

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Ananas comosus

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Fruit	116000.0	938000.0	0.8294973851052414	--
0	WATER	Fruit	812000.0	890000.0	0.5192678759882906	--
5	STARCH	Stem	100000.0	150000.0	1.0	Wealth of India.
14	SUCROSE	Fruit	59000.0	150000.0	0.31672247615443067	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
23	CITRIC-ACID	Fruit	3200.0	86000.0	0.7561189975512667	--
0	PROTEIN	Fruit	4000.0	55000.0	-0.7305766269277133	--
15	FIBER	Fruit	3000.0	45000.0	-0.9122848051944537	--
0	FAT	Fruit	1000.0	42772.0	-0.31456299424703693	--
0	ASH	Fruit	2800.0	36000.0	-0.5350952496139966	--
7	GLUCOSE	Fruit	10000.0	32000.0	-0.5554772375932454	--
5	STARCH	Leaf		30000.0	-0.15269733104161728	Wealth of India.
8	FRUCTOSE	Fruit	6000.0	23000.0	-0.5685085977706082	--
14	POTASSIUM	Fruit	110.0	18200.0	0.0250816407680162	--
4	PUFA	Fruit	1460.0	10815.0	-0.0653033406862613	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Fruit	840.0	6222.0	-0.26761688873606465	USDA's Ag Handbook 8 and sequelae)
54	BROMELAIN	Stem	400.0	6000.0		--
1	CELLULOSE	Fruit	4300.0	5400.0	-0.6079389189790592	--
15	MALIC-ACID	Fruit	1000.0	4700.0	-0.6457922708636072	--
15	ALPHA-LINOLENIC-ACID	Fruit	620.0	4592.0	0.9270718186858735	USDA's Ag Handbook 8 and sequelae)
0	PENTOSANS	Fruit	3300.0	4300.0	-0.82843239727699	--
3	ASPARTIC-ACID	Fruit	293.0	4222.0	-0.7799223200234909	--
112	ASCORBIC-ACID	Fruit	148.0	4178.0	-0.024713529850358282	--
0	KILOCALORIES	Fruit	460.0	3770.0	0.16623260731496653	Wealth of India.
13	MUFA	Fruit	480.0	3556.0	-0.2022365513065334	USDA's Ag Handbook 8 and sequelae)
8	GLUTAMIC-ACID	Fruit	90.0	3333.0	-0.7707955020140207	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	OLEIC-ACID	Fruit	450.0	3333.0	-0.4550566138643591	USDA's Ag Handbook 8 and sequelae)
0	SFA	Fruit	320.0	2370.0	-0.3271093228160582	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Fruit	46.0	1852.0	-0.5859651529954232	--
1	SERINE	Fruit	250.0	1852.0	-0.6323156765928126	USDA's Ag Handbook 8 and sequelae)
24	PECTIN	Fruit	600.0	1600.0	-0.6112516644530539	--
0	HEXOSANS	Fruit	1000.0	1500.0		--
2	LEUCINE	Fruit	24.0	1407.0	-0.7853327434466933	--
13	PALMITIC-ACID	Fruit	190.0	1407.0	-0.34363159570129753	USDA's Ag Handbook 8 and sequelae)
14	ARGININE	Fruit	46.0	1333.0	-0.794013888564445	--
28	CALCIUM	Fruit	62.0	1308.0	-0.5880435225997285	--
12	GLYCINE	Fruit	65.0	1259.0	-0.9073607916848047	--
3	ALANINE	Fruit	170.0	1259.0	-0.9623293474565466	USDA's Ag Handbook 8 and sequelae)
2	ASPARAGINE	Fruit		1251.0	-0.05455471931954438	--
0	NITRATE	Fruit	0.0	1200.0		--
3	VALINE	Fruit	39.0	1185.0	-0.6742786315009667	--
0	NITROGEN	Fruit	450.0	1150.0	-0.9446478386927912	--
65	MAGNESIUM	Fruit	110.0	1075.0	-0.4884044378711737	--
0	PROLINE	Fruit	31.0	963.0	-0.8357784281624211	--
3	ISOLEUCINE	Fruit	23.0	963.0	-0.8033643152755049	--
4	PHOSPHORUS	Fruit	60.0	923.0	-0.6964737105069562	--
8	TYROSINE	Fruit	58.0	889.0	-0.6338783019676755	--
7	PHENYLALANINE	Fruit	40.0	889.0	-0.8450965469447457	--
4	THREONINE	Fruit	78.0	859.0	-0.8973538144786632	--
8	STEARIC-ACID	Fruit	110.0	815.0	-0.22517226092311657	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Fruit	110.0	815.0	-0.17673494188159297	USDA's Ag Handbook 8 and sequelae)
54	BROMELAIN	Fruit		800.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
61	FERULIC-ACID	Plant	200.0	760.0	0.30089312112081323	--
54	BROMELAIN	Pericarp		750.0		--
