

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Panax quinquefolius*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,3-DIMETHYL-ACRYLIC-ACID	Plant	--	--		
0	1,9-CIS-HEPTADECADIENE-1,6-DIYN-3-OL	Plant	--	--		
0	1,9-CIS-HEPTADECADIENE-4,6-DIYN-3-OL	Plant	--	--		
0	1-2-9-10-DIEPOXY-3-OXO-HEPTADECA-4-6-DIYNE	Root	--	1.7		
0	1-HEPTADECAENE-4,6-DIYN-3,8,10-TRIOL	Plant	--	--		
0	1-HEPTADECAENE-4,6-DIYN-3,8-DIOL	Plant	--	--		
0	1-HYDROXY-9-10-EPOXY-C-OXO-HEPTADECA-4-6-DIYNE	Root	--	7.1		
0	1-OCTACOSANOL	Plant	--	--		
0	2-PHENYL-DODECANE	Root Essent. Oil	--	41500		
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-HYDROXY-5-METHYL-GAMMA-PYRONE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-PHENYL-DODECANE	Root Essent. Oil	--	16700		
0	3-PHENYL-UNDECANE	Root Essent. Oil	--	16700		
0	4-PHENYL-DODECANE	Root Essent. Oil	--	15600		
0	6(R),7(S)-EPOXY-TETRADECA-1,3-DIYNE	Root	--	--		
0	6-7-EPOXY-TETRADECA-1-3-DIEN	Root	--	2.8		
0	8-ACETOXY-9,10-EPOXYHEPTADECA-4,6-DIYN-1-EN-3-OL	Root	--	2.2		
0	9,10-EPOXY-3-HYDROXYHEPTADECA-1-EN-4,6-DIYNE	Plant	--	--		
16	ACETIC-ACID	Plant	126	126	1.414181220491693	
0	ACETYL-PANAXYDOL	Root	--	2.8	0.9999999999999999	
11	ADENINE	Plant	--	--		
28	ADENOSINE	Plant	--	--		
3	ALANINE	Plant	209	2250	-1.5644343500261684	
0	ALLOISOLEUCINE	Plant	--	--		
0	ALPHA-AMINO-BUTYRIC-ACID	Plant	--	--		
0	ALPHA-CARYOPHYLLENE-ALCOHOL	Root Essent. Oil	1457	23135		
3	ALPHA-CURCUMENE	Root Essent. Oil	1626	8677	-1	
0	ALPHA-ELEMENE	Root Essent. Oil	3352	19550	1	
0	ALPHA-FRUCTOSE	Root	--	--		
0	ALPHA-GLUCOSE	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ALPHA-HUMULENE	Plant	--	--		
0	ALPHA-MALTOSE	Root	--	--		
0	ALPHA-MUUROLENE	Root Essent. Oil	2007	9855	1	
0	ALPHA-NEOCLOVENE	Plant	--	--		
0	ALPHA-PANASINSENE	Plant	--	--		
0	ALPHA-PYRROLIDONE	Plant	--	--		
3	ALPHA-SELINENE	Plant	--	--		
5	ALUMINUM	Plant	24	285	-0.19024226653522344	
0	AMINO-ACIDS	Root	--	--		
0	AMINO-ACIDS	Leaf	--	--		
0	AMINO-ACIDS	Seed	--	--		
0	AMINO-ACIDS	Stem	--	--		
0	AMINO-ACIDS	Flower	--	--		
1	AMYLASE	Plant	--	--		
0	ARABINOFURANOSE	Plant	--	--		
0	ARABINOSE	Plant	--	--		
0	ARASAPONIN-A	Plant	--	--		
0	ARASAPONIN-B	Plant	--	--		
14	ARGININE	Plant	11530	17615	1.003029083943788	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ARSENIC	Plant	0.25	0.44	-0.4279845874681766	
112	ASCORBIC-ACID	Plant	39	39	-0.5845301492267876	
2	ASPARAGINE	Plant	--	--		
3	ASPARTIC-ACID	Plant	1265	4310	-1.3901518792841547	
0	AVENASTEROL	Seed Oil	--	--		
20	BENZOIC-ACID	Plant	--	--		
