Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Zingiber officinale

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
13	GERANIAL	Rhizome Essent. Oil	159000.0	400000.0		--
5	STARCH	Rhizome	123000.0	500000.0	0.41680828464384206	--
0	WATER	Rhizome	93090.0	930000.0	0.9531262707913175	--
0	CARBOHYDRATES	Rhizome	92000.0	823240.0	0.675882053937855	--
4	NERAL	Rhizome Essent. Oil	81000.0	260000.0		--
3	BETA-PHELLANDRENE	Rhizome Essent. Oil	57000.0	106700.0		--
0	CARBOHYDRATES	Root	47390.0	677000.0	-1.9641525828914683	--
5	STARCH	Root	35000.0	600000.0	1.18913249334548	--
67	1,8-CINEOLE	Rhizome Essent. Oil	26000.0	100000.0		--
6	BETA-BISABOLENE	Rhizome Essent. Oil	25000.0	105100.0	1.0	--
0	NITROGEN	Root	16000.0	24440.0	-0.453393339582228	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	NITROGEN	Rhizome	16000.0	24440.0		--
0	PROTEIN	Rhizome	14000.0	129000.0	-0.1125496505640368	--
15	FIBER	Root	9000.0	171000.0	1.8408067359156413	--
15	FIBER	Rhizome	9000.0	171000.0	-0.07465068104411866	--
0	ASH	Rhizome	7700.0	200000.0	1.829986028498204	--
0	FAT	Rhizome	7000.0	77000.0	0.7203322628500908	--
0	PROTEIN	Root	7000.0	100000.0	-0.20677098370529998	--
0	SUGARS	Root	5600.0	80000.0	-0.231158975572398	--
0	FAT	Root	5040.0	72000.0	1.6380886391848568	--
0	ALBUMIN	Rhizome	4984.0	45924.0		--
0	ALBUMIN	Root	4984.0	45924.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
53	LINALOOL	Rhizome Essent. Oil	3200.0	30000.0	1.0	--
15	CITRONELLOL	Rhizome Essent. Oil	3000.0	130000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ZINGIBEROL	Rhizome Essent. Oil	2900.0	160000.0		--
14	POTASSIUM	Rhizome	2640.0	25079.0	1.345332062692374	--
0	GLUTELIN	Rhizome	2506.0	23091.0		--
0	GLUTELIN	Root	2506.0	23091.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	ASH	Root	2450.0	35000.0	-0.9297321702301228	--
0	GLOBULIN	Root	2366.0	21801.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GLOBULIN	Rhizome	2366.0	21801.0		--
3	ASPARTIC-ACID	Root	2080.0	11990.0	0.26543138626572105	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Rhizome	2080.0	11990.0	-1.0	--
0	SFA	Rhizome	2030.0	11085.0		--
0	SFA	Root	2030.0	11085.0	3.076072794631063	USDA's Ag Handbook 8 and sequelae)
3	CAPRIC-ACID	Rhizome	1800.0	1980.0		--
3	CAPRIC-ACID	Root	1800.0	1980.0		USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Rhizome	1620.0	9328.0	1.0	--
8	GLUTAMIC-ACID	Root	1620.0	9328.0	-0.49975515668744586	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Root	1540.0	8400.0	2.513577974996003	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Rhizome	1540.0	8400.0	1.0	--
4	PUFA	Rhizome	1540.0	8400.0	1.0	--
4	PUFA	Root	1540.0	8400.0	1.333787882042874	USDA's Ag Handbook 8 and sequelae)
0	PROLAMINE	Plant	1540.0	14190.0		--
14	POTASSIUM	Root	1323.0	18900.0	0.22854620707535842	--
27	LINOLEIC-ACID	Rhizome	1200.0	11220.0	1.0	--
13	PALMITIC-ACID	Rhizome	1200.0	11220.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
13	PALMITIC-ACID	Root	1200.0	11220.0	0.13536149219761523	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Root	1200.0	11220.0	3.017959618154365	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Rhizome	1190.0	11000.0	1.0	--
18	OLEIC-ACID	Root	1190.0	11000.0	3.056426676222409	USDA's Ag Handbook 8 and sequelae)
0	ZINGIBERENES	Rhizome	890.0	17836.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	EO	Or	800.0	50000.0		--
2	LEUCINE	Rhizome	740.0	4257.0	1.0	--
2	LEUCINE	Root	740.0	4257.0	-0.0564322869347267	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Root	730.0	4202.0	0.07599207749422336	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Rhizome	730.0	4202.0	1.0	--
0	EO	Root	700.0	30000.0	0.7582862013339499	--
0	KILOCALORIES	Rhizome	690.0	3764.0	1.0	--
0	KILOCALORIES	Root	690.0	3764.0	0.8753423179683022	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Rhizome	570.0	3110.0	-1.0	--
4	LYSINE	Root	570.0	3110.0	-0.5755610272389462	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Root	510.0	2926.0	-0.2833451886291646	USDA's Ag Handbook 8 and sequelae)
3	ISOLEUCINE	Rhizome	510.0	2926.0	1.0	--
7	PHENYLALANINE	Root	450.0	2455.0	-0.39322284344633335	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Rhizome	450.0	2455.0	1.0	--
1	SERINE	Rhizome	450.0	2596.0	-1.0	--
1	SERINE	Root	450.0	2596.0	-0.4317372218630029	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Rhizome	430.0	2486.0	-1.0	--
14	ARGININE	Rhizome	430.0	2486.0	-1.0	--
12	GLYCINE	Root	430.0	2486.0	-0.22589147640123697	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
14	ARGININE	Root	430.0	2486.0	-0.41425783754112155	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Rhizome	430.0	2690.0	1.0779788333953992	--
0	PROLINE	Root	410.0	2376.0	0.2837932421997398	USDA's Ag Handbook 8 and sequelae)
0	PROLINE	Rhizome	410.0	2376.0	-1.0	--
7	LAURIC-ACID	Rhizome	390.0	3630.0		--
7	LAURIC-ACID	Root	390.0	3630.0	1.4134619657773633	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Root	360.0	2057.0	-0.4948266685368329	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Rhizome	360.0	2057.0	-1.0	--
15	ALPHA-LINOLENIC-ACID	Rhizome	340.0	3190.0		--
15	ALPHA-LINOLENIC-ACID	Root	340.0	3190.0	1.9620665358845129	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Rhizome	320.0	5323.0	0.4586280406131061	--
3	ALANINE	Rhizome	310.0	1793.0	-1.0	--
3	ALANINE	Root	310.0	1793.0	-0.8118285216311718	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Rhizome	300.0	1738.0	-1.0	--
7	HISTIDINE	Root	300.0	1738.0	-0.05270016889774364	USDA's Ag Handbook 8 and sequelae)
2	FARNESENE	Rhizome	245.0	4910.0		--
2	PALMITOLEIC-ACID	Rhizome	210.0	1145.0	1.0	--
2	PALMITOLEIC-ACID	Root	210.0	1145.0	0.05724502554235483	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Root	200.0	1122.0	-1.4340366854424644	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Rhizome	200.0	1122.0	-1.0	--
65	MAGNESIUM	Root	188.0	2690.0	0.0683510412136399	--
4	PHOSPHORUS	Root	181.0	2580.0	-0.1647701538167895	--
6	MYRISTIC-ACID	Rhizome	180.0	1650.0	-1.0	--
6	MYRISTIC-ACID	Root	180.0	1650.0	1.7305384293651185	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Root	170.0	1540.0	2.8114380671291452	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
