

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in *Curcuma longa***

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-(S)-AR-TURMERONE	Rhizome	--	--		
0	(+)-ALPHA-PHELLANDRENE	Root Essent. Oil	--	--		
0	(+)-ALPHA-PHELLANDRENE	Root	--	--		
0	(+)-ALPHA-PHELLANDRENE	Rhizome Essent. Oil	--	--		
0	(+)-AR-TURMERONE	Rhizome	--	--		
0	(+)-SABINENE	Root	--	--		
0	(+)-SABINENE	Rhizome Essent. Oil	--	--		
0	1,5-BIS-(4-HYDROXY-3-METHOXY-PHENYL)-PENTA-TRANS-1-TRANS-4-DIEN-3-ONE	Rhizome	--	27		
2	1,5-BIS-(4-HYDROXY-3-METHOXYPHENYL)-1,4-PENTADIEN-3-ONE	Rhizome	--	--		
2	1,7-BIS-(4-HYDROXY-3-METHOXYPHENYL)-1,4,6-HEPTATRIEN-3-ONE	Rhizome	--	--		
0	1,7-BIS-(4-HYDROXY-PHENYL)-HEPTA-1,4,6-TRIENE-3-ONE	Rhizome	--	3		
2	1,7-BIS-(4-HYDROXYPHENYL)-1-HEPTENE-3,5-DIONE	Rhizome	--	--		
67	1,8-CINEOLE	Rhizome	30	9575	0.3047864660484435	
67	1,8-CINEOLE	Leaf	--	330	-0.4877780232076323	
67	1,8-CINEOLE	Root	--	--		
0	1-(4-HYDROXY-3-METHOXY-PHENYL)-5-(4-HYDROXY-PHENYL)-PENTA-TRANS-1-TRANS-4-DIEN-3-ONE	Rhizome	--	13		
0	1-(4-HYDROXY-3-METHOXY-PHENYL)-7-(3,4-DIHYDROXY-PHENYL)-HEPTA-1,6-DIENE-3,5-DIONE	Rhizome	--	4		
2	1-HYDROXY-1,7-BIS-(4-HYDROXY-3-METHOXYPHENYL)-6-HEPTENE-3,5-DIONE	Plant	--	--		
0	2,5-DIHYDROXY-BISABOLA-3,10-DIENE	Rhizome	--	3		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-BORNANOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	2-HYDROXY-METHYL-ANTHRAQUINONE	Rhizome	--	--		
2	4''-(3''-METHOXY-4''-HYDROXYPHENYL)-2''-OXO-3''-ENEBUTANYL-3-(3'-METHOXY-4'-HYDROXYPHENYL)-PROPENOATE	Rhizome	--	--		
0	4(S)-5(S)-EPOXY-GERMACRONE	Rhizome	--	--		
0	4-HYDROXY-BISABOLA-2,10-DIEN-9-ONE	Rhizome	--	5.1		
0	4-HYDROXY-CINNAMOYL-(FERULOYL)-METHANE	Rhizome	--	180		
0	4-HYDROXY-CINNAMOYL-METHANE	Rhizome	--	--		
0	4-HYDROXY-FERULOXYL-METHANE	Rhizome	--	--		
0	5'-METHOXY-CURCUMIN	Rhizome	--	20		
0	5-HYDROXY-4-METHOXY-BISABOLA-2,10-DIEN-9-ONE	Rhizome	--	0.3		
0	5-HYDROXY-PROCURCUMENOL	Rhizome	--	0.6		
0	ALPHA-ATLANTONE	Root	--	--		
0	ALPHA-ATLANTONE	Rhizome	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