0	BETA-AMINO-ISOBUTYRIC-ACID	Plant	--	--		
0	BETA-AMINOBUTYRIC-ACID	Plant	--	--		
9	BETA-AMYRIN	Seed Oil	--	--		
6	BETA-BISABOLENE	Root Essent. Oil	6251	58670	1.706312778237975	
0	BETA-CUBEBENE	Root Essent. Oil	997	13216	1	
5	BETA-ELEMENE	Plant	--	--		
0	BETA-FARNESENE	Plant	--	--		
0	BETA-FARNESENE	Root Essent. Oil	--	260500	1	
0	BETA-FRUCTOSE	Root	--	--		
0	BETA-GLUCOSE	Root	--	--		
0	BETA-GURJUNENE	Root Essent. Oil	4908	78900	1	
0	BETA-HUMULENE	Plant	--	--		
0	BETA-MAALIENE	Root Essent. Oil	4938	6134		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-MALTOSE	Root	--	--		
0	BETA-N-OXALO-L-ALPHA-BETA-DIAMINOPROPIONIC-ACID	Root	--	200		
0	BETA-NEOCLOVENE	Plant	--	--		
0	BETA-PANASINSENE	Plant	--	--		
2	BETA-SANTALENE	Plant	--	--		
3	BETA-SELINENE	Plant	--	--		
47	BETA-SITOSTEROL	Plant	--	--		
47	BETA-SITOSTEROL	Root	--	--		
0	BETA-SITOSTEROL-GLYCOSIDE	Plant	--	--		
0	BICYCLOGERMACRENE	Plant	--	--		
4	BIOTIN	Plant	1	9	1	
4	BORON	Plant	24	96	0.13904887033764624	
0	BUTYROSPERMOL	Seed Oil	--	--		
28	CALCIUM	Plant	2340	10800	-0.29837191904081456	
0	CALCIUM-POLYURONIDE	Plant	--	--		
2	CAMPESTEROL	Plant	--	--		
1	CAPROIC-ACID	Root Essent. Oil	--	28600		
0	CARBOHYDRATES	Plant	700000	700000	0.1777298959145264	
31	CARYOPHYLLENE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	CARYOPHYLLENE	Root Essent. Oil	--	8670	-1	
1	CHOLESTEROL	Seed Oil	--	--		
20	CHOLINE	Plant	1000	2000	-1.1769646985527404	
18	CINNAMIC-ACID	Plant	--	--		
0	CIS-BETA-FARNESENE	Root Essent. Oil	4961	5279		
23	CITRIC-ACID	Plant	3000	3000	-0.5186178992564134	
2	COBALT	Plant	0.06	0.44	-0.46303973466040793	
0	COLONIN	Plant	--	--		
12	COPPER	Plant	6	13	-0.11258700446602109	
7	CYCLOARTENOL	Seed Oil	--	--		
0	CYSTEIC-ACID	Plant	--	--		
13	CYSTEINE	Plant	200	200		
2	CYSTINE	Plant	108	108	-1.1190679849671816	
0	D-FRUCTOSE	Plant	4160	5000		
1	D-GLUCOSE	Plant	5340	15000		
0	D-SUCROSE	Root	--	--		
0	D-XYLOSE	Plant	--	--		
0	DAUCOSTERIN	Plant	300	300		
0	DAUCOSTERINE	Plant	--	35		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	DEXTROSE	Plant	--	--		
0	DIASTASE	Plant	--	--		
0	DIBUTYL-PHTHALATE	Root Essent. Oil	9860	29274		
0	ECHINOCYSTIC-ACID	Plant	--	--		
2	ELEMOL	Root Essent. Oil	2959	14637		
0	EO	Root	--	--		
40	ESCIN	Plant	--	--		
3	ESTRADIOL	Plant	--	--		
0	ESTROL	Plant	--	--		
8	ESTRONE	Plant	--	--		
0	ETHYL-MACHAERINATE	Plant	--	--		
0	FALCALINOL	Root	--	558.3		
0	FAT	Plant	10000	10000	-0.6093148838235234	
61	FERULIC-ACID	Plant	--	--		
15	FIBER	Plant	59000	245000	0.16408539512716985	
15	FOLACIN	Plant	--	68	1.6046860210830616	
