

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

**Chemicals found in Phaseolus lunatus**

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Seed	201000.0	731000.0	0.8250352521602637	--
0	CARBOHYDRATES	Sprout Seedling	200000.0	556000.0	-0.11566411833728583	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Sprout Seedling	130000.0	361000.0	0.4725709176557974	--
0	PROTEIN	Seed	68400.0	287000.0	0.4732765325212745	--
0	WATER	Seed	46900.0	702400.0	1.8219784118561275	--
0	ASH	Sprout Seedling	22000.0	61000.0	-0.08467155315304167	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Leaf	17000.0	674000.0	0.49425767892588474	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	15000.0	100000.0	1.5676426558251149	--
15	FIBER	Seed	10000.0	84500.0	-0.3970101712098695	--
8	GLUTAMIC-ACID	Seed	8810.0	33820.0	-0.333021651306727	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Seed	7350.0	30802.0	0.7291156014800422	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Sprout Seedling	6000.0	17000.0	-1.3976624547397958	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Leaf	6000.0	214000.0	0.021497714576003205	--
2	LEUCINE	Seed	5380.0	20595.0	0.33631282993834133	--
0	ASH	Leaf	5000.0	179000.0	1.059739339830703	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	ARGININE	Seed	4580.0	15390.0	-0.391695611260045	USDA's Ag Handbook 8 and sequelae)
4	LYSINE	Seed	4520.0	19010.0	0.9361844799669995	--
3	ISOLEUCINE	Seed	4400.0	14785.0	0.5478501539209853	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Seed	4270.0	14370.0	0.2904680497574405	--
1	SERINE	Seed	4270.0	15900.0	1.020671669330021	--
4	PHOSPHORUS	Sprout Seedling	3820.0	10611.0	2.046625909896273	--
13	LIGNIN	Seed	3400.0	6400.0	-0.6566021203023709	--
7	PHENYLALANINE	Seed	3370.0	13760.0	0.26505605059796544	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PUFA	Seed	3090.0	14079.0	-0.6987597730103201	--
14	POTASSIUM	Seed	2950.0	39000.0	2.324341926317639	--
4	THREONINE	Seed	2900.0	10320.0	0.48822411613852307	--
0	FAT	Sprout Seedling	2900.0	22000.0	-0.624201906684424	--
12	GLYCINE	Seed	2740.0	10090.0	-0.12465742701620912	USDA's Ag Handbook 8 and sequelae)
3	ALANINE	Seed	2600.0	12190.0	0.4323402326407051	USDA's Ag Handbook 8 and sequelae)
7	HISTIDINE	Seed	2320.0	7796.0	0.44447546934882604	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Seed	2200.0	8450.0	0.16419778773437388	--
27	LINOLEIC-ACID	Seed	2150.0	9509.0	-0.8363595595989931	--
0	SFA	Seed	1620.0	6653.0	-0.5130672923462005	--
13	PALMITIC-ACID	Seed	1180.0	5813.0	-0.5796599980056426	--
0	KILOCALORIES	Seed	1130.0	3840.0	-0.7973418967888913	--
4	PHOSPHORUS	Seed	1130.0	9000.0	0.9636592343249576	--
28	CALCIUM	Sprout Seedling	1090.0	3028.0	-0.3113957775064191	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROLINE	Seed	1020.0	10855.0	-0.09446949370222676	--
0	FAT	Seed	1000.0	28898.0	-1.2456752692012885	--
0	ALPHA-LINOLEIC-ACID	Seed	950.0	4570.0	-1.1760076321649213	--
29	TRYPTOPHAN	Seed	900.0	3024.0	-0.10268270521142216	--
2	CYSTINE	Seed	830.0	2789.0	-0.25111403533042315	USDA's Ag Handbook 8 and sequelae)
15	METHIONINE	Seed	680.0	3017.0	-0.33511621096380556	--
65	MAGNESIUM	Seed	580.0	7000.0	1.6016677704610653	--
18	OLEIC-ACID	Seed	500.0	1680.0	-0.9652896250150863	--
13	MUFA	Seed	500.0	1680.0	-0.7794549980661318	--
28	CALCIUM	Seed	250.0	8600.0	0.8179356201966016	--
8	STEARIC-ACID	Seed	220.0	739.0	-0.5493562496934008	--
0	KILOCALORIES	Sprout Seedling	100.0	3060.0	-1.0461169193597875	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	KILOCALORIES	Leaf	80.0	2860.0	-0.2548146676073852	--
28	CALCIUM	Leaf	80.0	2857.0	-1.064557058192606	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Sprout Seedling	70.0	194.0	-0.9301554608062169	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Leaf	23.0	821.0	1.1604413665178475	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Seed	22.0	1000.0	3.9456754096489095	--
6	MYRISTIC-ACID	Seed	20.0	67.0	-0.2951261296538609	--
6	IRON	Sprout Seedling	13.0	228.0	2.073792630648015	--
39	NIACIN	Seed	10.0	49.5	0.19798273750765077	--
14	MANGANESE	Seed	8.0	100.0	0.5789731987465522	--
39	NIACIN	Sprout Seedling	8.0	56.0	-0.5317365686969346	--
77	ZINC	Seed	7.0	100.0	1.5577119469180905	--
1	SODIUM	Seed	5.0	269.0	-0.28870093305884625	--
