

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

**Chemicals Found in Acorus calamus**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-CALAMUSENONE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(-)-BETA-CURCUMENE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	(-)-TROPONE	Plant	--	--		
67	1,8-CINEOLE	Rhizome	--	100	-0.7982890747494946	
0	2,4,5-TRIMETHOXYBENZALDEHYDE	Rhizome	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	2,4,5-TRIMETHOXYBENZALDEHYDE	Plant	--	--		
0	2,5-DIMETHOXYBENZOQUINONE	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	2,5-DIMETHOXYQUINONE	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	2,6-DIEPISHYOBUNONE	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.
0	ACETEUGENOL	Rhizome	--	--		
0	ACOLAMONE	Plant	--	--		
0	ACOLAMONE	Rhizome	--	--		
0	ACORADIN	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	ACORAGERMACRONE	Plant	--	--		
0	ACORAMONE	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ACORENOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ACORENONE	Rhizome	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
9	ACORIC-ACID	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ACORIN	Plant	2000	2000		
0	ACORINE	Plant	--	--		
0	ACORONE	Plant	--	--		
0	ACOROXIDE	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ALPHA-ASARONE	Rhizome	132	6500		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-HUMULENE	Plant	--	--		
2	ALPHA-HUMULENE	Rhizome	--	--		
28	ALPHA-PINENE	Rhizome	280	280	-1.3131983079178744	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Plant	--	--		
23	ALPHA-TERPINEOL	Rhizome	1500	1500	1.3367642396634478	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-YLANGENE	Rhizome	500	500		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ANEURINE	Plant	--	--		
3	AR-CURCUMENE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ARISTOLENE	Rhizome	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ARSENIC	Rhizome	1.13	1.13	1.6025541922926834	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	ASARALDEHYDE	Plant	--	--		
0	ASARONALDEHYDE	Rhizome	2830	2830		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	ASARONE	Rhizome	2100	48000		
0	ASARYLALDEHYDE	Rhizome	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
112	ASCORBIC-ACID	Plant	--	--		
10	AZULENE	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.
18	BETA-ASARONE	Rhizome	2000	48000		
0	BETA-CURCUMENE	Plant	--	--		
5	BETA-ELEMENE	Rhizome	60	750	1.0692741796807936	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-GURJUNENE	Rhizome	20	1700	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Rhizome	150	150	1.1206310514564426	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	BORNEOL	Plant	--	--		
6	BUTYRIC-ACID	Plant	--	--		
0	CADALO-1,4,9-TRIENE	Rhizome	410	2050		Chemical Constituents of Oriental Herbs (3 diff. books)
0	CALACOLENE	Rhizome	100	100		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CALACONE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CALAMENE	Rhizome	40	1920		
0	CALAMENENE	Rhizome	10	2535	1	
0	CALAMENOL	Rhizome	500	5000		
0	CALAMENONE	Rhizome	100	500		
0	CALAMENONE	Plant	--	--		
0	CALAMEONE	Rhizome	280	280		Abstract (See species file)
0	CALAMOL	Rhizome	320	3885		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CALAMONE	Rhizome	100	1000		
0	CALARENE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
28	CALCIUM	Rhizome	7040	7040	0.024896656626718316	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
9	CAMPHENE	Rhizome	10	460	-1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
41	CAMPHOR	Rhizome	--	--		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	CARYOPHYLLINE	Rhizome	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	CHOLINE	Root	--	2600	-0.10560488367164568	
20	CHOLINE	Rhizome	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	CIS-ISOASARONE	Rhizome	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	CIS-ISOELEMICIN	Rhizome	50	50		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	COPPER	Rhizome	4	4	-1.4642120454178038	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	CRYPTOACORONE	Plant	--	--		
9	DELTA-CADINENE	Rhizome	5	1050	1.4135121224933511	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DELTA-CARENE	Rhizome	--	--		Pakistan Encyclopedia Planta Medica. 1986.
0	DELTA-CARENE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
0	DELTA-GUAZULENE	Plant	--	--		
0	DEXTRIN	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	DEXTROSE	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	DIMETHYL-AMINE	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.
16	ELEMICIN	Rhizome	10	650		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ENANTHYLIC-ACID	Plant	--	--		
0	EO	Rhizome	10000	50000	0.7957851377946111	
0	EO	Leaf	--	2000	-0.8386994921548646	
0	EO	Shoot	--	1200	-0.8419644356923442	
0	EPISHYOBUNONE	Rhizome	402	2010		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EPOXYISOACORAGERMACRONE	Rhizome	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
24	ETHANOL	Rhizome	--	--		
76	EUGENOL	Rhizome	30	300	-0.7161913723160901	
5	EUGENOL-METHYL-ETHER	Rhizome	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
6	FURFURAL	Rhizome	--	--		
13	GALANGIN	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
1	GAMMA-ASARONE	Plant	--	--		
11	GAMMA-TERPINENE	Plant	--	--		
0	GUAIENE	Rhizome	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
6	IRON	Rhizome	350	350	-0.02674945738357939	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	ISOACOLAMONE	Rhizome	--	--		
0	ISOACORONE	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOCAESPITOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ISOCALAMINEDIOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ISOCALAMUSENONE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
16	ISOEUGENOL	Rhizome	228	12510		
0	ISOSHYOBUNONE	Rhizome	134	670		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Rhizome	10	1400	1.2836558613056794	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Rhizome	30	6000	1	
53	LINALOOL	Rhizome	30	6000	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LUTEOLIN-6,8-C-DIGLUCOSIDE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Rhizome	1100	1100	-0.5600893515913968	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
14	MANGANESE	Rhizome	309	309	1.2244334870971068	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
63	MENTHOL	Rhizome	--	--		Pakistan Encyclopedia Planta Medica. 1986.
30	MENTHONE	Rhizome	--	--		Pakistan Encyclopedia Planta Medica. 1986.
1	METHYL-AMINE	Rhizome	--	--		
6	METHYL-CHAVICOL	Plant	--	--		
20	METHYL-EUGENOL	Rhizome	1025	1025	1	
15	METHYL-ISOEUGENOL	Rhizome	110	3950		
3	MUCILAGE	Plant	8000	8000	-1.4692496950899154	
22	MYRCENE	Plant	--	--		
0	N-HEPTYLIC-ACID	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	OCIMENE	Plant	--	--		
9	OXALIC-ACID	Plant	--	--		
16	P-CYMENE	Rhizome	--	50	-0.49356441935275247	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.



Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	P-METHOXYCINNAMALDEHYDE	Plant	--	--		Wolf, R.B. Effects Of p-Methoxycinnamaldehyde From Star Anise And Related Cinnamic Acid Derivatives On Velvetleaf Germination. Journal of Natural Products, 49(1): 156-158, 1986.
13	PALMITIC-ACID	Plant	--	--		
13	PALMITIC-ACID	Rhizome	--	--		
0	PARASARONE	Rhizome	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
26	PHENOL	Plant	--	--		
0	PHENYLPROPANES	Rhizome	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
14	POTASSIUM	Rhizome	16000	16000	0.33730143368752097	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
0	PREISOCALAMENDIOL	Rhizome	--	--		
0	RESIN	Rhizome	--	25000	-1.3821894809301767	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	RESIN	Plant	--	--		
5	SABINENE	Rhizome	--	--		Pakistan Encyclopedia Planta Medica. 1986.
0	SAPONIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
0	SEKISHONE	Rhizome	650	650		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SELINA-3,7(11)-DIENE	Essential Oil	--	--		
1	SELINENE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
0	SHYOBUNONE	Rhizome	1850	1850		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	SITOSTEROL	Rhizome	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	SITOSTEROL	Plant	--	--		
1	SODIUM	Rhizome	459	459	-0.10043590174501253	Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.
5	STARCH	Rhizome	250000	400000	-0.21818381438712206	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
35	TANNIN	Rhizome	--	15000		
35	TANNIN	Plant	--	--		
23	TERPINEN-4-OL	Rhizome	10	500		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TERPINIC-ALCOHOL	Plant	--	--		
9	TERPINOLENE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
9	TERPINOLENE	Rhizome	--	--		Pakistan Encyclopedia Planta Medica. 1986.
8	TRANS-ANETHOLE	Plant	--	--		
0	TRANS-ISOELEMICINE	Rhizome	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRANS-ISOEUGENOL-METHYL-ETHER	Plant	--	--		
1	TRIMETHYLAMINE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TROPONE	Plant	--	--		
77	ZINC	Rhizome	--	--		Chen, H.C. and Lin, S.M. 1988. Determination of Mineral Elements in Certain Crude Drugs (Part 1), Kaohsiung J. Med. Sci., 4: 259-272.