23	FOLIC-ACID	Plant	--	68	1.386195235089137	
13	FORMIC-ACID	Plant	--	--		
8	FRUCTOSE	Tissue Culture	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	FRUCTOSE	Root	--	3400	-0.5216566939988194	
7	FUMARIC-ACID	Plant	--	--		
1	GALACTOSE	Plant	--	--		
1	GALACTOSE	Root	--	--		
0	GALACTURONIC-ACID	Plant	--	--		
0	GAMMA-SELINENE	Plant	--	--		
2	GERMACRENE-D	Plant	--	--		
0	GERMANIUM	Plant	--	--		
0	GINSENG-TRISACCHARIDE	Plant	--	35		
2	GINSENIN	Plant	--	--		
0	GINSENOSIDE-A-1	Shoot	--	800		
0	GINSENOSIDE-A-1	Root	--	--		
0	GINSENOSIDE-F-11	Leaf	--	--		
0	GINSENOSIDE-F2	Root	--	180		
0	GINSENOSIDE-F2	Shoot	--	--		
0	GINSENOSIDE-FRC	Root	--	--		
4	GINSENOSIDE-R-O	Plant	--	--		
4	GINSENOSIDE-R-O	Root	700	1000	-1	
4	GINSENOSIDE-R-O	Tissue Culture	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	GINSENOSIDE-R-O	Leaf	--	--		
4	GINSENOSIDE-R-O	Rhizome	--	--		
0	GINSENOSIDE-RA	Leaf	--	--		
0	GINSENOSIDE-RA-Q	Plant	--	52		
1	GINSENOSIDE-RB	Plant	--	--		
14	GINSENOSIDE-RB-1	Plant	--	1480		
14	GINSENOSIDE-RB-1	Root	270	20900	-1	
14	GINSENOSIDE-RB-1	Rhizome	--	--		
14	GINSENOSIDE-RB-1	Leaf	1300	2900	-1	
14	GINSENOSIDE-RB-1	Tissue Culture	--	--		
8	GINSENOSIDE-RB-2	Plant	--	43		
8	GINSENOSIDE-RB-2	Shoot	--	1050	-1	
8	GINSENOSIDE-RB-2	Root	200	1000	-1	
8	GINSENOSIDE-RB-2	Rhizome	--	--		
8	GINSENOSIDE-RB-2	Tissue Culture	--	--		
8	GINSENOSIDE-RB-2	Leaf	4200	9300	-1	
2	GINSENOSIDE-RB-3	Shoot	--	1000		
2	GINSENOSIDE-RB-3	Root	--	300	1	
2	GINSENOSIDE-RB-3	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	GINSENOSIDE-RC	Plant	--	--		
6	GINSENOSIDE-RC	Root	630	3100	-1	
6	GINSENOSIDE-RC	Rhizome	--	--		
6	GINSENOSIDE-RC	Tissue Culture	--	--		
6	GINSENOSIDE-RC	Leaf	2200	3900	-1	
3	GINSENOSIDE-RD	Plant	--	15		
3	GINSENOSIDE-RD	Root	950	7700	-1	
3	GINSENOSIDE-RD	Rhizome	--	--		
3	GINSENOSIDE-RD	Shoot	--	1600	-1	
3	GINSENOSIDE-RD	Tissue Culture	--	--		
3	GINSENOSIDE-RD	Leaf	10000	22900	-1	
0	GINSENOSIDE-RD-1	Root	3400	3700		
5	GINSENOSIDE-RE	Plant	--	1450		
5	GINSENOSIDE-RE	Root	200	13800	-1	
5	GINSENOSIDE-RE	Shoot	--	200	-1	
5	GINSENOSIDE-RE	Tissue Culture	--	--		
5	GINSENOSIDE-RE	Leaf	12600	17800	-1	
0	GINSENOSIDE-RE-2	Root	--	--		
0	GINSENOSIDE-RE-2	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GINSENOSIDE-RE-3	Root	--	--		
0	GINSENOSIDE-RE-3	Leaf	--	--		
4	GINSENOSIDE-RF	Plant	--	25		
4	GINSENOSIDE-RF	Tissue Culture	--	--		
4	GINSENOSIDE-RF	Leaf	--	--		
4	GINSENOSIDE-RF	Root	--	--		
1	GINSENOSIDE-RG	Plant	--	--		
1	GINSENOSIDE-RG	Root	--	--		
13	GINSENOSIDE-RG-1	Plant	--	48		
