
3	ASPARTIC-ACID	Root	--	--		
3	ASPARTIC-ACID	Leaf	--	--		
0	AVENASTEROL	Seed Oil	--	--		
10	AZULENE	Shoot	--	--		
1	BEHENIC-ACID	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	BENZALDEHYDE	Shoot	--	--		
0	BENZYL-BETA-PRIMEVEROSIDE	Root	--	47		
0	BETA-AMYLASE	Root	--	--		
9	BETA-AMYRIN	Seed Oil	--	--		
6	BETA-BISABOLENE	Root Essent. Oil	--	--		
6	BETA-BISABOLENE	Plant	--	--		
0	BETA-BOURBONENE	Flower Essent. Oil	--	--		
0	BETA-BOURBONENE	Shoot	--	--		
53	BETA-CAROTENE	Root	--	--		
0	BETA-CARYOPHYLLENE	Flower Essent. Oil	--	--		
0	BETA-CARYOPHYLLENE	Shoot	--	--		
0	BETA-CUBEBENE	Flower Essent. Oil	--	--		
0	BETA-CUBEBENE	Shoot	--	--		
5	BETA-ELEMENE	Root	--	--		
5	BETA-ELEMENE	Root Essent. Oil	--	150000	1	
5	BETA-ELEMENE	Shoot	--	--		
5	BETA-ELEMENE	Flower Essent. Oil	--	29000		
0	BETA-ELEMENENE	Flower Essent. Oil	--	--		
13	BETA-EUDESMOL	Plant	--	--		
13	BETA-EUDESMOL	Root Essent. Oil	--	--		
0	BETA-FARNES-(3-CIS-6-TRANS)-ENE	Shoot	--	--		
0	BETA-FARNES-CIS-ENE	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-FARNESENE	Root	--	--		
0	BETA-FARNESENE	Flower Essent. Oil	--	43000		
0	BETA-FARNESENE	Root Essent. Oil	--	85000	-1	
0	BETA-FARNESENE	Leaf	--	1000	0.3101066332955471	
0	BETA-FARNESENE	Stem	--	1000		
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-FRUCTOSE	Root	--	--		
0	BETA-GLUCOSE	Root	--	--		
0	BETA-GUAIENE	Root Essent. Oil	--	--		
0	BETA-GUAIENE	Plant	--	--		
0	BETA-GURJUNENE	Root Essent. Oil	--	60000	-1	
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	Flower Essent. Oil	--	--		
0	BETA-MAALIENE	Root	--	--		
0	BETA-MAALIENE	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Root	--	10.2		
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-PATCHOULENE	Root Essent. Oil	--	--		
0	BETA-PATCHOULENE	Root	--	--		
2	BETA-SANTALENE	Flower Essent. Oil	--	--		
3	BETA-SELINENE	Root Essent. Oil	--	80000		
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	Root	--	--		
47	BETA-SITOSTEROL	Fruit	--	--		
47	BETA-SITOSTEROL	Rhizome	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Root	--	--		
0	BICYCLOGERMACRENE	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	BIOTIN	Root	0.9	0.9		
0	BISABOLENE	Flower Essent. Oil	--	--		
0	BUTYROSPERMOL	Seed Oil	--	--		
4	CADINENE	Shoot	--	--		
102	CAFFEIC-ACID	Root	--	--		
28	CALCIUM	Root	611	2880	-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)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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)
0	CAPROIC-ACID-BUTYL-ESTER	Root	--	--		
0	CAPROIC-ACID-PROPYL-ESTER	Root	--	--		
0	CARBOHYDRATES	Root	176808	834000	0.050849387570411526	
0	CARBON-DISULFIDE	Root	1500	1500		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	CARYOPHYLLENE	Root Essent. Oil	--	--		