3	ALPHA-CURCUMENE	Rhizome	--	--		
11	ALPHA-PHELLANDRENE	Leaf	--	2325	1.3345170744070258	
11	ALPHA-PHELLANDRENE	Rhizome	--	1945	1	
28	ALPHA-PINENE	Leaf	60	1440	-0.1310531749310525	
28	ALPHA-PINENE	Essential Oil	--	5300	-0.5134325695945586	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	ALPHA-PINENE	Tuber	--	--		
28	ALPHA-PINENE	Rhizome Essent. Oil	--	5300	-0.9114147781537915	
28	ALPHA-PINENE	Rhizome	--	--		
13	ALPHA-TERPINENE	Leaf	--	37	-0.2932431476626101	
13	ALPHA-TERPINENE	Rhizome	--	23	-1	
23	ALPHA-TERPINEOL	Rhizome	--	--		
32	ALPHA-TOCOPHEROL	Root	11	18	-0.09053574604251821	
0	ALPHA-TURMERONE	Rhizome	--	3.7		
13	AR-TURMERONE	Rhizome Essent. Oil	183800	596870		
13	AR-TURMERONE	Rhizome	740	5800		
13	AR-TURMERONE	Root	--	--		
0	ARABINOSE	Rhizome	--	10000		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
112	ASCORBIC-ACID	Rhizome	--	293	-0.34465428565155654	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Plant	--	--		
0	ASH	Plant	9920	32000	-1.6080997471982341	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ASH	Rhizome	9000	148000	0.8154551817141439	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
10	AZULENE	Rhizome	--	--		
6	BETA-BISABOLENE	Rhizome	--	--		
53	BETA-CAROTENE	Plant	6	18	-0.6296931924279244	
53	BETA-CAROTENE	Rhizome	--	--	-0.746733045887731	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
13	BETA-PINENE	Rhizome	--	--		
13	BETA-PINENE	Leaf	--	215	-0.11200647112758456	
13	BETA-PINENE	Rhizome Essent. Oil	--	2700	-0.04995838534443404	
13	BETA-PINENE	Tuber	--	--		
13	BETA-PINENE	Essential Oil	--	2700	-0.670434055955317	
5	BETA-SESQUIPELLANDRENE	Rhizome	--	--		
47	BETA-SITOSTEROL	Rhizome	--	--		
47	BETA-SITOSTEROL	Root	--	510	-0.26351706526294477	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
5	BETA-TURMERONE	Rhizome	--	--		
1	BIS-(4-HYDROXY-CINNAMOYL)-METHANE	Rhizome	--	--		
1	BIS-(4-HYDROXY-CINNAMOYL)-METHANE	Plant	--	--		
0	BIS-(P-HYDROXY-CINNAMOYL)-METHANE	Rhizome	--	1360		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BIS-(PARA-HYDROXY-CINNAMOYL)-METHANE	Rhizome	--	1360		