8	STEARIC-ACID	Rhizome	170.0	1540.0	1.0	--
2	PHYTOSTEROLS	Rhizome	150.0	913.0		--
28	CALCIUM	Rhizome	150.0	3458.0	-0.7549394061569589	--
2	PHYTOSTEROLS	Root	150.0	913.0	0.021969609312565776	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Root	130.0	737.0	-0.5917219440063812	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Rhizome	130.0	737.0	-1.0	--
28	6-GINGEROL	Rhizome	130.0	7138.0		--
29	TRYPTOPHAN	Root	120.0	693.0	-0.48600202664790343	USDA's Ag Handbook 8 and sequelae)
29	TRYPTOPHAN	Rhizome	120.0	693.0	-1.0	--
3	GINGERENONE-A	Rhizome	118.0	136.0		--
28	CALCIUM	Root	116.0	1650.0	-0.6300358799835268	--
5	8-GINGEROL	Rhizome	110.0	1069.0		--
14	MANGANESE	Rhizome	106.0	350.0	1.4980699854714286	--
47	BETA-SITOSTEROL	Root	100.0	500.0	-0.26375908041164936	--
0	GERMANIUM	Rhizome	87.0	169.0		--
2	CYSTINE	Root	80.0	462.0	-0.8891832694867765	USDA's Ag Handbook 8 and sequelae)
2	CYSTINE	Rhizome	80.0	462.0	-1.0	--
1	ALPHA-ZINGIBERENE	Rhizome	74.0	4600.0	1.0	--
5	CAPRYLIC-ACID	Rhizome	70.0	380.0		--
0	GADOLEIC-ACID	Rhizome	70.0	380.0	1.0	--
5	CAPRYLIC-ACID	Root	70.0	380.0		USDA's Ag Handbook 8 and sequelae)
0	GADOLEIC-ACID	Root	70.0	380.0		USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Rhizome	60.0	709.0	0.18755999323325184	--
2	8-SHOGAOL	Rhizome	48.0	130.0		--
5	ALUMINUM	Root	46.0	663.0	0.04325697966835661	--
7	SALICYLATES	Root	45.0	250.0	0.1478264757482174	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
32	6-SHOGAOL	Rhizome	40.0	330.0		--
12	STIGMASTEROL	Root	40.0	200.0	0.32535405334624357	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	GAMMA-SELINENE	Rhizome	35.0	700.0		--
0	GAMMA-SELINENE	Root	35.0	700.0		--
3	BETA-PHELLANDRENE	Rhizome	32.0	2850.0		--
1	SODIUM	Root	30.0	423.0	-0.31581734202184225	--
2	HEXAHYDROCURCUMIN	Rhizome	21.3	25.1		--
0	6-GINGEDIOL	Rhizome	21.0	30.0		--
112	ASCORBIC-ACID	Root	20.0	288.0	-0.48133996980232785	--
3	AR-CURCUMENE	Rhizome	20.0	9520.0	1.0	--
0	ALPHA-FARNESENE	Rhizome	20.0	1250.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
60	LIMONENE	Rhizome	17.0	1050.0	0.6650265305559545	--
0	GINGERGLYCOLIPID-B	Rhizome	14.0	15.0		--
4	D-BORNEOL	Rhizome	14.0	1102.0	1.0	--
4	D-BORNEOL	Root	14.0	1102.0		--
2	CAMPESTEROL	Root	10.0	100.0	-0.2945736885682078	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	NONAN-2-ONE	Rhizome	8.0	160.0		--
23	ALPHA-TERPINEOL	Rhizome	8.0	500.0	-0.26863716905966795	--
0	GAMMA-MUUROLENE	Rhizome	7.0	455.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	BETA-EUDESMOL	Rhizome	7.0	465.0	1.0	--
24	CHROMIUM	Rhizome	6.0	20.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	TRANS-BETA-SESQUIPHELLANDROL	Rhizome	6.0	360.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	TRANS-NEROLIDOL	Rhizome	5.0	350.0		--
39	NIACIN	Rhizome	5.0	135.0	1.0692722579935732	--
0	BETA-BISABOLOL	Rhizome	5.0	295.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	BETA-BISABOLENE	Rhizome	5.0	3600.0	-1.0	--
0	DECANAL	Plant	5.0	100.0	1.0	--
0	TRANS-NEROLIDOL	Rhizome Essent. Oil	5.0	7000.0		--
6	IRON	Rhizome	4.0	162.0	-0.5945282624931012	--
39	NIACIN	Root	3.6	51.0	0.0220587467388613	--
2	6-GINGERDIONE	Rhizome	3.3	10.0		--
12	COPPER	Root	3.0	16.0	0.47378131766732856	--
12	COPPER	Rhizome	3.0	16.0	1.223047708525459	--
11	ALPHA-PHELLANDRENE	Rhizome	3.0	200.0	-1.0	--
2	ELEMOL	Rhizome	3.0	190.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	10-GINGEROL	Rhizome	2.6	1862.0		--
14	MANGANESE	Root	2.4	33.8	-0.14226990626562633	--
0	NONANAL	Rhizome	2.0	50.0	1.0	--
11	PANTOTHENIC-ACID	Root	2.0	11.0	-0.9376231626080279	USDA's Ag Handbook 8 and sequelae)
0	TRICYCLENE	Rhizome	2.0	115.0		--
5	BETA-ELEMENE	Rhizome	2.0	500.0	0.26691736651361464	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	NICKEL	Root	2.0	5.2	1.752676229894103	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
22	MYRCENE	Rf	2.0	950.0		--
3	NICKEL	Rhizome	2.0	5.2	1.0	--
0	HEXAN-1-AL	Rhizome Essent. Oil	2.0	700.0		--
15	CITRONELLOL	Rhizome	2.0	6500.0		--
35	GERANIOL	Rhizome	2.0	345.0		--
0	HEXAN-1-AL	Rhizome	2.0	35.0		--
2	BETA-MYRCENE	Rf	2.0	950.0		--
0	6-METHYL-HEPT-5-EN-2-ONE	Rhizome	2.0	50.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	OCTAN-1-AL	Rhizome	2.0	40.0		--
4	SILICON	Root	2.0	28.5	-0.2119845357116175	--
12	BORNYL-ACETATE	Root	2.0	105.0	-0.5636066792773037	--
12	BORNYL-ACETATE	Rhizome	2.0	105.0		--
0	NONANAL	Root	2.0	50.0		--
22	MYRCENE	Rhizome	2.0	950.0	-1.0	--
0	GAMMA-EUDESMOL	Rhizome	2.0	115.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
11	PANTOTHENIC-ACID	Rhizome	2.0	11.0		--
0	VIT-B-6	Root	1.6	8.7	-0.2586482502443934	USDA's Ag Handbook 8 and sequelae)
0	VIT-B-6	Rhizome	1.6	8.7		--
6	IRON	Root	1.1	15.0	-0.4198613477374219	--
0	ALLO-AROMADENDRINE	Rhizome	1.0	70.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	XANTHORRHIZOL	Rhizome	1.0	50.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ROSEFURAN	Rhizome	1.0	90.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	FARNESAL	Rhizome	1.0	100.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
9	DELTA-CADINENE	Rhizome	1.0	65.0	-0.6681865179092669	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PERILLENE	Rhizome	1.0	95.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
9	TERPINOLENE	Rhizome	1.0	90.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	SELINA-3,7(11)-DIENE	Rhizome	1.0	65.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	BORON	Root	1.0	4.0	-0.7413065903382969	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
0	UNDECAN-2-OL	Rhizome	1.0	25.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	TRANS-BETA-FARNESENE	Rhizome	1.0	1200.0	-1.0	--
0	HEPTAN-2-OL	Rhizome	1.0	135.0		--
4	BORON	Rhizome	1.0	4.0		--
41	CAMPHOR	Rhizome	1.0	60.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	COBALT	Rhizome	0.9	42.0	1.0	--
0	BETA-CARYOPHYLLENE	Rhizome	0.7	45.0	-1.0	--
0	ISOEUGENOL-METHYL-ETHER	Rhizome	0.6	40.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
5	MYRTENAL	Rhizome	0.5	30.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	ALPHA-TERPINENE	Rhizome	0.5	35.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	P-CYMEN-8-OL	Rhizome	0.5	35.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	ZINGIBERENE	Rhizome	0.5	600.0	-1.0	--