13	GINSENOSIDE-RG-1	Tissue Culture	--	--		
13	GINSENOSIDE-RG-1	Rhizome	--	--		
13	GINSENOSIDE-RG-1	Shoot	820	1000	-1	
13	GINSENOSIDE-RG-1	Leaf	2200	3500	-1	
13	GINSENOSIDE-RG-1	Root	300	8600	-1	
3	GINSENOSIDE-RG-2	Plant	--	50		
3	GINSENOSIDE-RG-2	Root	--	80	-1	
3	GINSENOSIDE-RG-2	Leaf	--	--		
2	GINSENOSIDE-RG-3	Plant	--	32		
2	GINSENOSIDE-RG-3	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GINSENOSIDE-RH-2	Shoot	--	--		
0	GINSENOSIDE-RH-2	Rhizome	--	18600		
0	GINSENOSIDE-RH-2	Root	--	--		
2	GINSENOSIDE-RH1	Rhizome	--	9800		
2	GINSENOSIDE-RH1	Plant	--	20		
2	GINSENOSIDE-RH1	Shoot	--	--		
2	GINSENOSIDE-RH1	Root	--	--		
0	GINSENOSIDE-RQ	Plant	--	25		
18	GINSENOSIDES	Plant	--	--		
18	GINSENOSIDES	Leaf	41400	55800		
18	GINSENOSIDES	Root	24400	38800	-0.5241846473045308	
0	GINSENOYNE-G	Root	--	5.7	0.9999999999999999	
7	GLUCOSE	Root	--	3200	-0.9073364542217909	
4	GLUCURONIC-ACID	Plant	--	--		
0	GLUCURONOLACTONE	Plant	--	--		
8	GLUTAMIC-ACID	Plant	396	4450	-1.3461930909311184	
0	GLUTAMOSE	Plant	--	--		
0	GLUTARIC-ACID	Plant	--	--		
12	GLYCINE	Plant	23	1540	-0.6509937966580142	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	GUAIOL	Root Essent. Oil	4649	11276		
6	GUANIDINE	Plant	--	--		
1	GUANINE	Plant	--	--		
0	GYPENOSIDE-F-11	Root	--	--		
0	GYPENOSIDE-XVII	Root	--	300		
0	HEPTADECA-1-8-DIENE-4-6-DIYNE-3-10-DIOL	Root	--	15	0.99999999999999978	
0	HEPTADECA-1-EN-4,6-DIYN-3,9-DIOL	Plant	--	--		
7	HISTIDINE	Plant	320	1100	-1.2977122612239684	
0	HYDROXYCHOLINE	Plant	1	1		
1	HYDROXYPROLINE	Plant	--	--		
12	IODINE	Plant	--	--		
6	IRON	Plant	49	407	-0.25900516788108274	
2	ISOBUTYRIC-ACID	Plant	15	15		
3	ISOLEUCINE	Plant	151	370	-1.3559851947971977	
5	ISOVALERIC-ACID	Plant	7	7	-1	
75	KAEMPFEROL	Plant	--	--		
0	KAEMPFEROL-3-GLUCOGALACTOSIDE	Plant	--	--		
0	KETOGLUTARIC-ACID	Plant	5500	5500		
0	L-RHAMNOSE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LEDOL	Root Essent. Oil	6831	7680		
2	LEUCINE	Plant	420	1530	-1.2675450754216828	
1	LEVULOSE	Plant	--	--		
27	LINOLEIC-ACID	Plant	--	--		
0	LINOLENIC-ACID	Plant	--	--		
21	LUPEOL	Seed Oil	--	--		
4	LYSINE	Plant	2080	2100	-0.994569738261644	
65	MAGNESIUM	Plant	980	2200	-0.5793608934861032	
0	MALEIC-ACID	Plant	--	--		
15	MALIC-ACID	Plant	--	--		
1	MALONIC-ACID	Plant	--	--		
0	MALONYL-GINSENOSE-1	Root	--	--		
0	MALONYL-GINSENOSE-1	Rhizome	--	--		
0	MALONYL-GINSENOSE-2	Root	--	--		
0	MALONYL-GINSENOSE-2	Rhizome	--	--		
0	MALONYL-GINSENOSE-3	Root	--	--		
0	MALONYL-GINSENOSE-3	Rhizome	--	--		
0	MALONYL-GINSENOSE-4	Rhizome	--	--		