25	P-COUMARIC-ACID	Plant	330.0	730.0	1.0	--
4	SILICON	Fruit	110.0	690.0	1.6333480894777093	--
7	HISTIDINE	Fruit	48.0	667.0	-0.7330978320953143	--
7	CHLORINE	Fruit	130.0	460.0	-0.37076321149612135	--
2	PHYTOSTEROLS	Fruit	60.0	444.0	-0.6459122529026068	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Fruit	10.0	347.0	-0.15104516616496144	--
5	GLUTAMINE	Fruit		256.0	-1.3035344452228055	--
0	ESTERS	Fruit	1.0	250.0		--
2	PALMITOLEIC-ACID	Fruit	30.0	220.0	-0.3052214375445054	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Fruit	12.0	209.0	0.9745812460530798	USDA's Ag Handbook 8 and sequelae)
14	SULFUR	Fruit	70.0	200.0	-0.8453199626150852	--
7	SALICYLATES	Fruit	10.0	150.0	0.09337758267881556	--
2	CYSTINE	Fruit	20.0	148.0	-0.9213988097846431	--
22	GABA	Fruit		124.0	-0.8260218279660345	--
22	GAMMA-AMINOBUTYRIC-ACID	Fruit		124.0	-0.7339036629968998	--
6	ETHYL-ACETATE	Fruit	3.0	120.0	-0.70662139478696	--
6	IRON	Fruit	3.0	73.0	-0.237916857716136	--
0	ETHYL-ALCOHOL	Fruit		60.0		--
26	SEROTONIN	Fruit	19.0	60.0	0.9214964116563734	--
9	OXALIC-ACID	Fruit	50.0	58.0	-0.3031507791033899	--
47	BETA-SITOSTEROL	Fruit		40.0	-0.7416857929866011	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
39	NIACIN	Fruit	2.0	33.0	-0.3702757051487892	--
5	STARCH	Fruit		19.0	-0.4565493616156333	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	PANTOTHENIC-ACID	Fruit	1.0	11.0	-0.4531667614192529	--
2	CAMPESTEROL	Fruit		10.0	-0.574497534390022	--
12	COPPER	Fruit	1.0	8.8	-0.31279291639814205	USDA's Ag Handbook 8 and sequelae)
32	ALPHA-TOCOPHEROL	Fruit	1.0	7.0	-1.0138725518998306	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Fruit	0.0	7.0	0.21342198396383905	--
77	ZINC	Fruit	0.7	6.0	-0.7311333825482068	USDA's Ag Handbook 8 and sequelae)
0	VIT-B-6	Fruit	0.9	6.0	-0.3708031557292606	USDA's Ag Handbook 8 and sequelae)
53	BETA-CAROTENE	Fruit	0.0	3.0	-0.14500168318231235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	RIBOFLAVIN	Fruit	0.0	3.0	-0.4303249009534089	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	ACETALDEHYDE	Fruit	0.61	1.4	-0.7074252260202778	--
0	METHYL-ISOCAPROATE	Fruit		1.4		--
0	2,5-DIMETHYL-4-HYDROXY-3(2H)-FURANONE	Plant		1.2		--
0	METHYL-BETA-METHYLTHIOPROPIONATE	Fruit	0.12	1.1		--
12	IODINE	Fruit	0.0	1.0	-0.2853656286580971	--
12	P-AMINOBENZOIC-ACID	Fruit	0.0	1.0		--
0	ETHYL-CAPROATE	Fruit		0.77		--
3	ETHYL-ACRYLATE	Fruit		0.77		--
2	METHYL-CAPRYLATE	Fruit		0.75		--
2	METHYL-ISOVALERATE	Fruit		0.6		--
16	ACETIC-ACID	Fruit		0.49	-0.6429596690411867	--
1	ETHYL-ISOVALERATE	Fruit		0.39		--
0	DELTA-OCTALACTONE	Fruit		0.3	0.9999999999999998	--
0	GAMMA-OCTALACTONE	Fruit		0.3		--
3	CHAVICOL	Fruit		0.27	-0.9394828377321076	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	BORON	Fruit		0.2	-0.7998787652725032	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	GAMMA-CAPROLACTONE	Fruit		0.12		--
0	ETHYL-BETA-METHYLTHIOPROPIONATE	Fruit		0.09		--
0	DIMETHYL-MALONATE	Fruit		0.06		--
0	ETHYL-BETA-HYDROXYHEXANOATE	Fruit		0.03		--
0	METHYL-BETA-ACETOXYHEXANOATE	Fruit		0.03		--
0	METHYL-BETA-HYDROXYHEXANOATE	Fruit		0.021		--
0	METHYL-BETA-HYDROXYBUTYRATE	Fruit		0.006		--
0	ETHYL-BETA-ACETOXYHEXANOATE	Fruit		0.006		--
5	PHYLLUQUINONE	Fruit		0.002	-0.2326945725033858	--
0	METHYL-CIS-(4?)-OCTENOATE	Fruit		0.001		--
12	STIGMASTEROL	Fruit		0.0	-1.1725991994622522	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	ETHYL-CAPRYLATE	Fruit				--