2	COBALT	Root	0.3	4.2	-0.454047411785451	--
2	ZINGIBERONE	Rhizome	0.3	400.0		--
15	RIBOFLAVIN	Root	0.2	3.1	-0.21327168080429257	--
53	BETA-CAROTENE	Root	0.1	1.0	-0.43002798118623115	--
4	TIN	Root	0.1	1.3	-1.5436732662398835	--
0	THIAMINE	Root	0.1	1.5	-0.5634413774971821	--
60	SELENIUM	Root	0.1	1.0	-0.29131634494743897	--
112	ASCORBIC-ACID	Rhizome	0.0	317.0	-0.3087839350199982	--
15	RIBOFLAVIN	Rhizome	0.0	5.0	-0.10465353747473792	--
0	ZINGIBEROL	Rhizome	0.0	8000.0		--
31	THIAMIN	Root	0.0	3.0	-0.32687193108858614	--
31	THIAMIN	Rhizome	0.0	3.0	-0.9831353843426084	--
53	BETA-CAROTENE	Rhizome	0.0	4.0	-0.6667259338283312	--
53	CITRAL	Root	0.0	13500.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
53	CITRAL	Rhizome	0.0	13500.0		--
0	BETA-ZINGIBERENE	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	GINGERENONE-B	Rhizome		4.7		--
0	ALPHA-CADINENE	Rhizome				--
0	DECYL-ALDEHYDE	Root				--
0	16-GINGEROL	Rhizome				--
77	ZINC	Rhizome		57.0	-0.18700695320743768	--
0	3(R)-5(S)-DIACETOXY-1-(4-HYDROXY-3-METHOXY-PHENYL)-DECANE	Rhizome		41.8		--
2	LEUCINE	Tuber				--
0	PERILLENE	Rhizome Essent. Oil		1900.0		--
0	HEPTAN-2-OL	Rhizome Essent. Oil		2700.0		--
0	BETA-CARYOPHYLLENE	Rhizome Essent. Oil		900.0	-1.0	--
28	6-GINGEROL	Root Essent. Oil				--
2	BETA-SANTALOL	Rhizome Essent. Oil		162000.0		--
0	5-O-BETA-D-GLUCOPYRANOSYL-3-HYDROXY-1-(4-HYDROXYPHENYL)-DECANE	Rhizome		3.0		--
135	CURCUMIN	Plant				Stitt, Paul. Why George should eat broccoli.
5	SABINENE	Rhizome		20.0		--
3	ASPARTIC-ACID	Tuber				--
0	8-GINGEDIOL	Rhizome				--
0	6-METHYLGINGEDIACETATE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
67	1,8-CINEOLE	Rhizome		490.0	-0.7528854377140122	--
0	GAMMA-EUDESMOL	Rhizome Essent. Oil		2300.0		--
11	NEROLIDOL	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	TRANS-OCTEN-2-AL	Rhizome Essent. Oil				--
0	6-GINGEDIOL-DIACETATE-METHYL-ETHER	Rhizome				--
1	RAFFINOSE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	TRANS-3-(2-4-5-TRIMETHOXY-PHENYL)-4-(TRANS-3-4-DIMETHOXY-STYRYL)-CYCLOHEXENE	Rhizome		13.9		--
0	3(S)-5(S)-DIHYDROXY-1-7-BIS-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome		5.3		--
0	NEOISOPULEGOLE	Rhizome Essent. Oil				--
7	ISOBORNEOL	Rhizome				--
0	TRAN-8-SHOGOAL	Rhizome		40.0		--
9	DELTA-CADINENE	Rhizome Essent. Oil		1300.0		--
0	2-(3'-METHYL-2'-BUTENYL)-3-METHYL-FURAN	Rhizome				--
0	3-7-DIMETHYL-OCTA-3-CIS-6-DIEN-1-AL	Rhizome				--
13	ZINGERONE	Root Essent. Oil				--
4	THREONINE	Shoot				--
0	CIS-BETA-SESQUIPHELLANDROL	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
2	PIPECOLIC-ACID	Rhizome		320.0		--
22	GAMMA-AMINOBUTYRIC-ACID	Rhizome				--
0	N-PROPANOL	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
20	CITRONELLAL	Rhizome Essent. Oil		2900.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	5-HYDROXY-7-(4-HYDROXY-3-5-DIMETHOXY-PHENYL)-1-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTAN-3-ONE	Rhizome		0.52		--
0	CIS-SESQUISABINENE-HYDRATE	Rhizome Essent. Oil				--
53	LINALOOL	Root Essent. Oil				--
0	DIHYDROGINGEROL	Rhizome				--
3	METHYL-ACETATE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	CAR-3-ENE	Rhizome				--
6	ACETALDEHYDE	Rhizome				--
0	6-GINGEDIOL-ACETATE-METHYL-ETHER	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