0	MALONYL-GINSENOSE-4	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	MALTOL	Plant	--	--		
2	MALTOSE	Plant	--	--		
2	MALTOSE	Root	--	3800	-1	
14	MANGANESE	Plant	19	156	0.4231761021050064	
15	METHIONINE	Plant	34	340	-0.8464519406388384	
0	METHYL-BUTYRIC-ACID	Plant	--	--		
2	MOLYBDENUM	Plant	10	14	1.719900856164318	
0	MORETENOL	Seed Oil	--	--		
6	MYRISTIC-ACID	Root	--	--		
1	N-BUTYRIC-ACID	Plant	1	1		
0	N-CAPROIC-ACID	Plant	6	6		
0	N-HEXADECANE	Root Essent. Oil	--	88900		
0	N-VALERIC-ACID	Plant	--	--		
39	NIACIN	Plant	47	60	-0.23425190792611786	
11	NICOTINIC-ACID	Plant	14	16	-0.6618011950864978	
0	NITROGEN	Plant	15000	20000	0.027319474332790486	
2	NONACOSANE	Plant	--	--		
0	NONADECADIENOIC-ACID-METHYL-ESTER	Root Essent. Oil	27682	37935		
0	O-MONOMETHYLAMINOBENZOIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	OCTADECADIENOIC-ACID-METHYL-ESTER	Root Essent. Oil	13701	56439		
64	OLEANOLIC-ACID	Plant	--	20	-1.1996319701805378	
64	OLEANOLIC-ACID	Root	600	980	1.5393329014356174	
18	OLEIC-ACID	Plant	--	--		
18	OLEIC-ACID	Root	--	--		
1	P-HYDROXYCINNAMIC-ACID	Plant	28	28	1.0000000000000002	
13	PALMITIC-ACID	Plant	--	30	-1.0441687446910903	
13	PALMITIC-ACID	Root	--	--		
13	PALMITIC-ACID	Root Essent. Oil	6543	41917	-1.1452861672753163	
1	PALMITIC-ACID-ETHYL-ESTER	Root Essent. Oil	35913	73504		
0	PALMITIC-ACID-METHYL-ESTER	Root Essent. Oil	16744	63486		
3	PANACEN	Plant	--	--		
0	PANAQUILIN-E-1	Root	--	--		
0	PANAQUILIN-G-2	Root	--	--		
0	PANAQUILON	Plant	--	--		
0	PANASENOSIDE	Shoot	--	--		
0	PANAX-ACID	Plant	--	--		
0	PANAX-POLYACETYLENE-PQ-1	Root	--	75.8		
0	PANAX-POLYACETYLENE-PQ-2	Root	--	6.6		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PANAX-POLYACETYLENE-PQ-3	Root	--	29.1		
0	PANAX-PROTEIN	Leaf	--	--		
0	PANAX-PROTEIN	Root	--	--		
0	PANAXADIOL	Plant	6500	8960		
0	PANAXADIOL	Root	3100	9600	1	
0	PANAXADIOL	Shoot	--	--		
1	PANAXAN-A	Root	--	--		
1	PANAXAN-B	Root	--	--		
1	PANAXAN-C	Root	--	--		
1	PANAXAN-D	Root	--	--		
1	PANAXAN-E	Root	--	--		
0	PANAXASAPOGENIN	Plant	--	--		
0	PANAXASAPOGENOL	Plant	--	--		
0	PANAXATRIOL	Plant	7390	12450		
0	PANAXATRIOL	Root	1500	12540	1	
0	PANAXATRIOL	Shoot	--	--		
4	PANAXIC-ACID	Plant	--	--		
5	PANAXIN	Plant	--	--		
0	PANAXOSIDE-A	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PANAXOSIDE-B	Plant	--	--		
0	PANAXOSIDE-C	Plant	--	--		
0	PANAXOSIDE-D	Plant	--	--		
0	PANAXOSIDE-E	Plant	--	--		
0	PANAXOSIDE-F	Plant	--	--		
0	PANAXYDIOL	Plant	--	--		
1	PANAXYDOL	Root	--	950	1	
3	PANAXYNOL	Plant	--	--		