2	METHYL-CAPROATE	Fruit				--
3	SUBAPHYLLIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	GAMMA-EUDESOL	Fruit				Wealth of India.
1	STIGMAST-5-ENE-3-BETA-7-ALPHA-DIOL	Plant				--
0	BROMELIN	Fruit				--
0	PROPYL-FORMATE	Fruit				--

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2	METHYL-BUTYRATE	Fruit				--
0	INDOLE-ACETIC-ACID- OXIDASE	Fruit				--
0	PENTANOL	Fruit				--
15	5-HYDROXYTRYPTAMINE	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	ETHYL-BUTYRATE	Fruit				--
0	PROPYL-ACETATE	Fruit				--
0	ANANASIC-ACID	Plant				--
0	STIGMASTANOL	Leaf				Wealth of India.
5	CYANIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	N-VALERIANIC-ACID	Fruit				--
0	PROPANOL	Fruit				--
1	AMYL-CAPROATE	Fruit				--
0	CYANIDIN-3,5,3'- TRIGLUCOSIDE	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
28	VANILLIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BIACETYL	Fruit				--
0	L-MALIC-ACID	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BETA-METHYL- THIOPROPIONIC-ACID- METHYL-ESTER	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYL-N-PROPYL- KETONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
9	SINAPIC-ACID	Fruit				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISOPROPYL-ISOBUTYRATE	Fruit				--
0	CAMPESTANOL	Leaf				Wealth of India.
1	ETHYL-PROPIONATE	Fruit				--
0	BETA-METHYL-THIOPROPIONIC-ACID-ETHYL-ESTER	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
54	BROMELAIN	Leaf				--
3	METHYL-ACETATE	Fruit				--
0	ISOCAPRONIC-ACID	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	TRANS-TETRAHYDRO-ALPHA-ALPHA-5-TRIMETHYL-5-VINYLFURFURYL-ALC	Plant				--
102	CAFFEIC-ACID	Fruit				Wealth of India.
1	ETHYL-LACTATE	Fruit				--
2	ACRYLIC-ACID	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOBUTYL-FORMATE	Fruit				--
0	METHYL-ISOBUTYRATE	Fruit				--
0	PHOSPHATASE	Fruit				--
0	ACETOXYACETONE	Fruit				--
2	METHANOL	Fruit				--
6	MYRISTIC-ACID	Leaf				Wealth of India.
3	ISOBUTYL-ACETATE	Fruit				--
23	ALPHA-TERPINEOL	Fruit				Wealth of India.
2	ETHYL-ISOBUTYRATE	Fruit				--
54	BROMELAIN	Fruit Juice				--
3	ACETONE	Fruit				--
0	MYRICYL-ALCOHOL	Plant				Wealth of India.
0	ISOBUTANOL	Fruit				--

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0	5-STIGMASTENE-3-BETA-7-ALPHA-DIOL	Leaf				--
1	ETHYL-FORMATE	Fruit				--
53	LINALLOOL	Fruit				Wealth of India.
0	ANANASIC-ACID	Stem				--
0	ERGOSTEROL-PEROXIDE	Plant				--
0	PEROXIDASE	Fruit				--
0	GAMMA-BUTYROLACTONE	Fruit				--
0	BUTYL-FORMATE	Fruit				--
0	ERGOSTEROL-PEROXIDE	Leaf				--