31	CARYOPHYLLENE	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	CARYOPHYLLENE-ALCOHOL	Root Essent. Oil	--	--		
1	CATALASE	Root	--	--		
0	CELLULASE	Root	--	--		
0	CEREBROSIDE	Root	--	--		
0	CHLORO-PANAXYDIOL	Tissue Culture	--	3		
21	CHLOROPHYLL	Leaf	--	--		
0	CHOLESTA-3-5-DIENE	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	CHOLESTEROL	Seed Oil	--	--		
20	CHOLINE	Root	1000	2000	-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	Root Essent. Oil	--	--		
0	CIS-CARYOPHYLLENE	Plant	--	--		
53	CITRAL	Root Essent. Oil	--	--		
53	CITRAL	Root	--	--		Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellscharft. mbH Stuttgart. 393 pp.
23	CITRIC-ACID	Root	--	--		
1	CITROSTADIENOL	Seed Oil	--	--		
2	COBALT	Root	0.7	3.1	-0.477922970663694	
12	COPPER	Root	17	17	0.5844884448285068	
12	COPPER	Fruit	--	--		
12	COPPER	Inflorescence	--	--		
12	COPPER	Flower	--	--		
12	COPPER	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	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	DAUCOSTERINE	Root	--	--		
0	DAUCOSTERINE	Leaf	--	3.8		
5	DAUCOSTEROL	Root	--	--		
5	DAUCOSTEROL	Fruit	--	--		
5	DAUCOSTEROL	Rhizome	--	--		
5	DAUCOSTEROL	Tissue Culture	--	--		
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	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIGLYCOSYL-DIGLYCERIDE	Root	--	--		
0	DIHYDROACTINIDIOLIDE	Shoot	--	--		
1	DIHYDROPANAXACOL	Tissue Culture	--	2		
0	DISACCHARIDES	Root	33000	33000		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	500	-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	Root Essent. Oil	--	23000		
0	EREMOPHILENE	Plant	--	--		
2	ERUCIC-ACID	Root	--	--		
3	ESTRADIOL	Root	--	--		
6	ESTRIOL	Root	--	--		
8	ESTRONE	Root	--	--		
24	ETHANOL	Shoot	--	--		
0	ETHYLBENZENE	Shoot	--	--		
1	ETHYLENE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	Root	0.9	310	1.4051395916147116	
16	FALCARINOL	Rhizome	--	--		
0	FAT	Root	3752	17700	-0.172739674548991	
61	FERULIC-ACID	Root	--	--		
15	FIBER	Root	72000	72000	-0.35781867764508235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Root	--	72000	-1.1616741196232196	
0	FIBER(DIETARY)	Root	--	301000	-1.0640221212316432	
3	FLUORIDE	Root	--	26.3	1.7190337938896858	
23	FOLIC-ACID	Root	--	--		
0	FORMIC-ACID-METHYL-ESTER	Shoot	--	--		
8	FRUCTOSE	Root	200	6000	-0.4913954846191467	
8	FRUCTOSE	Tissue Culture	--	--		
8	FRUCTOSE	Leaf	--	6500	-1.351589051251948	
8	FRUCTOSE	Stem	--	1800		
7	FUMARIC-ACID	Root	--	--		
0	FURALDEHYDE	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GADOLEIC-ACID	Root	--	--		
1	GALACTOSE	Root	--	--		
