

# P Citrullus lanatus

## Common Name(s)

Watermelon

## How Used

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Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	(+)-VALINE	Plant	--	--		
0	2,4-METHYLENE-CHOLESTEROL	Seed	--	--		
0	2-(CIS-2-NONENYL-OXY)-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-(CIS-CIS-3,6-NONADIENYL-OXY)-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-(ON-CIS-3-ENYL-OXY)-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-BENZYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-ETHOXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-HEXYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-HYDROXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-NONYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-OCTYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	2-PENTYL-FURAN	Fruit Juice	--	--		
0	2-PENTYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	2-PHENETHYL-OXY-5-PENTYL-TETRAHYDROFURAN	Fruit Juice	--	--		
0	22-DIHYDRO-SPINASTEROL	Seed	--	--		
0	22-DIHYDROBRASSICASTEROL	Seed	--	--		
0	24-BETA-ETHYL-25(27)-DEHYDROLATHOSTEROL	Seed	--	--		
0	24-BETA-ETHYL-25-(27)-DEHYDROLOPHENOL	Seed	--	3		
0	24-BETA-ETHYL-LOPHENOL	Seed	--	--		
0	24-METHYL-LATHOSTEROL	Seed	--	--		
0	25(27)-DEHYDRO-CHONDRILLASTEROL	Seed	--	--		
0	25(27)-DEHYDRO-FUNGISTEROL	Seed	--	--		
0	25(27)-DEHYDRO-PORIFERASTEROL	Seed	--	--		
0	3-METHYL-BUTAN-1-OL	Fruit Juice	--	--		
0	4-OXO-NONAN-1-AL	Fruit Juice	--	--		
0	6-METHYL-HEPT-5-EN-2-ONE	Fruit Juice	--	--		
0	7-DEHYDRO-AVENASTEROL	Seed Oil	--	--		
6	ACETOPHENONE	Fruit Juice	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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	
0	ALPHA-AMINO-BETA-(1-IMIDAZOYL)-PROPIONIC-ACID	Plant	--	--		
2	ALPHA-SPINASTEROL	Seed Oil	--	--		
0	AMINO-ACIDS	Seed	--	--		
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	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	ASH	Seed	62000	62000	0.4246927171829582	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASH	Fruit	30600	30600	-0.674930125714854	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.
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.
0	AVENASTEROL	Seed	--	--		
24	BENZALDEHYDE	Fruit Juice	--	--		
9	BENZYL-ALCOHOL	Fruit Juice	--	--		
53	BETA-CAROTENE	Fruit	2	48	-0.05801749395743059	
13	BETA-IONONE	Fruit	--	--		
13	BETA-IONONE	Fruit Juice	--	--		
0	BETA-IONONE-EPOXIDE	Fruit Juice	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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	Tissue Culture	--	--		
3	BRYONOLIC-ACID	Plant	--	--		
0	BUTAN-1-OL	Fruit Juice	--	--		
0	BUTAN-4-OLIDE	Fruit Juice	--	--		
102	CAFFEIC-ACID	Seed	--	--		
28	CALCIUM	Fruit	100	3400	-0.10529282176440947	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Seed	1294	1300	-0.5227673999999125	
2	CAMPESTEROL	Seed Oil	--	--		
2	CAMPESTEROL	Seed	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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.)
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.
0	CARBOHYDRATES	Fruit	3800	859000	0.4070437865584783	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Seed	44000	48000	-1.8893447311177833	
0	CINEOL	Seed	--	--		
6	CINNAMYL-ALCOHOL	Fruit Juice	--	--		
0	CIS,CIS-3,6-NONADIEN-1-OL	Fruit	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
0	CITRULLIC-ACID	Plant	--	--		
5	CITRULLINE	Fruit	1627	3705	1.7302359496972917	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	CITRULLOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CLEROSTEROL	Seed	--	--		
0	CODISTEROL	Seed	--	--		
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	--	--		
0	CUCURBITACIN-E-GLUCOSIDE	Fruit	--	--		
0	CUCURBITACIN-E-GLYCOSIDE	Fruit	--	--		
0	CUCURBITACIN-II	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.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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	--	--		
0	DEC-TRANS-2-ENAL	Fruit	--	--		
0	DECA-TRANS-2,TRANS-4-DIEN-1-AL	Fruit Juice	--	--		
0	DECA-TRANS-2-CIS-4-DIEN-1-AL	Fruit Juice	--	--		
0	DODECAN-1-OL	Fruit Juice	--	--		
24	ETHANOL	Fruit Juice	--	--		
0	FARNESYL-ACETONE	Fruit Juice	--	--		
0	FAT	Fruit	200	89000	0.03852275132214275	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	200000	571000	1.6097698742458455	
0	FATTY-ACIDS	Seed	--	--		
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	



Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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.
0	FRAXIDIN	Seed	--	--		
13	GERANIAL	Fruit	--	--		
13	GERANIAL	Fruit Juice	--	--		
35	GERANIOL	Fruit Juice	--	--		
2	GERANYL-ACETONE	Fruit Juice	--	--		
0	GLOBULIN	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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.
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.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	GLUTELIN	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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.
0	GRAMISTEROL	Seed	--	--		
0	HENTRIACONTANE	Fruit	--	--		
0	HEPT-TRANS-2-EN-1-AL	Fruit Juice	--	--		
0	HEPT-TRANS-2-ENAL	Fruit	--	--		
0	HEPTA-TRANS-2-CIS-4-DIEN-1-AL	Fruit Juice	--	--		
0	HEPTA-TRANS-2-TRANS-4-DIEN-1-AL	Fruit Juice	--	--		
0	HEPTAN-2-ONE	Fruit Juice	--	--		
0	HEX-CIS-EN-1-OL	Fruit Juice	--	--		
0	HEX-TRANS-2-EN-1-AL	Fruit Juice	--	--		
0	HEX-TRANS-2-ENAL	Fruit	--	--		
0	HEX-TRANS-3-EN-1-OL	Fruit Juice	--	--		
0	HEXAN-1-AL	Fruit	--	--		
0	HEXAN-1-AL	Fruit Juice	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	HEXAN-1-OL	Fruit Juice	--	--		
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	--	--		
0	ISOFUCCOSTEROL	Seed	--	--		
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.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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.
0	KILOCALORIES	Fruit	3513	3513	-0.22410600170435108	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	KILOCALORIES	Seed	6500	6500	1.2844790550738516	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	L-(+)-ISOLEUCINE	Plant	--	--		
0	L-(-)-PHENYLALANINE	Plant	--	--		
0	L-(-)-THREONINE	Plant	--	--		
0	L-(-)-TYROSINE	Plant	--	--		
0	L-BETA-(PYRAZOL-1-YL)-ALANINE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	L-BETA-(PYRAZOL-1-YL)-ALANINE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	L-GLUTAMIC-ACID	Seed	--	--		
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	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.
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.
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	
0	LUPINIC-ACID	Sprout Seedling	--	--		
15	LUTEIN	Fruit	0.14	3	-0.575590894746515	
16	LYCOPENE	Fruit	45	900	1.8766429320601818	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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.

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.
0	N-ACETYL-SERINE	Fruit	--	--		
0	N-HENEICOSANE	Fruit Juice	--	--		
0	N-HEXADECANE	Fruit Juice	--	--		
0	N-NONADECANE	Fruit Juice	--	--		
0	N-OCTACOSANOL	Fruit	--	--		
0	N-OCTADECANE	Fruit Juice	--	--		
0	N-PENTADECANE	Fruit Juice	--	--		
0	NEOLYCOPENE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	NERAL	Fruit Juice	--	--		
0	NEUROSPORIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN	Fruit	15	27	-0.45048529250390834	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	NON-CIS-3-EN-1-AL	Fruit Juice	--	--		
0	NON-CIS-3-EN-1-OL	Fruit	--	--		
0	NON-CIS-3-EN-1-OL	Fruit Juice	--	--		
0	NON-CIS-6-EN-1-OL	Fruit Juice	--	--		
0	NON-CIS-6-EN-1-OL	Fruit	--	--		
0	NON-TRANS-2-EN-1-OL	Fruit	--	--		
0	NON-TRANS-2-EN-AL	Fruit	--	--		
0	NONA-CIS-3,6-CIS-DIEN-1-AL	Fruit Juice	--	--		
0	NONA-CIS-3,CIS-6-DIEN-1-OL	Fruit	--	--		
0	NONA-CIS-3-CIS-6-DIEN-10-OL	Fruit Juice	--	--		
0	NONA-TRANS-2,CIS-6-DIEN-1-AL	Fruit Juice	--	--		
0	NONA-TRANS-2,CIS-6-DIEN-1-OL	Fruit	--	--		
0	NONA-TRANS-2-CIS-6-DIENAL	Fruit	--	--		
0	NONAN-1-AL	Fruit	--	--		
0	NONAN-1-AL	Fruit Juice	--	--		
0	NONAN-1-OL	Fruit	--	--		
0	NONAN-1-OL	Fruit Juice	--	--		
0	NONAN-2-ONE	Fruit Juice	--	--		
0	NONAN-4-OLIDE	Fruit Juice	--	--		



Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	O-ACETYL-SERINE	Fruit	--	--		
0	OBTUSIFOLIOL	Seed	--	--		
0	OCT-1-EN-3-OL	Fruit Juice	--	--		
0	OCT-1-EN-3-ONE	Fruit Juice	--	--		
0	OCT-TRANS-2-EN-1-AL	Fruit Juice	--	--		
0	OCT-TRANS-2-EN-1-OL	Fruit Juice	--	--		
0	OCT-TRANS-2-ENAL	Fruit	--	--		
0	OCTAN-1-AL	Fruit Juice	--	--		
0	OCTAN-1-OL	Fruit Juice	--	--		
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.
0	OXYSILVINE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	PALMITIC-ACID	Seed	15200	55000	0.4352274100182752	
13	PALMITIC-ACID	Cotyledon	--	206300	-1.727557853929548	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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	--	--		
0	PENT-1-EN-3-OL	Fruit Juice	--	--		
0	PENT-CIS-2-EN-1-OL	Fruit Juice	--	--		
0	PENT-TRANS-2-EN-1-AL	Fruit Juice	--	--		
0	PENTADEC-1-ENE	Fruit Juice	--	--		
0	PENTAN-1-AL	Fruit Juice	--	--		
0	PENTAN-1-OL	Fruit Juice	--	--		
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	

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
5	PHYLLOQUINONE	Fruit	--	0.003	-0.2325377501021479	
0	PHYSETOLIC-ACID	Plant	--	--		
0	PHYTOFLUIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PHYTOIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PHYTOSTEROLS	Fruit	20	236	-0.9138748529599334	
12	PINENE	Seed	--	--		
0	POLY-CIS-LYCOPENE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	POTASSIUM	Fruit	13514	18000	0.0073869157433379936	
0	PRO-BETA-CAROTENE	Fruit	--	--		
0	PROLINE	Fruit	2827	2827	-0.3240363604117524	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	PROLINE	Seed	11800	11800	0.09118447788174708	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PRONEUROSPORIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PROTEIN	Fruit	1000	100000	-0.12733205905952616	
0	PROTEIN	Seed	198000	600000	3.2575736283478713	
0	PROTEIN-CVTI-I	Seed	--	--		
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.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
1	SODIUM	Fruit	135	236	-0.1615711715033237	
0	SPINASTEROL	Seed	--	--		
8	STEARIC-ACID	Cotyledon	--	59100	-0.5870403836004546	
8	STEARIC-ACID	Seed	12200	66000	0.8665858434484109	
0	STIGMAST-7-EN-3BETA-OL-BETA-D-GLUCOPYRANOSIDE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	STIGMASTA-7,25-DIEN-3-BETA-OL	Seed Oil	--	--		
0	STIGMASTA-7-22-25-TRIEN-3-BETA-OL	Seed Oil	--	--		
12	STIGMASTEROL	Seed	--	--		
12	STIGMASTEROL	Seed Oil	--	--		
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	--	--		

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	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.
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.
0	UNDEC-TRANS-2-ENAL	Fruit	--	--		
0	UREASE	Seed	--	10000		
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.
0	WATER	Fruit	915100	957000	0.8105901474331062	
0	WATER	Seed	71000	81000	-0.5625925943807273	

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Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
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.

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