9	CAMPHENE	Rhizome		3080.0	1.0	--
0	CIS-GERANIC-ACID	Rhizome				--
2	9-OXO-NEROLIDOL	Rhizome Essent. Oil				--
0	SESQUITHUJENE	Rhizome				--
2	PROPIONALDEHYDE	Rhizome				--
0	14-GINGEROL	Rhizome				--
0	3(R)-5(S)-DIACETOXY-1-(3-4-DIMETHOXY-PHENYL)-DECANE	Rhizome		14.9		--
7	LAURIC-ACID	Rhizome Essent. Oil		900.0		--
11	PERILLALDEHYDE	Rhizome Essent. Oil				--
27	GINGEROL	Root Essent. Oil				--
3	AR-CURCUMENE	Rhizome Essent. Oil		25000.0		--
28	6-GINGEROL	Root				--
13	BETA-PINENE	Rhizome Essent. Oil		5300.0	1.248959633610851	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
1	PENTADECANOIC-ACID	Rhizome				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	1-(4-O-BETA-D-GLUCOPYRANOSYL-3-METHOXYPHENYL)-3,5-DIHYDROXYDECANE	Rhizome		2.0		--
1	CUMENE	Rhizome		1.0		--
5	BETA-THUJONE	Rhizome				--
3	ASPARTIC-ACID	Shoot				--
1	8-BETA-17-EPOXY-LABD-TRANS-12-ENE-15,16-DIAL	Rhizome		400.0		--
4	GALANOLACTONE	Rhizome				--
11	NEROLIDOL	Rhizome		60.0		--
0	TRANS-BETA-SESQUIPHELLANDROL	Rhizome Essent. Oil		7200.0		--
0	6-GINGEDIOL-DIACETATE	Rhizome		3.3		--
0	P-CYMEN-8-OL	Rhizome Essent. Oil		700.0		--
0	3(S)-5(S)-DIHYDROXY-1-(4'-HYDROXY-3'-5'-DIMETHOXY-PHENYL)-7-(4'-HYDROXY-3'-METHOXY-PHENYL)-HEPTANE	Rhizome		2.0		--
0	N-OCTANOL	Rhizome				--
0	BORNEOL-ACETATE	Rhizome Essent. Oil		2100.0		--
17	FARNESOL	Rhizome				--
0	TRAN-6-SHOGOAL	Rhizome		40.0		--
0	CIS-8-SHOGOAL	Rhizome		40.0		--
0	AROMADENDRINE	Rhizome				--
53	CITRAL	Rhizome Essent. Oil		130000.0		--
0	5-HYDROXY-1-(4-HYDROXY-3-5-DIMETHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTAN-3-ONE	Rhizome		0.52		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	CIS-SELINEN-4-OL	Rhizome				--
53	LINALOOL	Rhizome		50.0	-1.0	--
0	DIETHYLSULFIDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	METHYL-8-SHOGOAL	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	SILICON	Rhizome		285.0		--
44	CAPSAICIN	Plant				Stitt, Paul. Why George should eat broccoli.
3	ALPHA-SELINENE	Rhizome				--
0	4-PHENYL-BENZALDEHYDE	Rhizome Essent. Oil				--
0	6-GINGEDIOL-ACETATE	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	ZONARENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-FARNESENE	Root Essent. Oil				--
0	TRANS-LINALOOL-OXIDE	Rhizome Essent. Oil				--
0	SESQUITERPENE-HYDROCARBON	Rhizome Essent. Oil				--
0	PERILLEN	Rhizome Essent. Oil				--
14	SUCROSE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	12-GINGEROL	Rhizome				--
1	DECAN-1-AL	Rhizome				--
1	LABDA-TRANS-8(17)-12-DIENE-15-16-DIAL	Rhizome				--
0	PENTAN-2-OL	Rhizome				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	GINGERGLYCOLIPID-C	Rhizome		14.0		--
3	ALPHA-CURCUMENE	Rhizome Essent. Oil		19400.0		--
28	6-GINGEROL	Essential Oil				--
1	HEPTADECANOIC-ACID	Rhizome				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	SHOGAOLS	Root		1800.0		--
0	LINALOL	Rhizome		50.0	-1.0	--
47	BETA-SITOSTEROL	Plant				--
0	GINGEDIACETATE	Rhizome				--
0	NONAN-2-OL	Rhizome		10.0		--
0	ANTI-METHYL-10-SHOGAOL	Rhizome				--
4	GALANOLACTONE	Root				--
10	NEROL	Rhizome Essent. Oil				--
0	TRANS-12-SHOGAOL	Rhizome				--
0	3-EPIACETOXY-1,5-EPOXY-1-(3,4-DIHYDROXY-5-METHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome				--