0	GALANIN	Root	--	--		
22	GAMMA-AMINOBUTYRIC-ACID	Root	--	--		
0	GAMMA-CADINENE	Flower Essent. Oil	--	--		
0	GAMMA-ELEMENE	Plant	--	--		
0	GAMMA-ELEMENE	Root Essent. Oil	60000	100000	1	
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	1	
0	GINSENAN-PA	Root	--	235		
0	GINSENAN-PB	Root	--	170		
0	GINSENAN-S-I-A	Root	--	106.6		
0	GINSENAN-S-II-A	Root	--	90		
0	GINSENG-POLYPEPTIDE	Root	--	--		
0	GINSENG-POLYPEPTIDE-GPP	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GINSENOL	Root	--	9.6		
0	GINSENOSIDE	Plant	--	--		
0	GINSENOSIDE	Root	--	47000		
0	GINSENOSIDE-F	Leaf	--	12.5		
0	GINSENOSIDE-F-1	Leaf	4000	4000		
0	GINSENOSIDE-F-1	Shoot	--	4000		
0	GINSENOSIDE-F2	Leaf	2000	18400		
0	GINSENOSIDE-F2	Shoot	--	2000		
0	GINSENOSIDE-F2	Fruit	--	5000		
0	GINSENOSIDE-F3	Leaf	2000	2000		
0	GINSENOSIDE-F3	Flower	--	300		
0	GINSENOSIDE-F3	Shoot	--	2000		
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	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	GINSENOSIDE-M-7-A	Flower	--	--		
0	GINSENOSIDE-M-7-B	Flower	--	--		
0	GINSENOSIDE-M-7-CD	Flower	--	--		
0	GINSENOSIDE-M-7-ED	Flower	--	10		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GINSENOSIDE-NG-R-2	Root	--	--		
4	GINSENOSIDE-R-O	Root	100	11000	1	
4	GINSENOSIDE-R-O	Flower	--	--		
4	GINSENOSIDE-R-O	Rhizome	18000	34000		
0	GINSENOSIDE-RA	Shoot	--	--		
0	GINSENOSIDE-RA	Root	100	300		
0	GINSENOSIDE-RA-1	Root	100	300		
0	GINSENOSIDE-RA-2	Root	--	300		
0	GINSENOSIDE-RA-3	Root	--	50		
0	GINSENOSIDE-RA-O	Root	--	--		
1	GINSENOSIDE-RB	Root	11300	40000		
1	GINSENOSIDE-RB	Rhizome	--	--		
1	GINSENOSIDE-RB	Tissue Culture	13100	15900		
14	GINSENOSIDE-RB-1	Bud	--	2000		
14	GINSENOSIDE-RB-1	Leaf	9	8000	1	
14	GINSENOSIDE-RB-1	Root	1700	83000	1	
14	GINSENOSIDE-RB-1	Fruit	--	--		
14	GINSENOSIDE-RB-1	Rhizome	8800	14000		
14	GINSENOSIDE-RB-1	Embryo	--	--		
14	GINSENOSIDE-RB-1	Tissue Culture	--	--		
14	GINSENOSIDE-RB-1	Flower	--	2000		
14	GINSENOSIDE-RB-1	Seed	--	--		
14	GINSENOSIDE-RB-1	Shoot	--	1000		
14	GINSENOSIDE-RB-1	Root Bark	--	--		
8	GINSENOSIDE-RB-2	Flower	--	2000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	GINSENOSIDE-RB-2	Fruit	200	29500		
8	GINSENOSIDE-RB-2	Leaf	11	58300	1	
8	GINSENOSIDE-RB-2	Root	100	23000	1	
8	GINSENOSIDE-RB-2	Root Bark	--	--		
8	GINSENOSIDE-RB-2	Rhizome	4500	5700		
8	GINSENOSIDE-RB-2	Stem	--	3970		
8	GINSENOSIDE-RB-2	Shoot	--	4000	1	
8	GINSENOSIDE-RB-2	Embryo	--	--		
8	GINSENOSIDE-RB-2	Tissue Culture	--	--		
8	GINSENOSIDE-RB-2	Seed	--	--		
0	GINSENOSIDE-RB-2-C	Root	--	--		
2	GINSENOSIDE-RB-3	Root	50	50	-1	
