

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Nelumbo nucifera*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	1-(P-HYDROXYBENZYL)-6,7-DIHYDROXY-1,2,3,4-TETRAHYDROISOQU...	Plant				--
0	2-HYDROXY-1-METHOXYAPORPHINE	Plant				--
0	4'METHYL-N-METHYLCOCLAURINE	Leaf				--
3	ALANINE	Rhizome	540.0	2585.0	1.0	--
3	ALANINE	Seed	2390.0	7242.0	-0.6195055861544037	--
10	ANONAININE	Leaf				--
14	ARGININE	Seed	3380.0	10242.0	-0.609680847263205	--
14	ARGININE	Rhizome	880.0	4210.0	1.0	--
2	ARSENIC	Seed		0.11	0.4218036673294472	--
112	ASCORBIC-ACID	Seed				--
112	ASCORBIC-ACID	Rhizome		15.0	-0.760152513800441	--
0	ASH	Seed	9000.0	52000.0	0.12391641754028537	--
0	ASH	Rhizome	9700.0	68000.0	-0.7453615056459485	--
2	ASPARAGINE	Rhizome		20000.0	1.413855910886902	--
3	ASPARTIC-ACID	Seed	5050.0	15303.0	-0.6468161986586874	--
3	ASPARTIC-ACID	Rhizome	3690.0	17655.0	1.0	--
53	BETA-CAROTENE	Seed	0.06	0.18	-0.41805691248749494	--
53	BETA-CAROTENE	Rhizome				--
28	CALCIUM	Seed	590.0	13333.0	1.6871886879486702	--
28	CALCIUM	Rhizome	450.0	3704.0	-0.7013828256307767	--
28	CALCIUM	Fruit	1360.0	1511.0	-0.5411991668303356	--
0	CARBOHYDRATES	Seed	139000.0	762000.0	0.9482355149444796	--
0	CARBOHYDRATES	Rhizome	120000.0	824880.0	0.6878082293275205	--
0	CARBOHYDRATES	Fruit	666000.0	740000.0	-0.2293103682144932	--
0	CERYL-ALCOHOL	Leaf				--
0	CETYL-ALCOHOL	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
12	COPPER	Seed		17.0	0.19823790075523398	--
2	CYSTINE	Seed	540.0	1636.0	-1.0532357485975676	--
2	CYSTINE	Rhizome	220.0	1055.0	1.0	--
4	D-CATECHIN	Root				--
0	D-GALLOCATECHIN	Root				--
0	D-PRONUCIFERINE	Leaf				--
0	DEHYDROANONAININE	Leaf				--
0	DEHYDRONUCIFERINE	Leaf				--
0	DEHYDROROEMERINE	Leaf				--
0	DEMETHYLCOCLAURINE	Seed				--
0	DL-ARMEPAVINE	Leaf				--
0	DL-N-NORARMEPAVINE	Stem				--
2	ERUCIC-ACID	Seed	310.0	939.0	-0.8054355202873063	--
0	FAT	Seed	2000.0	27000.0	-1.255672714114354	--
0	FAT	Rhizome	1000.0	6790.0	-0.8553236515091139	--
0	FAT	Fruit	24000.0	26667.0	-0.4375716888129199	--
15	FIBER	Seed	10700.0	131000.0	-0.02983822939187279	--
15	FIBER	Rhizome	8000.0	49383.0	-1.416178848985394	--
15	FIBER	Fruit	26000.0	28889.0	-1.0643159457036309	--
0	GADOLEIC-ACID	Seed	120.0	364.0	-0.6782820193733493	--
0	GADOLEIC-ACID	Rhizome	20.0	95.0	-1.0	--
0	GLUCOLUTEOLIN	Leaf				--
8	GLUTAMIC-ACID	Seed	9570.0	29000.0	-0.5363817172881947	--
8	GLUTAMIC-ACID	Rhizome	1390.0	6650.0	-1.0	--
7	GLUTATHIONE	Seed				--
12	GLYCINE	Seed	2210.0	6697.0	-0.6152261192530225	--