16	BIS-DEMETHOXYCURCUMIN	Plant	--	--		
16	BIS-DEMETHOXYCURCUMIN	Root	--	400		
16	BIS-DEMETHOXYCURCUMIN	Rhizome	6.6	16200		
5	BIS-DESMETHOXYCURCUMIN	Rhizome	67	28000	1	
0	BISABOLA-3,10-DIEN-2-ONE	Rhizome	--	13.5		
0	BISABOLENE	Root	--	--		
0	BISACUMOL	Rhizome	--	2		
0	BISACURONE	Rhizome	--	9		
35	BORNEOL	Rhizome Essent. Oil	--	--		
35	BORNEOL	Root	--	--		
35	BORNEOL	Rhizome	--	--		
4	BORON	Root	1	6	-0.667360795790836	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).
102	CAFFEIC-ACID	Rhizome	--	5		
28	CALCIUM	Rhizome	270	2898	-0.8768568252409509	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Plant	226	730	-1.3755257581090707	
3	CALEBIN-A	Rhizome	--	--		
2	CAMPESTEROL	Rhizome	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Root	--	90	-0.45238102172974776	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
9	CAMPHENE	Tuber	--	--		
9	CAMPHENE	Rhizome	--	--		
41	CAMPHOR	Tuber	--	--		
41	CAMPHOR	Rhizome Essent. Oil	--	600	-1	
5	CAPRYLIC-ACID	Rhizome	--	--		
0	CAR-3-ENE	Leaf	29	41		
0	CARBOHYDRATES	Rhizome	79000	829000	0.7177691089649727	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	CARYOPHYLLENE	Tuber	--	--		
31	CARYOPHYLLENE	Rhizome	--	--		
31	CARYOPHYLLENE	Essential Oil	--	13400	-0.5168789270461833	
1	CHOLESTEROL	Rhizome	--	--		
24	CHROMIUM	Plant	0.2	0.6	-0.8071397754932234	
24	CHROMIUM	Rhizome	--	6	-1	
0	CINEOL	Rhizome	--	--		
0	CINEOL	Rhizome Essent. Oil	--	29200		
0	CINEOL	Tuber	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CINEOLE	Essential Oil	--	29200		
18	CINNAMIC-ACID	Rhizome	--	--		
2	COBALT	Rhizome	--	1	-1	
2	COBALT	Plant	0.5	1.5	-0.42841157368319116	
12	COPPER	Rhizome	6	17	1.4469860213540642	
0	CUMINYL-ALCOHOL	Rhizome	--	--		
0	CURCUMENE	Tuber	--	--		
0	CURCUMENE	Rhizome	--	--		
0	CURCUMENE	Rhizome Essent. Oil	--	121700		
0	CURCUMENE	Essential Oil	--	121700		
3	CURCUMENOL	Rhizome Essent. Oil	--	21300		
3	CURCUMENOL	Essential Oil	--	21300		
3	CURCUMENOL	Rhizome	--	65		
0	CURCUMENONE	Rhizome	--	26		
135	CURCUMIN	Root	--	800		
135	CURCUMIN	Plant	--	--		
135	CURCUMIN	Rhizome	9	56000	1.3976645180230614	
135	CURCUMIN	Resin, Exudate, Sap	--	175000		
9	CURCUMINOIDS	Root	30000	80000		
3	CURCUMOL	Rhizome	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	CURDIONE	Rhizome Essent. Oil	--	11900		
6	CURDIONE	Tuber	--	--		
6	CURDIONE	Essential Oil	--	11900		
6	CURDIONE	Rhizome	--	--		
0	CURLONE	Rhizome	--	120		
0	CURZERENONE	Tuber	--	--		
0	CURZERENONE	Rhizome	--	--		
0	CURZERENONE-C	Essential Oil	--	20400		
0	CURZERENONE-C	Rhizome Essent. Oil	--	20400		
0	CYCLO-ISOPRENYMYRCENE	Rhizome	8500	29750		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CYCLOCURCUMIN	Rhizome	13.3	8000		
0	D-ALPHA-PHELLANDRENE	Rhizome	30	720		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	D-CAMPHENE	Rhizome	--	480	-1	



Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-CAMPHOR	Rhizome	30	1500	-0.29880116775229165	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	D-SABINENE	Rhizome	20	432		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	DEHYDROCURDIONE	Rhizome	--	4.5		
0	DEHYDROTURMERONE	Rhizome	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