0	CIS-3-(3-4-DIMETHOXY-PHENYL)-4-(TRANS-3-4-DIMETHOXY-STYRYL)-CYCLOHEXENE	Rhizome		50.6		--
0	3(S)-5(S)-DIACETOXY-1-7-BIS-(3-4-DIHYDROXY-PHENYL)-HEPTANE	Rhizome		15.7		--
0	N-OCTANE	Rhizome				--
0	BISABOLENE	Rhizome				--
34	MYRICETIN	Plant				Stitt, Paul. Why George should eat broccoli.
4	TIN	Rhizome		13.0		--
0	CIS-6-SHOGOAL	Rhizome		40.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	HUMULENE	Rhizome				--
3	AROMADENDRENE	Rhizome Essent. Oil				--
0	7-GINGEROL	Rhizome				--
0	CIS-1-2-BIS-(TRANS-3-4-DIMETHOXY-STYRYL)-CYCLOBUTANE	Rhizome		13.9		--
0	2-6-DIMETHYL-HEPT-5-EN-1-AL	Rhizome				--
0	CIS-ROSE-OXIDE	Rhizome				--
60	LIMONENE	Rhizome Essent. Oil		21000.0	1.411888259893775	--
0	DEMETHYL-HEXAHYDROCURCUMIN	Rhizome				--
0	METHYL-8-GINGEROL	Rhizome				--
0	SHOGAOLS	Rhizome		1800.0		--
13	P-HYDROXY-BENZOIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
28	ALPHA-PINENE	Rhizome		720.0	1.111167799007431	--
0	1-(4-HYDROXY-3-METHOXYPHENYL)-3,5-OCTANEDIOL	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	3-PHENYL-BENZALDEHYDE	Rhizome Essent. Oil				--
13	BETA-EUDESMOL	Rhizome Essent. Oil		9300.0		--
0	P-MENTHA-2,8-DIEN-1-OL	Rhizome				--
0	SESQUIPHELLANDRENE	Rhizome Essent. Oil				--
0	OCTAN-2-OL	Rhizome				--
24	CHROMIUM	Root		0.6	-0.44035111981195524	--
0	10-SHOGOAL	Rhizome				--
0	3-6-EPOXY-1-(4-HYDROXY-3-METHOXY-PHENYL)-DECA-3-5-DIENE	Rhizome				--
3	ISOLEUCINE	Tuber				--
4	PATCHOULI-ALCOHOL	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	7-(3-4-DIHYDROXY-PHENYL)-1-(4-HYDROXY-3-METHOXY-PHENYL)-HEPT-4-EN-3-ONE	Rhizome		1.4		--
0	ALPHA-CUBEBENE	Rhizome Essent. Oil				--
27	GINGEROL	Root				--
0	ALPHA-YLANGENE	Rhizome				--
2	HUMULENE	Root				--
1	RAFFINOSE	Rhizome				--
5	BETA-SESQUIPHELLANDRENE	Rhizome		460.0		--
20	LECITHIN	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
6	FURFURAL	Rhizome Essent. Oil				--
0	TRANS-8-SHOGAOL	Rhizome		40.0		--
0	3-ACETOXY-1,5-EPOXY-1-(3,4-DIHYDROXY-5-METHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome				--
0	(+)-ALPHA-CURCUMENE	Essential Oil				--
0	3(S)-5(S)-DIACETOXY-1-(4'-HYDROXY-3'-5'-DIMETHOXY-PHENYL)-7-(4'-HYDROXY-3'-METHOXY-PHENYL)-HEPTANE	Rhizome		20.0		--
0	N-NONANONE	Rhizome Essent. Oil				--
0	ANGELICOIDENOL-2-O-BETA-D-GLUCOPYRANOSIDE	Rhizome		14.0		--
0	CIS-12-SHOGOAL	Rhizome				--
0	PHOSPHATIDIC-ACID	Rhizome				--
14	ARGININE	Tuber				--
0	DELTA-CAR-3-ENE	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	METHYL-6-SHOGOAL	Rhizome				--
14	SHIKIMIC-ACID	Leaf				--
7	GLUCOSE	Rhizome				--
16	P-CYMENE	Rhizome		90.0	-0.47413848530364283	--
0	6-DIHYDROGINGERDIONE	Rhizome				--
0	ALPHA-FARNESENE	Root Essent. Oil				--
0	P-MENTHA-1,5-DIEN-7-OL	Rhizome				--
1	SERINE	Tuber				--
0	NONAN-2-ONE	Rhizome Essent. Oil		3200.0		--
3	CHAVICOL	Rhizome Essent. Oil				--
3	GUAIOL	Rhizome Essent. Oil				--
0	CIS-BETA-SESQUIPHELLANDROL	Rhizome Essent. Oil				--
2	ELEMOL	Rhizome Essent. Oil		3800.0		--
0	BORNEOL-METHYL-ETHER	Rhizome				--
3	ACETONE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	TRANS-10-SHOGAOL	Rhizome				--
0	2-(2'-3'-EPOXY-3-METHYL-BUTYL)-3-METHYL-FURAN	Rhizome				--
0	2-6-DIMETHYL-OCTA-3-7-DIENE-1-6-DIOL	Rhizome				--
13	ZINGERONE	Rhizome Essent. Oil				--
0	N-UNDECANONE	Rhizome Essent. Oil				--
28	VANILLIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	DEC-TRANS-2-EN-1-AL	Rhizome				--
0	HEXAN-1-OL	Rhizome Essent. Oil				--
9	OXALIC-ACID	Root		5000.0	2.5415261372448525	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ISOEUGENOL-METHYL-ETHER	Rhizome Essent. Oil		800.0		--