12	GLYCINE	Rhizome	1560.0	7464.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
5	HIGENAMINE	Plant				--
7	HISTIDINE	Seed	1150.0	3485.0	-0.7015941536729161	--
7	HISTIDINE	Rhizome	380.0	1820.0	1.0	--
30	HYPEROSIDE	Flower				--
6	IRON	Seed	9.5	71.0	-0.3707432045286709	--
6	IRON	Rhizome	7.0	70.0	-0.8723774649935054	--
3	ISOLEUCINE	Seed	2050.0	6212.0	-0.5460777275645406	--
3	ISOLEUCINE	Rhizome	540.0	2585.0	-1.0	--
0	ISOLIENSINE	Plant				--
2	ISOLIENSININE	Seed				--
3	ISOQUERCETIN	Flower				--
75	KAEMPFEROL	Plant				--
0	KAEMPFEROL-3-GLUCURONIDE	Flower				--
0	KILOCALORIES	Seed	630.0	3900.0	-0.7503835294536415	--
0	KILOCALORIES	Rhizome	560.0	2680.0	-1.0	--
2	LEUCINE	Seed	3260.0	9879.0	-0.6894100288005248	--
2	LEUCINE	Rhizome	690.0	3300.0	-1.0	--
1	LEUCOCYANIDIN	Leaf				--
2	LEUCODELPHINIDIN	Leaf				--
4	LIENSININE	Seed				--
27	LINOLEIC-ACID	Seed	2850.0	8636.0	-0.8438395102690177	--
27	LINOLEIC-ACID	Rhizome	140.0	670.0	-1.0	--
0	LINOLENIC-ACID	Seed	270.0	818.0	-0.5655819009930871	--
0	LINOLENIC-ACID	Rhizome	60.0	285.0		--
11	LIRIODENINE	Stem				--
11	LIRIODENINE	Leaf				--
0	LOTUSINE	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LOTUSINE-CHLORIDE	Embryo				--
78	LUTEOLIN	Flower				--
7	LUTEOLIN-7-GLUCOSIDE	Embryo				--
4	LYSINE	Seed	2640.0	8000.0	-0.5551787308352996	--
4	LYSINE	Rhizome	940.0	4500.0	1.0	--
65	MAGNESIUM	Rhizome	200.0	1215.0	-0.4416127218596474	--
65	MAGNESIUM	Seed	560.0	2650.0	-0.1169887078856715	--
14	MANGANESE	Seed		125.0	0.8903919851861474	--
0	MERATINE	Flower				--
15	METHIONINE	Seed	720.0	2182.0	-0.5507291236968568	--
15	METHIONINE	Rhizome	220.0	1050.0	1.0	--
13	MUFA	Seed	1040.0	3152.0	-0.7688061139304148	--
13	MUFA	Rhizome	200.0	955.0	-1.0	--
6	MYRISTIC-ACID	Seed	10.0	30.0	-0.2956104916529291	--
6	MYRISTIC-ACID	Rhizome				--
2	N-METHYLCOCLAURINE	Leaf				--
0	N-METHYLISOCOCLAURINE	Leaf				--
0	N-NOR-ARMEPAVINE	Seed				--
0	N-NORNUCIFERINE	Seed				--
0	NEFERIN	Seed				--
0	NELUMBINE	Leaf				--
1	NELUMBOSIDE	Leaf				--
2	NEO-CHLOROGENIC-ACID	Root				--
39	NIACIN	Seed	4.0	78.0	1.0511049250581166	--
39	NIACIN	Rhizome	21.0	130.0	0.9186705315156052	--
1	NORNUCIFERINE	Leaf				--
1	NUCIFERINE	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
1	NUCIFERINE	Leaf				--
0	O-METHYLCORYPALLINE	Seed				--
18	OLEIC-ACID	Rhizome	140.0	670.0	-1.0	--
18	OLEIC-ACID	Seed	620.0	1879.0	-0.9636537281728552	--
3	OXOUSHINSUNINE	Seed				--
13	PALMITIC-ACID	Seed	770.0	2333.0	-0.6514636896299181	--