12	COPPER	Seed	3.0	15.0	0.01682814208698858	--
11	PANTOTHENIC-ACID	Seed	2.3	16.0	-0.07785532199076041	--
0	VIT-B-6	Seed	2.0	7.2	0.9735016974675352	--
31	THIAMIN	Seed	1.6	7.4	0.1946489656859541	--
15	RIBOFLAVIN	Sprout Seedling	1.4	3.9	-1.108146796514586	--
4	BORON	Seed	1.0	30.0	0.2793241380657447	--
0	BARIUM	Seed	1.0	30.0	-0.23022161672747324	--
0	STRONTIUM	Seed	1.0	100.0	2.458461267539286	--
0	ZIRCONIUM	Seed	0.9	7.0	2.195044244331477	--
5	ALUMINUM	Seed	0.44	3000.0	4.630050127611181	--
0	LEAD	Seed	0.4	5.0	0.7501092826491648	--
53	BETA-CAROTENE	Sprout Seedling	0.3	0.8	-0.4606140559060844	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Seed	0.3	5.1	0.6039254891737816	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	NICKEL	Seed	0.3	7.0	0.4299174580067636	--
32	DAIDZEIN	Seed	0.3	28.0	-0.38531802700702444	--
16	VANADIUM	Seed	0.22	3.0	2.2640915166491467	--
31	THIAMIN	Sprout Seedling	0.1	4.7	-0.8926853261592119	--
2	MOLYBDENUM	Seed	0.0	15.0	2.256828035241135	--
13	COUMESTROL	Seed	0.0			--
2	COBALT	Seed	0.0	1.0	-0.16257255524625883	--
53	BETA-CAROTENE	Seed	0.0	9.8	0.18328220133121417	USDA's Ag Handbook 8 and sequela)
0	TITANIUM	Seed	0.0	20.0	0.06479285650349677	--
24	CHROMIUM	Seed	0.0	5.0	0.045935160498438064	--
81	GENISTEIN	Seed	0.0	40.1	-0.30321411252522595	--
0	FAT	Leaf	0.0	48000.0	-0.16862267810970435	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Seed	0.0	952.0	0.23307541788601452	--
81	GENISTEIN	Leaf		2300.0	-0.5761048613124907	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
2	2,10-DI-(GAMMA,GAMMA-DIMETHYLALLYL)GLYCINOL	Leaf		500.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	S-METHYL-CYSTEINE	Plant				--
81	GENISTEIN	Leaf Diffusate				--
3	5-DEOXYKIEVITONE	Leaf		2300.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
8	AMYGDALIN	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	COUMESTROL	Leaf		1200.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Leaf		360.0	-0.8484475813664748	--
0	PHASEOLUNATIN	Seed				--
2	5-DEOXYKIEVITOL	Leaf		33000.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	3-HYDROXY-4'-METHOXYFLAVONE	Shoot				--
3	2,3-DEHYDROKIEVITONE	Leaf		900.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
3	2'-HYDROXYDAIDZEIN	Leaf		2300.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
15	FIBER	Leaf		111000.0	-0.6249222392756235	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	2,3-DEHYDROKIEVITOL	Leaf		800.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	WATER	Sprout Seedling		640000.0	-1.6726424699664966	--
0	ISOFERREIRIN	Leaf		1100.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
15	FIBER	Fruit		175000.0	0.314457685414015	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	1",2"-DEHYDROCYCLOKIEVITONE	Leaf		5600.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
3	8-HYDROXYGENISTEIN	Leaf		3600.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	HYDROXYGENISTEIN	Leaf Diffusate		4.0	-1.0042632195254433	--
4	IRIGENIN	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	DALBERGIODIN	Leaf Diffusate		12.0	1.0	--
1	8,2'-DIHYDROXYGENISTEIN	Leaf		5800.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	CARBOHYDRATES	Fruit		766000.0	-0.0902750066674574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	WATER	Leaf		972000.0	0.8200006464526265	--
0	2'-METHOXYGENISTEIN	Leaf		5100.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	PROTEIN	Fruit		188000.0	1.0523462069938174	--
0	GARBANZOL	Shoot				--
0	ASH	Fruit		40000.0	-0.4315138599096578	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CYCLOKIEVITONE-HYDRATE	Leaf		500.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
3	2'-HYDROXYGENISTEIN	Leaf		5100.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	GLUTAMYL-5-METHYLCYSTEINE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	4-(GAMMA,GAMMA-DIMETHYLALLYL)PHASEOLIDIN	Leaf		400.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
0	FAT	Fruit		6000.0	-0.5954245724262762	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CYCLO-2,3-DEHYDROKIEVITONE-HYDRATE	Leaf		2100.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	3'-(GAMMA,GAMMA-DIMETHYLALLYL)KIEVITONE	Leaf		9700.0		Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
13	COUMESTROL	Root				--