2	GINSENOSIDE-RB-3	Flower	--	136		
0	GINSENOSIDE-RB-C	Root	--	14000		
0	GINSENOSIDE-RB-C	Root Bark	--	24000		
0	GINSENOSIDE-RB-GROUP	Root	--	--		
0	GINSENOSIDE-RB-GROUP	Tissue Culture	--	--		
6	GINSENOSIDE-RC	Flower	672	2000		
6	GINSENOSIDE-RC	Fruit	1000	36700		
6	GINSENOSIDE-RC	Leaf	3.5	37700	1	
6	GINSENOSIDE-RC	Root	500	25000	1	
6	GINSENOSIDE-RC	Rhizome	--	4700		
6	GINSENOSIDE-RC	Root Bark	--	--		
6	GINSENOSIDE-RC	Embryo	--	--		
6	GINSENOSIDE-RC	Pt	--	1900		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	GINSENOSIDE-RC	Seed	--	--		
6	GINSENOSIDE-RC	Shoot	2000	2000		
6	GINSENOSIDE-RC	Tissue Culture	--	--		
0	GINSENOSIDE-RC-2	Root	--	--		
3	GINSENOSIDE-RD	Flower	1000	5000		
3	GINSENOSIDE-RD	Fruit	1000	68800		
3	GINSENOSIDE-RD	Leaf	11	65800	1	
3	GINSENOSIDE-RD	Root	380	21200	1	
3	GINSENOSIDE-RD	Embryo	--	--		
3	GINSENOSIDE-RD	Rhizome	700	1600	-1	
3	GINSENOSIDE-RD	Root Bark	--	--		
3	GINSENOSIDE-RD	Seed	--	--		
3	GINSENOSIDE-RD	Shoot	--	15000	1	
3	GINSENOSIDE-RD	Pt	100	1070		
3	GINSENOSIDE-RD	Tissue Culture	--	--		
0	GINSENOSIDE-RD-2	Root	--	--		
0	GINSENOSIDE-RD-2	Embryo	--	--		
5	GINSENOSIDE-RE	Flower	25000	60000		
5	GINSENOSIDE-RE	Fruit	25000	60000		
5	GINSENOSIDE-RE	Leaf	15	151200	1	
5	GINSENOSIDE-RE	Root	680	84800	1	
5	GINSENOSIDE-RE	Pt	600	1410		
5	GINSENOSIDE-RE	Rhizome	4700	5700		
5	GINSENOSIDE-RE	Seed	--	--		
5	GINSENOSIDE-RE	Shoot	--	15000	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	GINSENOSIDE-RE	Stem	--	700		
5	GINSENOSIDE-RE	Tissue Culture	--	--		
5	GINSENOSIDE-RE	Fruit Juice	--	--		
0	GINSENOSIDE-RE-2	Root	--	--		
0	GINSENOSIDE-RE-3	Root	--	--		
4	GINSENOSIDE-RF	Root	200	9200		
4	GINSENOSIDE-RF	Rhizome	--	1500		
4	GINSENOSIDE-RF	Leaf	24100	38300		
4	GINSENOSIDE-RF	Fruit	--	6900		
4	GINSENOSIDE-RF	Shoot	--	--		
4	GINSENOSIDE-RF	Tissue Culture	--	--		
4	GINSENOSIDE-RF	Flower	--	--		
1	GINSENOSIDE-RG	Root	4600	16300		
1	GINSENOSIDE-RG	Stem	--	700		
1	GINSENOSIDE-RG	Tissue Culture	12200	17300		
1	GINSENOSIDE-RG	Root Bark	--	34000		
13	GINSENOSIDE-RG-1	Flower	400	3000		
13	GINSENOSIDE-RG-1	Fruit	400	287200		
13	GINSENOSIDE-RG-1	Leaf	5	72200	1	
13	GINSENOSIDE-RG-1	Root	320	58400	1	
13	GINSENOSIDE-RG-1	Pt	1000	3270		
13	GINSENOSIDE-RG-1	Rhizome	3800	4500		
13	GINSENOSIDE-RG-1	Root Bark	--	--		
13	GINSENOSIDE-RG-1	Tissue Culture	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	GINSENOSIDE-RG-1	Embryo	--	--		
13	GINSENOSIDE-RG-1	Shoot	--	15000	1	
13	GINSENOSIDE-RG-1	Stem	--	2920		
3	GINSENOSIDE-RG-2	Root	100	26700	1	
3	GINSENOSIDE-RG-2	Rhizome	--	--		