13	PALMITIC-ACID	Rhizome	280.0	1340.0	-1.0	--
2	PALMITOLEIC-ACID	Rhizome	20.0	95.0	-1.0	--
7	PHENYLALANINE	Seed	2060.0	6242.0	-0.6327266374250495	--
7	PHENYLALANINE	Rhizome	470.0	2250.0	-1.0	--
4	PHOSPHORUS	Seed	590.0	7130.0	0.4694948719093944	--
4	PHOSPHORUS	Rhizome	1000.0	4785.0	0.14066169286845265	--
4	PHOSPHORUS	Fruit	2940.0	3267.0	0.015492353484958482	--
14	POTASSIUM	Rhizome	3820.0	34925.0	2.4385217942907635	--
14	POTASSIUM	Seed	3670.0	16652.0	0.3589805431834817	--
0	PROLINE	Seed	3440.0	10424.0	-0.17914342148285398	--
0	PROLINE	Rhizome	1360.0	6500.0	1.0	--
3	PRONUCIFERINE	Seed				--
0	PROTEIN	Seed	41300.0	242000.0	0.07297822800946349	--
0	PROTEIN	Rhizome	26000.0	167000.0	0.3411913153735525	--
0	PROTEIN	Fruit	172000.0	191111.0	1.0940505147857715	--
4	PUFA	Seed	3120.0	9454.0	-0.7339901909326525	--
4	PUFA	Rhizome	200.0	955.0	-1.0	--
176	QUERCETIN	Flower				--
0	QUERCETIN-3-GLUCURONIDE	Flower				--
1	RAFFINOSE	Rhizome				--
0	REDUCING-SUGARS	Rhizome	15600.0	96296.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	REDUCING-SUGARS	Fruit	24000.0	26667.0	-1.1602147215207481	--
15	RIBOFLAVIN	Seed	0.4	2.6	-0.35420998757183836	--
15	RIBOFLAVIN	Rhizome	0.6	3.7	-0.4247702403386429	--
10	ROBININ	Plant				--
0	ROEMERINE	Leaf				--
87	RUTIN	Embryo				--
1	SERINE	Seed	2520.0	7636.0	-0.5631281506906898	--
1	SERINE	Rhizome	600.0	2870.0	1.0	--
0	SFA	Seed	880.0	2667.0	-0.5522324907429264	--
1	SODIUM	Seed	10.0	490.0	0.06211847255545912	--
1	SODIUM	Rhizome	395.0	1935.0	1.5998918622066602	--
1	STACHYOSE	Rhizome				--
5	STARCH	Rhizome	92500.0	570988.0	0.8675764759039429	--
8	STEARIC-ACID	Rhizome	10.0	50.0	-1.0	--
14	SUCROSE	Rhizome	4100.0	25309.0	-0.6188226376488517	--
14	SUCROSE	Fruit	41000.0	45556.0	-0.4238120028643726	--
41	TANNIC-ACID	Rhizome				--
31	THIAMIN	Seed	1.5	7.5	0.21850728435000166	--
31	THIAMIN	Rhizome	2.2	14.0	1.5614503163088487	--
4	THREONINE	Seed	2000.0	6060.0	-0.4647145083594269	--
4	THREONINE	Rhizome	510.0	2440.0	1.0	--
15	TRIGONELLINE	Rhizome				--
29	TRYPTOPHAN	Seed	590.0	1788.0	-0.5242003854770584	--
29	TRYPTOPHAN	Rhizome	200.0	955.0	1.0	--
8	TYROSINE	Seed	1000.0	3030.0	-1.0913578208403276	--
8	TYROSINE	Rhizome	290.0	1390.0	1.0	--
3	VALINE	Seed	2660.0	8061.0	-0.48654728017865406	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
3	VALINE	Rhizome	550.0	2630.0	-1.0	--
0	WATER	Seed	143000.0	80200.0	-0.5656625280868578	--
0	WATER	Rhizome	750000.0	838000.0	0.7144555660749288	--
77	ZINC	Seed		28.0	-0.48638233396421304	--