

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Citrullus lanatus

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	ACETOPHENONE	Fruit Juice	--	--		
3	ALANINE	Fruit	2000	2000	-0.6710955118570772	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ALANINE	Seed	15000	15000	1.029690020598315	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	ALLANTOIN	Seed	--	450	1	
2	ALPHA-SPINASTEROL	Seed Oil	--	--		
14	ARGININE	Fruit	6949	6949	0.7039836472964519	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	ARGININE	Seed	46600	46600	0.929850467927722	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
112	ASCORBIC-ACID	Fruit	--	94	-0.27864436815713767	
3	ASPARTIC-ACID	Seed	25500	25500	0.2584277890834008	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ASPARTIC-ACID	Fruit	4594	4594	-0.7310504308235704	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
24	BENZALDEHYDE	Fruit Juice	--	--		
9	BENZYL-ALCOHOL	Fruit Juice	--	--		
53	BETA-CAROTENE	Fruit	2	48	-0.05801749395743059	
13	BETA-IONONE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-IONONE	Fruit Juice	--	--		
47	BETA-SITOSTEROL	Fruit	--	10	-0.7811022213118411	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
4	BORON	Fruit	1	4	-0.7233703732714263	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages.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).
3	BRYONOLIC-ACID	Plant	--	--		
3	BRYONOLIC-ACID	Tissue Culture	--	--		
102	CAFFEIC-ACID	Seed	--	--		
28	CALCIUM	Seed	1294	1300	-0.5227673999999125	
28	CALCIUM	Fruit	100	3400	-0.10529282176440947	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CAMPESTEROL	Seed	--	--		
2	CAMPESTEROL	Fruit	--	--		Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
2	CAMPESTEROL	Seed Oil	--	--		
3	CAPRIC-ACID	Seed	2200	4840	-0.30943296733156234	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	CAPRYLIC-ACID	Seed	400	880	-0.5843771702554066	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	CINNAMYL-ALCOHOL	Fruit Juice	--	--		
5	CITRULLINE	Fruit	1627	3705	1.7302359496972917	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	COPPER	Fruit	4	4	-0.6863742487163819	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	CUCURBITACIN-B	Fruit	--	--		
6	CUCURBITACIN-E	Leaf	--	--		
6	CUCURBITACIN-E	Fruit	--	--		
1	CUCURBITOCITRIN	Seed	--	--		
3	CYCLOEUCALENOL	Seed	--	--		
13	CYSTEINE	Seed	5742	5742	0.19782577765447393	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	CYSTEINE	Fruit	236	236	-1	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
5	DAPHNETIN	Seed	--	--		
24	ETHANOL	Fruit Juice	--	--		
15	FIBER	Fruit	35300	257000	1.088249102567049	
15	FIBER	Seed	67000	316000	1.430953367088329	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FOLACIN	Fruit	--	0.259	-0.7306474642603418	
23	FOLIC-ACID	Fruit	--	0.259	-0.9781598366401939	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	GERANIAL	Fruit	--	--		
13	GERANIAL	Fruit Juice	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	GERANIOL	Fruit Juice	--	--		
2	GERANYL-ACETONE	Fruit Juice	--	--		
8	GLUTAMIC-ACID	Fruit	7420	7420	-0.45273980737780517	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	GLUTAMIC-ACID	Seed	53000	53000	0.4761995241133043	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
12	GLYCINE	Fruit	1178	1178	-0.9386946705890442	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	HISTIDINE	Fruit	707	707	-0.7050530351595478	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	HISTIDINE	Seed	7018	7018	0.23764592476267077	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	HYDROXYPROLINE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	IRON	Fruit	2	143	0.039754275898127606	
6	IRON	Seed	75	75	-0.35215797906396656	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
5	ISOFRAXIDIN	Seed	--	--		
3	ISOLEUCINE	Fruit	2238	2238	-0.4204244192171918	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ISOLEUCINE	Seed	12100	12100	0.20524005689676544	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
7	LAURIC-ACID	Seed	1600	3250	-0.4831852350597927	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	LEUCINE	Fruit	2120	2120	-0.6337573482739223	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	LEUCINE	Seed	21100	21100	0.3846508332663674	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
27	LINOLEIC-ACID	Seed	52000	210280	0.8838663006203578	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
27	LINOLEIC-ACID	Cotyledon	--	486700	0.16004066347331836	
15	LUTEIN	Fruit	0.14	3	-0.575590894746515	
16	LYCOPENE	Fruit	45	900	1.8766429320601818	
4	LYSINE	Fruit	7303	7303	0.8258091084664485	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	LYSINE	Seed	8932	8932	-0.4289343609472212	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
65	MAGNESIUM	Fruit	1081	1500	-0.2916047454654987	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	MANGANESE	Fruit	4	4	-0.37716201175428304	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	METHIONINE	Fruit	707	707	-0.30972946336439705	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	METHIONINE	Seed	5742	5742	0.36853071981172086	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
6	MYRISTIC-ACID	Seed	400	800	-0.2855305257263749	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	NERAL	Fruit Juice	--	--		
39	NIACIN	Fruit	15	27	-0.45048529250390834	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
18	OLEIC-ACID	Cotyledon	--	241000	0.9197508532724963	
18	OLEIC-ACID	Seed	71000	189000	0.5745907593403166	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Cotyledon	--	206300	-1.727557853929548	
13	PALMITIC-ACID	Seed	15200	55000	0.4352274100182752	
11	PANTOTHENIC-ACID	Fruit	25	25	0.4398424963040165	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
24	PECTIN	Fruit	--	--		
6	PHENETHYL-ALCOHOL	Fruit Juice	--	--		
7	PHENYLALANINE	Fruit	1767	1767	-0.5405989656840343	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	PHENYLALANINE	Seed	16600	16600	0.6042024770392214	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	PHOSPHORUS	Fruit	1	2900	-0.09598014885507253	
4	PHOSPHORUS	Seed	8300	14600	2.443509731398302	
5	PHYLLOQUINONE	Fruit	--	0.003	-0.2325377501021479	
2	PHYTOSTEROLS	Fruit	20	236	-0.9138748529599334	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	PINENE	Seed	--	--		
14	POTASSIUM	Fruit	13514	18000	0.0073869157433379936	
15	RIBOFLAVIN	Seed	1	1	-0.9674166926890354	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Fruit	2	8	0.6405083179917069	
87	RUTIN	Seed	15000	16500	1.606098941923909	
1	SERINE	Fruit	1885	1885	-0.6206649689838999	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	SERINE	Seed	13700	13700	0.5990405458975957	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	SODIUM	Fruit	135	236	-0.1615711715033237	
8	STEARIC-ACID	Cotyledon	--	59100	-0.5870403836004546	
8	STEARIC-ACID	Seed	12200	66000	0.8665858434484109	
12	STIGMASTEROL	Seed Oil	--	--		
12	STIGMASTEROL	Seed	--	--		
31	THIAMIN	Fruit	4	9	0.46943256721187576	
4	THREONINE	Fruit	3180	3180	0.06746781297128561	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	THREONINE	Seed	15300	15300	1.6022227898473942	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	TRYPTAMINE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
29	TRYPTOPHAN	Fruit	825	825	-0.03571324596706864	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	TYROSINE	Seed	10200	10200	0.5695893587686409	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	TYROSINE	Fruit	1413	1413	-0.4167463140410469	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	VALINE	Fruit	1885	1885	-0.5298493040680791	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	VALINE	Seed	10200	10200	-0.22310841653412938	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
77	ZINC	Fruit	8	8	-0.6709616277275268	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.