3	GINSENOSIDE-RG-2	Flower	--	--		
3	GINSENOSIDE-RG-2	Shoot	--	--		
3	GINSENOSIDE-RG-2	Leaf	67	317.5		
2	GINSENOSIDE-RG-3	Leaf	25	195		
2	GINSENOSIDE-RG-3	Shoot	--	--		
2	GINSENOSIDE-RG-3	Root	3	30		
0	GINSENOSIDE-RG-4	Leaf	0.16	4.5		
0	GINSENOSIDE-RH	Root	--	--		
0	GINSENOSIDE-RH	Shoot	--	--		
0	GINSENOSIDE-RH-2	Shoot	--	0.4		
0	GINSENOSIDE-RH-2	Root	--	--		
0	GINSENOSIDE-RH-3	Leaf	2.9	5		
0	GINSENOSIDE-RH-3	Shoot	--	--		
2	GINSENOSIDE-RH1	Root	--	15		
2	GINSENOSIDE-RH1	Shoot	--	--		
2	GINSENOSIDE-RH1	Leaf	12.5	135		
2	GINSENOSIDE-RH1	Tissue Culture	--	--		
0	GINSENOSIDE-Z-R-1	Root	--	--		
18	GINSENOSIDES	Root	10720	30000	-0.8754149693562976	
18	GINSENOSIDES	Tissue Culture	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	GINSENOSIDES	Shoot	--	--		
18	GINSENOSIDES	Plant	--	--		
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	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 fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellscharft. mbH Stuttgart. 393 pp.
7	GLUCOSE	Root	100	9000	-0.5544082656198722	
7	GLUCOSE	Leaf	--	5800	-0.5922731387025567	
7	GLUCOSE	Stem	--	14700		
7	GLUCOSE	Tissue Culture	--	--		
8	GLUTAMIC-ACID	Root	--	--		
8	GLUTAMIC-ACID	Leaf	--	--		
0	GLY-ARG-GAMMA-GLU-VAL-NH2	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	GLYCINE	Root	--	--		
12	GLYCINE	Leaf	--	--		
0	GLYCO-CHENODEOXYCHOLIC-ACID	Root	--	--		
0	GLYCO-DEOXY-CHOLIC-ACID	Root	--	--		
0	GLYCOCHOLIC-ACID	Root	--	--		
0	GOMSEMPSODE-RB-2	Root	--	--		
1	GUANINE	Root	--	--		
0	GUM	Root	27560	130000	0.9757626125530419	
0	GYPENOSIDE-XVII	Tissue Culture	--	960		
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	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	
0	HEPTADECA-1-9-DIEN-4-6-DIYN-3-OL	Root	--	--		
0	HEPTADECA-1-EN-4,6-DIYN-3,9-DIOL	Root	150	150		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		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEPTADECAN-2-ONE	Root Essent. Oil	--	43000		
0	HEPTADECAN-2-ONE	Stem Essent. Oil	--	20000		
0	HEPTADECAN-2-ONE	Leaf Essent. Oil	--	20000		
1	HEPTADECANOIC-ACID	Root	--	--		
0	HETEROGLYCAN-F	Fruit	--	--		
0	HEXADECANOIC-ACID	Shoot	--	--		
0	HEXAN-1-AL	Shoot	--	--		
7	HISTIDINE	Leaf	--	--		
7	HISTIDINE	Root	--	20	-1.7257014002319866	
2	HUMULENE	Root Essent. Oil	--	24000	1	
2	HUMULENE	Leaf Essent. Oil	--	--		
2	HUMULENE	Stem 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	Root	--	--		
6	IRON	Leaf	--	--		
6	IRON	Pt	--	--		
6	IRON	Stem	--	--		
6	IRON	Fruit	--	--		
0	ISO-BUTYL-PROPIONATE	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISO-PROPYL-PROPIONATE	Root	--	--		