20	DEMETHOXYCURCUMIN	Rhizome	6.6	11100		
20	DEMETHOXYCURCUMIN	Plant	--	--		
20	DEMETHOXYCURCUMIN	Root	--	500		
0	DESMETHOXYCURCUMIN	Rhizome	500	28000	1.3363062095621216	
2	DI-P-COUMAROYL-METHANE	Rhizome	--	--		
1	DICINNAMOYLMETHANE	Rhizome	--	--		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	DIDESMETHOXYCURCUMIN	Rhizome	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
1	DIFERULOYL-METHANE	Rhizome	--	--		
0	DIHYDROCURCUMIN	Rhizome	--	57		
0	EO	Leaf	--	4100	-0.6539838935784101	
0	EO	Rhizome	3000	72000	0.38278614749621226	
0	EO	Plant	15500	80000	5.339729553841824	
2	EPI-PROCURCUMENOL	Rhizome	--	1.3		
76	EUGENOL	Tuber	--	--		
76	EUGENOL	Rhizome Essent. Oil	--	2100		
76	EUGENOL	Essential Oil	--	2100	-0.7050089035376114	
0	FAT	Plant	28830	93000	0.6021091742130502	
0	FAT	Rhizome	18000	153000	2.4259276123914604	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	FERULOYL-4-HYDROXYCINAMOYL-METHANE	Plant	--	--		
1	FERULOYL-P-COUMAROYL-METHANE	Rhizome	--	--		
15	FIBER	Rhizome	9000	84000	-1.0343269648768965	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FIBER(CRUDE)	Plant	--	63000	-0.7596673986017957	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FIBER(DIETARY)	Plant	--	370000	0.06486249593456934	
0	FLAVONOIDS	Rhizome	90	95		
8	FRUCTOSE	Rhizome	--	120000	1.413312598024455	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	GAMMA-ATLANTONE	Root	--	--		
0	GAMMA-ATLANTONE	Rhizome	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	GAMMA-TERPINENE	Leaf	--	90	-0.19839281229128486	
11	GAMMA-TERPINENE	Rhizome	--	60	-1	
0	GERMACRENE	Rhizome	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	GERMACRON-(4S',5S)-EPOXIDE	Rhizome	--	0.7		
0	GERMACRON-13-AL	Rhizome	--	0.6		
7	GERMACRONE	Rhizome	--	--		
7	GLUCOSE	Rhizome	--	280000	1	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	GUAIACOL	Rhizome	--	--		
0	GUAIANE	Rhizome	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
6	IRON	Rhizome	121	467	0.32660224579628255	
6	IRON	Plant	25	80	-0.6440919715501999	
7	ISOBORNEOL	Rhizome Essent. Oil	--	200		
7	ISOBORNEOL	Tuber	--	--		
0	ISOPROCURCUMENOL	Rhizome	--	1.6		
0	L-ALPHA-CURCUMENE	Rhizome	--	18000		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	L-BETA-CURCUMENE	Rhizome	--	18000		
60	LIMONENE	Leaf	--	125	-0.31628413309781417	
60	LIMONENE	Rhizome Essent. Oil	--	2300	-0.7761485185603905	
60	LIMONENE	Tuber	--	--		
60	LIMONENE	Rhizome	--	80	-1.049460471807569	
60	LIMONENE	Essential Oil	--	2300	-0.7238268976657102	
0	LINALOL	Essential Oil	--	1600	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	LINALOOL	Rhizome Essent. Oil	--	1600	-1	
53	LINALOOL	Tuber	--	--		
53	LINALOOL	Rhizome	--	--		
65	MAGNESIUM	Plant	3038	9800	1.779937751704662	
14	MANGANESE	Rhizome	33	78	-0.31727458910943884	
14	MANGANESE	Plant	2.5	8.2	-0.6361340105099139	
0	MONODEMETHOXYCURCUMIN	Root	--	--		
0	MONODEMETHOXYCURCUMIN	Rhizome	--	--		
0	MONODESMETHOXYCURCUMIN	Rhizome	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
39	NIACIN	Plant	22	70	-0.09411242290768869	
39	NIACIN	Rhizome	5	62	-1.1295129485847604	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	NICKEL	Rhizome	--	3.8	-1	