0	N-OCTANE	Essential Oil				--
0	TRANS-OCTEN-2-AL	Rhizome				--
0	ALPHA-COPAENE	Rhizome Essent. Oil				--
27	GINGEROL	Rhizome				--
23	ALPHA-TERPINEOL	Rhizome Essent. Oil		10000.0		--
2	ZINGIBERONE	Rhizome Essent. Oil				--
0	ZINGIBEROL	Essential Oil				--
2	CITRONELLYL-ACETATE	Rhizome				--
20	LECITHIN	Rhizome				--
176	QUERCETIN	Plant				Stitt, Paul. Why George should eat broccoli.
3	BETA-SELINENE	Rhizome				--
5	GERANYL-ACETATE	Rhizome				--
0	1-(4-HYDROXY-3-METHOXYPHENYL)-3,5-DIACETOXYOCTANE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
3	FLUORIDE	Rhizome		7.9	1.0	--
5	MYRTENAL	Rhizome Essent. Oil		600.0		--
4	THREONINE	Tuber				--
0	12-GINGEDIOL	Rhizome				--
2	HEXAHYDROCURCUMIN	Rhizome Essent. Oil				--
0	1-7-BIS-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE-3(S)-DIOL	Rhizome		4.0		--
0	N-NONANOL	Rhizome				--
1	ETHYL-MYRISTATE	Rhizome				--
0	CIS-10-SHOGOAL	Rhizome				--
3	HEXANOL	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ANTI-METHYL-8-SHOGAOL	Rhizome				--
0	6-METHYLGINGEDIOL	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	6-PARADOL	Rhizome		9.0		--
0	METHYL-6-GINGEROL	Rhizome				--
0	CAMPHENE-HYDRATE	Rhizome				--
0	ALPHA-MUUROLENE	Rhizome				--
2	6-DEHYDROGINGERDIONE	Rhizome				--
0	ZINGIBERENOL	Rhizome		100.0		--
8	FRUCTOSE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	ALPHA-FARNESENE	Rhizome Essent. Oil		25000.0		--
3	METHYL-NONYL-KETONE	Rhizome Essent. Oil				--
1	SERINE	Shoot				--
0	N-PROPANOL	Rhizome				--
0	CEDOROL	Rhizome Essent. Oil				--
12	GLYCINE	Tuber				--
0	CIS-8-SHOGAOL	Rhizome		40.0		--
41	CAMPHOR	Rhizome Essent. Oil		1200.0	1.0	--
0	BISABOLENE	Essential Oil				--
16	ACETIC-ACID	Rhizome				--
0	CIS-10-SHOGAOL	Rhizome				--
2	10-GINGERDIONE	Rhizome		11.0		--
16	ISOEUGENOL	Rhizome				--
0	2-6-DIMETHYL-OCTA-2-6-DIENE-1-8-DIOL	Rhizome				--
3	VALINE	Tuber				--
0	(+)-6-GINGEROL	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
24	VANILLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	DODEC-TRANS-2-EN-1-AL	Rhizome				--
0	OCT-TRANS-2-EN-1-AL	Rhizome				--
3	AR-CURCUMENE	Root Essent. Oil				--
6	FURFURAL	Plant				--
0	N-NONANONE	Rhizome				--
0	ALPHA-CEDROL	Rhizome Essent. Oil				--
13	ALPHA-TERPINENE	Rhizome Essent. Oil		700.0		--
0	ZERUMBODIENONE	Rhizome				--
13	BETA-PINENE	Rhizome		100.0	0.1867718419094071	--
17	FARNESOL	Rhizome Essent. Oil				--
22	MYRCENE	Rhizome Essent. Oil		19000.0	-1.0	--
9	TERPINOLENE	Rhizome Essent. Oil		1800.0		--
2	10-GINGERDIONE	Root				--
0	DEMETHYL-HEXAHYDROCURCUMIN	Root				--
0	2,2,4-TRIMETHYL-HEPTANE	Rhizome Essent. Oil				--
0	N-NONANE	Rhizome				--
0	ETHYL-ISOPROPYL-SULFIDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
3	METHYL-NONYL-KETONE	Rhizome				--
0	TERT-BUTANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CINEOLE	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	ANTI-METHYL-6-SHOGAOL	Rhizome				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
3	ALPHA-CADINOL	Rhizome Essent. Oil				--
0	6-METHYLGINGEDIOL	Rhizome				--
0	METHYL-12-GINGEROL	Rhizome				--
0	SESQUITHUJENE	Essential Oil				--
0	GLANOLACTONE	Rhizome		120.0		--
25	P-COUMARIC-ACID	Rhizome		19.0	-1.0	--
7	GLUCOSE	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	6,10-DEHYDROGINGERDIONE	Rhizome				--
17	FARNESOL	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
1	6-GINGERDIOL	Rhizome				--
0	METHYL-HEPTENONE	Rhizome Essent. Oil				--
0	SELINA-3,7(11)-DIENE	Rhizome Essent. Oil		1300.0		--
0	N-OCTANE	Rhizome Essent. Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	CAR-3-ENE	Rhizome Essent. Oil				--
12	GLYCINE	Shoot				--
0	CIS-12-SHOGAOL	Rhizome				--
9	CAMPHENE	Essential Oil				--
9	DELPHINIDIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	BISABOLENE	Root Essent. Oil				--
6	ACETALDEHYDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	10-GINGEDIOL	Rhizome				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	GERANYL-ACETATE	Rhizome Essent. Oil				--
0	10-SHOGAOL	Rhizome		74.0		--
3	VALINE	Shoot				--
0	METHYL-12-GINGEDIOL	Rhizome				--
0	DIETHYLSULFIDE	Rhizome				--
0	CIS-HEXAN-3-OL	Rhizome Essent. Oil				--
0	OCTAN-1-OL-ACETATE	Rhizome				--
3	AR-CURCUMENE	Root				--
0	FURANOGERMENONE	Rhizome				--
0	N-NONANOL	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	TRANS-LINALOL-OXIDE	Rhizome				--
0	GINGERGLYCOLIPID-A	Rhizome		13.0		--
3	ALPHA-SELINENE	Rhizome Essent. Oil				--
0	ZINGIBERINE	Root				--
0	URIDINE	Rhizome		11.0	1.0000000000000002	--
20	CITRONELLAL	Rhizome		10.0		--
13	GERANIAL	Rhizome		980.0		--
11	NEROLIDOL	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	MENTHOL-ACETATE	Rhizome				--
0	GINGERONE	Root				--
2	FARNESENE	Essential Oil				--
0	GAMMA-MUUROLENE	Rhizome Essent. Oil		9100.0		--
23	TERPINEN-4-OL	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	1,5-EPOXY-3-HYDROXY-1-(4-HYDROXY-3,5-DIMETHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome				--
5	CYANIN	Rhizome				--
0	2(R)-5(S)-DIHYDROXY-1-7-BIS-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome		5.6		--
0	METHYL-ALLYL-SULFIDE	Rhizome				--
6	ETHYL-ACETATE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
2	METHYL-ISOBUTYL-KETONE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PERILLEN	Rhizome				--
0	ANTI-METHYL-10-SHOGOAL	Rhizome				--
0	ALPHA-CADINENE	Rhizome Essent. Oil				--
0	6-METHYLGINGEDIACETATE	Rhizome				--
0	METHYL-10-SHOGOAL	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CALAMENEN	Rhizome				--
0	GINGERONE	Rhizome				--
9	OXALIC-ACID	Rhizome		5000.0		--
0	GINGEDIACETATE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	4-PHENYL-BENZALDEHYDE	Rhizome				--
0	10-DIHYDROGINGERDIONE	Rhizome		6.3		--
3	METHYL-ACETATE	Rhizome				--
5	SABINENE	Rhizome Essent. Oil		700.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	METHYL-GINGEROL	Essential Oil				--
44	CAPSAICIN	Rhizome				--
0	DIHYDROGINGEROL	Root Essent. Oil				--
5	BETA-THUJONE	Rhizome Essent. Oil				--
9	CAMPHENE	Rhizome Essent. Oil		126000.0		--
0	DECYL-ALDEHYDE	Rhizome				--
0	BISABOLENE	Root				--
2	9-OXO-NEROLIDOL	Rhizome				--
0	10-EPIZONARENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GERANIOL-ACETATE	Rhizome				--