3	ISOLEUCINE	Root	--	--		
3	ISOLEUCINE	Leaf	--	--		
75	KAEMPFEROL	Leaf	--	--		
75	KAEMPFEROL	Shoot	--	--		
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	2740	-1.3796935435329993	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	KINETIN	Tissue Culture	--	--		
2	LEUCINE	Root	--	--		
2	LEUCINE	Leaf	--	--		
1	LIGNOCERIC-ACID	Root	--	--		
3	LIGUSTRAZINE	Root	--	--		
60	LIMONENE	Root Essent. Oil	--	--		
60	LIMONENE	Root	--	--		Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellscharft. mbH Stuttgart. 393 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	LINALOOL	Root Essent. Oil	--	--		
27	LINOLEIC-ACID	Root	--	140	-1.1111121238776438	
0	LINOLEIN	Root	--	--		
0	LINOLENIC-ACID	Root	--	--		
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	Leaf	--	--		
4	LYSINE	Root	--	--		
0	LYSOPHOSPHATIDYL-INOSITOL	Root	--	--		
0	LYSOPHOSPHATIDYLCHOLINE	Root	--	--		
65	MAGNESIUM	Root	102	481	-1.107068199242284	
0	MALEIC-ACID	Root	--	--		
15	MALIC-ACID	Root	--	--		
0	MALONYL-GINSENOSIDE-RB-1	Root	2730	13000		
0	MALONYL-GINSENOSIDE-RB-1	Rhizome	6900	13000		
0	MALONYL-GINSENOSIDE-RB-2	Root	1370	11000		
0	MALONYL-GINSENOSIDE-RB-2	Rhizome	4000	4200		
0	MALONYL-GINSENOSIDE-RC	Root	1000	8400		
0	MALONYL-GINSENOSIDE-RC	Rhizome	3400	3500		
0	MALONYL-GINSENOSIDE-RD	Root	400	1200		
0	MALONYL-GINSENOSIDE-RD	Rhizome	--	--		
11	MALTOL	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	MALTOSE	Root	5100	199600	1	
2	MALTOSE	Stem	--	1300		
14	MANGANESE	Root	0.4	1.9	-0.5231856000816221	
14	MANGANESE	Fruit	--	--		
14	MANGANESE	Stem	--	--		
14	MANGANESE	Leaf	--	--		
14	MANGANESE	Pt	--	--		
18	MANNITOL	Root	--	--		
0	MAYURONE	Root Essent. Oil	--	--		
0	MAYURONE	Plant	--	--		
15	METHIONINE	Leaf	--	--		
15	METHIONINE	Root	--	--		
0	METHYL-6,9-DIALKYNE-OCTADECATE	Shoot	--	--		
2	MOLYBDENUM	Root	--	--		
2	MOLYBDENUM	Leaf	--	--		
2	MOLYBDENUM	Fruit	--	--		
2	MOLYBDENUM	Pt	--	--		
2	MOLYBDENUM	Stem	--	--		
0	MONOSACCHARIDES	Root	15000	15000		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	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	N-NONACOSANE	Leaf	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
1	N-NONACOSANE	Rhizome	--	--		
1	N-NONACOSANE	Root	--	--		
0	N-PENTADECANE	Plant	--	--		
0	N-PENTADECANE	Root Essent. Oil	--	18000		
0	NEO-INTERMEDEOL	Plant	--	10.4		
0	NEOCLOVENE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	NEOXANTHIN	Leaf	--	--		
11	NEROLIDOL	Shoot	--	--		
0	NERVONIC-ACID	Root	--	--		
39	NIACIN	Root	17	80	0.8625453013144426	
2	NICOTINAMIDE	Root	--	--		