1	PANAXYTRIOL	Root	--	59.1	-0.9999999999999999	
11	PANTOTHENIC-ACID	Plant	7	10	-1.1594401320923207	
24	PECTIN	Plant	--	--		
0	PELARGONIDIN-3-MONOGLUCOSIDE	Fruit Epidermis	--	--		
0	PETROSELAIDIC-ACID	Plant	--	--		
0	PETROSELINIC-ACID	Plant	--	--		
0	PHENOLASE	Plant	--	--		
7	PHENYLALANINE	Plant	--	--		
4	PHOSPHORUS	Plant	2700	5200	0.7743102067399853	
14	POTASSIUM	Plant	6600	33800	0.8370626901796255	
0	PROLINE	Plant	175	1120	-0.9274280071141	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	PROPIONIC-ACID	Plant	4	4		
2	PROSTISOL	Plant	--	--		
0	PROTEIN	Plant	122000	122000	-0.421755206107789	
0	PROTEIN	Root	80600	102500	-0.17869720649227266	
0	PROTOPANAXADION	Plant	--	--		
0	PROTOPANAXATRIOL	Plant	--	--		
0	PSEUDO-GINSENOSE-F-11	Shoot	--	--		
0	PSEUDO-GINSENOSE-F-11	Root	70	400		
28	PULEGONE	Root Essent. Oil	--	260500		
1	PYRUVIC-ACID	Plant	7000	7000		
1	QUINQUEFOLAN-A	Root	--	--		
1	QUINQUEFOLAN-B	Root	--	--		
1	QUINQUEFOLAN-C	Root	--	--		
0	QUINQUENOSIDE-R-1	Root	--	100	1	
1	RAFFINOSE	Plant	--	--		
0	RESIN	Plant	--	--		
15	RIBOFLAVIN	Plant	--	1	-0.7255538374993776	
0	SACCHAROSE	Plant	--	--		
7	SAIKOSAPONIN-A	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SAIKOSAPONIN-B	Plant	--	--		
34	SALICYLIC-ACID	Plant	--	--		
0	SAPONIN	Plant	7500	10000	-0.8100884237312033	
5	SAPONINS	Leaf	--	--		
5	SAPONINS	Root	--	--		
5	SAPONINS	Flower	--	--		
1	SERINE	Plant	289	1240	-1.3409887493313337	
4	SILICON	Plant	--	--		
1	SODIUM	Plant	500	4800	-0.038367843686175344	
10	SQUALENE	Seed Oil	--	--		
0	SQUALENE-2-3-OXIDE	Seed Oil	--	--		
5	STARCH	Plant	80000	320000	0.9009192002645995	
8	STEARIC-ACID	Plant	--	--		
12	STIGMASTEROL	Plant	500	500	1.5758984909207412	
12	STIGMASTEROL	Root	--	--		
0	STRONTIUM	Plant	--	--		
7	SUCCINIC-ACID	Plant	40000	40000	1	
14	SUCROSE	Plant	--	420		
14	SUCROSE	Root	39000	158600	0.35021909440780613	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SULFUR	Plant	1500	1500	-1.0029568742069708	
5	SUPEROXIDE-DISMUTASE	Root	--	--		
35	TANNIN	Plant	--	--		
6	TARTARIC-ACID	Plant	--	--		
0	TENUIFOLIC-ACID	Plant	--	--		
4	THREONINE	Plant	584	1070	-1.2992802612381582	
1	TIGLIC-ACID	Plant	--	--		
2	TRANS-BETA-FARNESENE	Root Essent. Oil	9768	63517	0.4353826614163918	
8	TYROSINE	Plant	--	--		
0	URACIL	Plant	--	--		
0	URIDINE	Plant	--	--		
0	URONIC-ACID	Plant	--	--		
3	VALINE	Plant	82	82	-1.398364895247216	
16	VANADIUM	Plant	0.02	0.02	-0.9999999999999999	
24	VANILLIC-ACID	Plant	33	33	-0.751444222737324	
0	VIT-B12	Plant	0.4	0.6		
3	XYLOSE	Root	--	--		
77	ZINC	Plant	10	114	0.6100835562215182	