0	(+)-BETA-PHELLANDRENE	Essential Oil				--
0	UNDECAN-2-ONE	Rhizome Essent. Oil				--
0	METHYL-10-GINGEROL	Rhizome				--
0	UNDECAN-2-ONE	Rhizome				--
13	CYSTEINE	Tuber				--
13	BETA-IONONE	Rhizome Essent. Oil				--
0	OCTAN-1-AL	Rhizome Essent. Oil		800.0		--
16	P-CYMENE	Rhizome Essent. Oil		26000.0		--
8	FRUCTOSE	Rhizome				--
0	N-NONANE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	(+)-BORNEOL	Rhizome Essent. Oil				--
0	6-10-GINGERDIONE	Root				--
28	ALPHA-PINENE	Rhizome Essent. Oil		39000.0	1.392186073629917	--
0	ZINGIBERENOL	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
1	ALPHA-ZINGIBERENE	Rhizome Essent. Oil		442600.0		--
75	KAEMPFEROL	Plant				Stitt, Paul. Why George should eat broccoli.
2	PROPIONALDEHYDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
11	GAMMA-TERPINENE	Rhizome		1230.0	1.0	--
10	NEROL	Rhizome				--
2	FARNESAL	Rhizome Essent. Oil		2000.0		--
0	CIS-NEROLIDOL	Rhizome Essent. Oil				--
18	SHOGAOL	Essential Oil				--
0	1,5-EPOXY-3-HYDROXY-1-(3,4-DIHYDROXY-5-METHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome				--
135	CURCUMIN	Rhizome				--
0	HEPTAN-2-ONE	Rhizome Essent. Oil				--
1	ISOVALERALDEHYDE	Rhizome				--
0	FIBER(DIETARY)	Root		242000.0	-1.7083639629745593	--
0	EO	Rhizome		10000.0	-0.5317116167359565	--
0	METHYL-HEPTENONE	Rhizome				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Rhizome				--
77	CHLOROGENIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	HEPTAN-2-ONE	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PENTOSANS	Rhizome				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	ALUMINUM	Rhizome		663.0		--
0	ALLO-AROMADENDRENE	Rhizome Essent. Oil		1400.0		--
102	CAFFEIC-ACID	Rhizome				--
0	GINGEROLS	Rhizome		13200.0		--
3	ALPHA-CURCUMENE	Rhizome		280.0		--
0	FLUORINE	Root		2.0	1.3347186593784242	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	4-GINGEROL	Rhizome				--
1	ZINGIBAIN	Rhizome				--
22	GAMMA-AMINOBUTYRIC-ACID	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	5(S)-ACETOXY-3(R)-HYDROXY-1-(4-HYDROXY-3-METHOXY-PHENYL)-DECANE	Rhizome		15.8		--
23	MELATONIN	Rhizome		0.001		Hattori, A., et. al. 1995. Identification of Melatonin in Plants and its Effects on Plasma Melatonin Levels and Binding to Melatonin Receptors in Vertebrates. Biochem. Mol. Biol. Int., 35(3): 627-634.
0	ROSEFURAN	Rhizome Essent. Oil		1800.0		--
0	JUNIPER-CAMPHOR	Rhizome Essent. Oil				--
5	CAPRYLIC-ACID	Rhizome Essent. Oil				--
5	8-GINGEROL	Rhizome Essent. Oil				--
0	BETA-SESQUIPHELLANDROL	Rhizome				--
35	BORNEOL	Rhizome		180.0		--
0	PHOSPHATIDIC-ACID	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	BETA-BISABOLOL	Rhizome Essent. Oil		5900.0		--
0	9-GINGEROL	Rhizome				--
3	10-DEHYDROGINGERDIONE	Rhizome				--
0	GERANIOL-ACETATE	Rhizome Essent. Oil		2000.0		--
0	UNDECAN-2-OL	Rhizome Essent. Oil		500.0		--
0	HUMULENE-EPOXIDE-2	Rhizome				--
13	CYSTEINE	Shoot				--
0	BETA-HIMACHALENE	Rhizome Essent. Oil				--
0	NONYL-ALDEHYDE	Rhizome Essent. Oil				--
0	CITRONELLOL-ACETATE	Rhizome				--
0	FLUORINE	Rhizome		2.0		--
1	N-HEPTANE	Rhizome				--
1	N-BUTYRALDEHYDE	Rhizome				--
0	6,10-DEHYDROGINGERDIONE	Root				--
11	ALPHA-PHELLANDRENE	Rhizome Essent. Oil		4000.0		--
6	ZINGIBERENE	Essential Oil				--
6	ZINGIBERENE	Rhizome Essent. Oil				--
0	CIS-SESQUISABINENE-HYDRATE	Plant				--
1	ISOVALERALDEHYDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
13	BETA-IONONE	Rhizome				--
4	NERAL	Rhizome		410.0		--
76	EUGENOL	Rhizome Essent. Oil				--
2	BETA-MYRCENE	Rhizome Essent. Oil				--
18	SHOGAOL	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	1,5-EPOXY-3-EPIHYDROXY-1-(3,4-DIHYDROXY-5-METHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome				--
2	CITRONELLYL-ACETATE	Rhizome Essent. Oil				--
0	6-METHYL-HEPT-5-EN-2-ONE	Rhizome Essent. Oil				--
11	GAMMA-TERPINENE	Rhizome Essent. Oil		500.0		--
0	FIBER(CRUDE)	Root		171000.0	1.7664789948967667	--
0	EO	Resin, Exudate, Sap		60000.0	-1.007598115442729	--
0	METHYL-GLYOXAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	SUCROSE	Rhizome				--
3	CHAVICOL	Rhizome				--
4	PATCHOULI-ALCOHOL	Rhizome				--
0	AFRAMODIAL	Seed		400.0	1.0	--
0	GINGEROL-METHYL-ETHER	Rhizome				--
0	ALPHA-COPAENE	Rhizome				--
0	3-PHENYL-BENZALDEHYDE	Rhizome				--