11	NICOTINIC-ACID	Root	--	--		
2	NORHARMAN	Root	--	--		
0	NOTOGINSENOSIDE-R-1	Root	--	20		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	700	0.845493216306878	
18	OLEIC-ACID	Root	--	--		
0	OXALIC-ACID-ETHYL-ESTER	Root	--	--		
25	P-COUMARIC-ACID	Root	--	--		
1	P-HYDROXYCINNAMIC-ACID	Root	--	26		
13	PALMITIC-ACID	Root	--	--		
13	PALMITIC-ACID	Plant	--	--		
13	PALMITIC-ACID	Root Essent. Oil	--	86000	1.2911413065205417	
13	PALMITIC-ACID	Stem Essent. Oil	--	160000		
13	PALMITIC-ACID	Leaf Essent. Oil	--	160000		
2	PALMITOLEIC-ACID	Root	--	--		
0	PALMITOYL-BETA-D-GLUCOSIDE	Tissue Culture	--	--		
1	PANACENE	Root	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PANASENOSIDE	Leaf	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANASENOSIDE	Shoot	--	--		
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	--	--		
0	PANAX-PECTIC-HETEROGLYCAN-GL-4-II-B-1-III	Leaf	--	--		
0	PANAX-POLYPEPTIDE	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PANAX-POLYPHENOLIC-PERMETHYL-ETHER	Root	--	--		
0	PANAX-POLYSACCHARIDE	Root	30000	40000		
0	PANAX-POLYSACCHARIDE	Tissue Culture	--	--		
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	Root	--	--		
1	PANAXACOL	Tissue Culture	37	50		
0	PANAXADIOL	Root	700	6500	-1	
0	PANAXADIOL-SAPONIN	Shoot	--	--		
1	PANAXAN-A	Root	--	--		
1	PANAXAN-B	Root	--	--		
1	PANAXAN-C	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	7700	-1	
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference 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	-1	
1	PANAXYDOL	Tissue Culture	--	8		
0	PANAXYDOL-CHLOROHYDRIN	Root	--	13.5		
0	PANAXYDOL-LINOLEATE	Root	--	8.1		
0	PANAXYNE	Root	--	--		
0	PANAXYNE-EPOXIDE	Root	1.8	9		
3	PANAXYNOL	Root	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	PANAXYNOL-LINOLEATE	Root	--	1.3		
1	PANAXYTRIOL	Root	14.2	250	0.9999999999999999	
11	PANTOTHENIC-ACID	Root	6.6	6.6	-1.5734087317737453	
2	PATCHOULENE	Root Essent. Oil	--	20000		
24	PECTIN	Root	--	--		
24	PECTIN	Plant	--	--		
0	PELARGONIDIN-3-MONOGLUCOSIDE	Fruit Epidermis	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PENTADECANOIC-ACID	Root	--	--		
0	PERLARGONIDIN-3-O-BETA-D-GLUCOSIDE	Root	--	--		
0	PERLOLYRINE	Root	--	1.6		
0	PHENOLASE	Root	--	--		
2	PHENYL-ACETALDEHYDE	Shoot	--	--		
7	PHENYLALANINE	Root	--	--		
7	PHENYLALANINE	Leaf	--	--		
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	528	-0.5253256654441569	
0	POLYACETYLENES	Root	--	--		Wichtl, M. 1984. Teedrogen. Ein Handbuch fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellscharft. mbH Stuttgart. 393 pp.