4	O-COUMARIC-ACID	Leaf	--	--		
25	P-COUMARIC-ACID	Rhizome	--	345	1	
1	P-COUMAROYL-FERULOYL-METHANE	Rhizome	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Leaf	--	310	-0.1425664765796497	
16	P-CYMENE	Rhizome	210	5184	1.9997542158504666	
5	P-METHOXY-CINNAMIC-ACID	Rhizome	--	360		
1	P-TOLYL-METHYLCARBINOL	Rhizome	500	1750		
1	P-TOLYMETHYLCARBINOL	Rhizome	500	1750		
4	PHOSPHORUS	Plant	725	2340	-0.6000258604656092	
4	PHOSPHORUS	Rhizome	640	6307	1.0401873086070448	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	PHYTOSTEROLS	Root	--	820	-0.21102387892333058	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	POTASSIUM	Rhizome	4870	41271	3.143110666596612	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Plant	5239	16900	-0.3415285138089129	
2	PROCURCUMENOL	Rhizome	--	0.1		
0	PROTEIN	Rhizome	12000	306000	2.0009280065663138	
0	PROTEIN	Plant	31000	100000	-0.6020445420166102	
43	PROTocatechuic-acid	Leaf	--	--		
176	QUERCETIN	Rhizome	90	95	-1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	RESIN	Rhizome	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
15	RIBOFLAVIN	Rhizome	--	12	1.6190517856385973	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Plant	--	--		
7	SALICYLATES	Root	--	765	1.8939419576365641	
0	SATURATED-FATTY-ACIDS	Rhizome	--	--		
60	SELENIUM	Plant	0.5	1.6	-0.35611748372726487	
4	SILICON	Plant	6	20	-0.425552572565658	
1	SODIUM	Plant	462	1490	-0.22159718118474486	
1	SODIUM	Rhizome	30	4290	4.312813192901911	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM-CURCUMATE	Plant	--	--		
5	STARCH	Rhizome	300000	550000	0.7343043341593242	
12	STIGMASTEROL	Rhizome	--	--		
12	STIGMASTEROL	Root	--	220	0.43921373955665255	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	SUGARS	Plant	108500	400000	2.5556146442635606	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	SYRINGIC-ACID	Leaf	--	--		
0	TERPINENE	Essential Oil	--	27200		
0	TERPINENE	Rhizome Essent. Oil	--	27200		
0	TERPINENE	Tuber	--	--		
0	TERPINENE	Rhizome	--	--		
18	TERPINEOL	Essential Oil	--	500	-1	
18	TERPINEOL	Rhizome Essent. Oil	--	500		
9	TERPINOLENE	Leaf	115	485	0.3857342005583795	
4	TETRAHYDROCURCUMIN	Plant	--	--		
31	THIAMIN	Rhizome	--	8	0.17349447958987207	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	THIAMINE	Plant	--	--		
0	TOLYL-METHYLCARBINOL	Rhizome	--	--		
1	TRIETHYLCURCUMIN	Plant	--	--		
3	TURMERIN	Rhizome	--	1000		
4	TURMERONE	Root	--	--		
4	TURMERONE	Rhizome Essent. Oil	--	240700		
4	TURMERONE	Rhizome	1800	43200		
1	TURMERONOL-A	Rhizome	--	282		
1	TURMERONOL-B	Rhizome	--	193		



Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	UKONAN-A	Rhizome	33	6600		
2	UKONAN-B	Rhizome	--	47		
0	UKONAN-C	Rhizome	52	315		
0	UKONAN-D	Rhizome	--	41		
0	UNSATURATED-FATTY-ACIDS	Rhizome	--	--		
24	VANILLIC-ACID	Leaf	--	--		
0	WATER	Rhizome	--	133000	-1.1144884211539199	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	WATER	Plant	--	690000	-0.346469410041001	
0	ZEDOARONDIOL	Rhizome	--	35		
77	ZINC	Rhizome	--	22	-0.3731629077654671	
77	ZINC	Plant	0.5	1.5	-0.49949550935262865	
6	ZINGIBERENE	Root	--	--		
6	ZINGIBERENE	Rhizome	750	18000	1	
6	ZINGIBERENE	Rhizome Essent. Oil	--	81400		