13	ZINGERONE	Rhizome				--
1	ZINGIBAIN	Root				Abstract (See species file)
0	5(S)-3(R)-DIHYDROXY-1-(4-HYDROXY-3-METHOXY-PHENYL)-DECANE	Rhizome		53.1		--
0	LINALOOL-PROPIONATE	Rhizome Essent. Oil				--
0	PROTEASE	Rhizome				--
0	HUMULENE-EPOXIDE-1	Rhizome				--
0	CAMPHENE-HYDRATE	Rhizome Essent. Oil				--
1	6-GINGESULFONIC-ACID	Rhizome		13.0		--
5	BETA-SESQUIPHELLANDRENE	Rhizome Essent. Oil		43000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
35	BORNEOL	Rhizome Essent. Oil		18000.0		--
60	SELENIUM	Rhizome				--
0	1-(4-HYDROXY-3-METHOXYPHENYL)-3,5-OCTANEDIOL	Rhizome				--
35	GERANIOL	Rhizome Essent. Oil		6900.0		--
0	P-MENTHA-1-8-DIEN-7-OL	Rhizome				--
0	TRICYCLENE	Rhizome Essent. Oil		2300.0		--
5	BETA-SESQUIPHELLANDRENE	Root Essent. Oil				--
5	BETA-ELEMENE	Rhizome Essent. Oil		3000.0		--
0	3-5-DIACETOXY-7-(3-4-DIHYDROXY-PHENYL)-1-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome		3.5		--
0	NONAN-2-OL	Rhizome Essent. Oil		2000.0		--
0	CHRYSANTHEMIN	Rhizome				--
1	N-DECANAL	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	TRANS-12-SHOGOAL	Rhizome				--
7	ISOBORNEOL	Rhizome Essent. Oil				--
0	4-GINGEROL	Rhizome Essent. Oil				--
8	4-TERPINEOL	Rhizome				--
6	ZINGIBERENE	Root Essent. Oil				--
0	XANTHORRHIZOL	Rhizome Essent. Oil		1000.0		--
0	CIS-SESQUIABINENE-HYDRATE	Rhizome				--
0	BETA-HIMACHALENE	Rhizome				--
0	NEO-ISOPULEGOL	Rhizome				--
2	ASPARAGINE	Rhizome		500.0	-0.734470603058131	--
0	CITRONELLOL-ACETATE	Rhizome Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	6-METHYL-HEPT-5-EN-2-OL	Rhizome				--
0	ETHYL-ISOPROPYL-SULFIDE	Rhizome				--
0	MENTHOL-ACETATE	Rhizome Essent. Oil				--
2	METHYL-CAPRYLATE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	CEDOROL	Rhizome				--
0	GUAIL	Rhizome				--
3	PARADOL	Rhizome				--
1	ALPHA-ZINGIBERENE	Rhizome		200.0	-1.0	--
3	ACETONE	Rhizome				--
31	CARYOPHYLLENE	Essential Oil				--
1	ETHYL-MYRISTATE	Rhizome Essent. Oil				--
2	BETA-MYRCENE	Rhizome		330.0		--
18	SHOGAOL	Root Essent. Oil				--
0	TRANS-GERANIC-ACID	Rhizome				--
2	GINGERENONE-C	Rhizome		14.2		--
0	NONYL-ALDEHYDE	Rhizome				--
3	ALPHA-CADINOL	Rhizome				--
77	ZINC	Root				--
0	2,2,4-TRIMETHYL-HEPTANE	Rhizome				--
0	ZINGERBERONE	Essential Oil				--
0	WATER	Root		930000.0	1.052183415545071	--
0	3(R)-ACETOXY-5(S)-DYDROXY-1-(4-HYDROXY-3-METHOXY-PHENYL)-DECANE	Rhizome		15.8		--
0	LINALOOL-OXIDE	Rhizome				--
0	PIN-2-EN-5-OL	Rhizome				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	HEXAN-1-OL	Rhizome				--
0	CALAMENENE	Rhizome Essent. Oil				--
28	6-GINGEROL	Rhizome Essent. Oil				--
3	BETA-SELINENE	Rhizome Essent. Oil				--
0	SEC-BUTANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
24	BENZALDEHYDE	Rhizome				--
0	1-(4-HYDROXY-3-METHOXYPHENYL)-3,5-DIACETOXYOCTANE	Rhizome				--
0	NEROL-OXIDE	Rhizome				--
0	TRANS-ROSE-OXIDE	Rhizome				--
5	8-GINGEROL	Root				--
0	TRANS-3-(3-4-DIMETHOXY-PHENYL)-4-(TRANS-3-4-DIMETHOXY-STYRYL)-CYCLOHEXENE	Rhizome		55.8		--
0	3-5-DIACETOXY-1-(4-HYDROXY-3-5-DIMETHOXY-PHENYL)-7-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTANE	Rhizome		30.3		--
0	NONAN-1-AL	Rhizome				--
0	(+)-ANGELICOIDENOL	Rhizome		14.0		--
61	FERULIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
1	N-BUTYRALDEHYDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	TRANS-10-SHOGOAL	Rhizome				--
2	GAMMA-BISABOLENE	Rhizome Essent. Oil				--
3	10-GINGEROL	Root				--
0	3-7-DIMETHYL-OCTA-3-TRANS-6-DIEN-1-AL	Rhizome				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
13	ZINGERONE	Essential Oil				--
0	TRANS-6-SHOGAOL	Rhizome		40.0		--
0	CIS-HEXAN-3-OL	Rhizome				--
2	ISOGINGERENONE-B	Rhizome		4.7		--
0	N-UNDECANONE	Rhizome				--
0	5-HYDROXY-7-(4-HYDROXY-PHENYL)-1-(4-HYDROXY-3-METHOXY-PHENYL)-HEPTAN-3-ONE	Rhizome		2.09		--
0	CIS-SESQUISABINENE-HYDRATE	Rhizome				--
1	DODECANOIC-ACID	Rhizome				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	METHYL-ALLYL-SULFIDE	Essential Oil				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
0	GLYOXAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	ACETIC-ACID	Rhizome Essent. Oil				--
0	6-GINGEDIOL-METHYL-ETHER	Rhizome				--
1	CUMENE	Root		1.0		--
6	ETHYL-ACETATE	Rhizome				--
0	ALPHA-MUUROLENE	Rhizome Essent. Oil				--
18	SHOGAOL	Root				--
18	SHOGAOL	Rhizome				--