0	POLYSACCHARIDE	Root	--	--		
0	POLYSACCHARIDE	Rhizome	--	--		
0	POLYSACCHARIDE	Tissue Culture	--	--		
0	POLYSACCHARIDE-GL-P-I	Leaf	--	5		
0	POLYSACCHARIDE-GL-P-II	Leaf	--	8		
0	POLYSACCHARIDE-GL-P-III	Leaf	--	2.2		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	POLYSACCHARIDE-GL-P-IV	Leaf	--	2.4		
0	POLYSACCHARIDE-SA	Root	--	--		
0	POLYSACCHARIDE-SB	Root	--	--		
14	POTASSIUM	Root	515	2430	-0.9774436969784575	
0	PRO-RENIN	Root	--	--		
0	PROLINE	Root	--	--		
0	PROLINE	Leaf	--	--		
0	PROTEIN	Root	23108	109000	-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	-1	
0	RHAMNOSE	Root	--	--		
0	RHAMNOSE	Tissue Culture	--	--		
15	RIBOFLAVIN	Root	0.4	1.8	-0.49776655351897503	
34	SALICYLIC-ACID	Root	--	3.4	-1	
0	SANTALENE	Shoot	--	--		
0	SAPONIN-II	Plant	--	--		
0	SAPONIN-II	Tissue Culture	--	--		
0	SAPONIN-II	Root	--	--		
0	SAPONIN-III	Root	--	--		
0	SAPONIN-III	Tissue Culture	--	--		
0	SAPONIN-III	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SAPONIN-IV	Root	--	--		
0	SAPONIN-IV	Plant	--	--		
0	SAPONIN-IV	Tissue Culture	--	--		
0	SAPONIN-V	Root	--	--		
0	SAPONIN-V	Plant	--	--		
0	SAPONIN-V	Tissue Culture	--	--		
5	SAPONINS	Root	--	20000	-0.6445017907060011	
5	SAPONINS	Shoot	--	--		
5	SAPONINS	Stem	16000	40000		
5	SAPONINS	Flower	--	69000		
5	SAPONINS	Leaf	--	128000	1.3249298643249272	
60	SELENIUM	Root	0.5	2.5	-0.18461140397934853	
0	SELINA-4(14),7(11)-DIENE	Root Essent. Oil	--	--		
0	SENECRASSIDIOL	Root	--	--		
1	SERINE	Root	--	--		
1	SERINE	Leaf	--	--		
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)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	24	-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	Rhizome	--	--		
5	STARCH	Root	25440	120000	-0.818804895582863	
8	STEARIC-ACID	Root	--	--		
12	STIGMASTEROL	Root	--	--		
0	STIGMASTEROL-6'-LINOLENYLGLUCOSIDE	Root	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
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)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	226000	1.0351788500330728	
14	SUCROSE	Rhizome	--	--		
14	SUCROSE	Leaf	--	6400	-0.9162072066569106	
14	SUCROSE	Stem	--	3500		
0	SUGARS	Root	19080	90000	-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 fur Apotheker und Arzte. Wissenschaftliche Verlagsgesellscharft. mbH Stuttgart. 393 pp.
31	THIAMIN	Root	1.7	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	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	THREONINE	Root	--	--		
0	THUJ-4(10)-ENE	Root	--	--		
4	TIN	Root	3.4	16	-0.0494227816847916	
1	TOLUENE	Shoot	--	--		
0	TRACE-ELEMENTS	Root	--	--		
2	TRANS-BETA-FARNESENE	Root Essent. Oil	--	80000	0.947568920739301	
2	TRANS-BETA-FARNESENE	Plant	--	--		
0	TRANS-CARYOPHYLLENE	Root Essent. Oil	--	--		
0	TRANS-CARYOPHYLLENE	Plant	--	--		
0	TRICOSANOIC-ACID	Root	--	--		
2	TRIFOLIN	Leaf	--	--		
2	TRIFOLIN	Shoot	--	--		
0	TRIMETHYL-PYRAZINE	Root	--	--		
0	TRIPALMITIN	Rhizome	--	--		
0	TRIPALMITIN	Root	--	--		
8	TYROSINE	Root	--	--		
8	TYROSINE	Leaf	--	--		
0	URACIL	Root	--	--		
0	URIDINE	Root	--	--		
3	VALINE	Leaf	--	--		
3	VALINE	Root	--	--		
24	VANILLIC-ACID	Root	--	55	0.9214964116563734	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	0.12275678708782596	
3	XYLOSE	Root	--	--		
3	XYLOSE	Tissue Culture	--	--		
77	ZINC	Root	--	--		
77	ZINC	Leaf	--	--		
77	ZINC	Fruit	--	--		
77	ZINC	Petiole	--	--		
77	ZINC	Stem	--	--		