

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Trigonella foenum-graecum*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	(25-R)-SPIROSTA-3-5-DIENE	Seed				--
0	2,5-DIMETHYL-PYRAZINE	Seed				--
0	2,6-DIMETHYL-PYRAZINE	Seed				--
0	2-ETHYL-3-METHYL-PYRAZINE	Seed				--
0	2-ETHYL-5-METHYL-PYRAZINE	Seed				--
0	2-ETHYL-PYRAZINE	Seed				--
0	2-METHOXY-3-METHYLPYRAZINE	Seed				--
0	2-METHOXY-3-SEC-BUTYL-PYRAZINE	Seed				--
0	2-METHYL-PYRAZINE	Seed				--
0	2-METHYL-THIO-3-ISO-PROPYL-PYRAZINE	Seed				--
0	24-XI-ETHYL-CHOLEST-5-EN-3-BETA-OL	Seed				--
0	25(S)-TIGOGENIN	Seed				--
0	25-(S)-DIOSGENIN	Seed				--
0	25-ALPHA-SPIROSTA-3,5-DIENE	Seed				--
0	25-BETA-SPIROSTA-3-5-DIENE	Seed				--
0	3',4',7-TRIHYDROXYFLAVONE	Plant				--
0	3'-METHOXY-QUERCETIN	Leaf				--
0	3,4,7-TRIMETHYLCOUMARIN	Stem				--
0	3-BETA-HYDROXY-PREGNA-5-16-DIEN-20-ONE	Seed				--
0	3-BETA-O-(L-RHAMNOSYL)-(1-4)-(L-RHAMNOSYL)-(GLUCOSYL)-SPIROST-5-EN-3-BETA-OL	Seed				--
0	3-HYDROXY-4,5-DIMETHYL-2-FURANONE	Seed				--
0	4',7-DIHYDROXYFLAVONE	Plant				--
0	4-HYDROXYISOLEUCINE	Seed	180.0	7400.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4-HYDROXYISOLEUCINE-LACTONE	Seed		40.0		--
0	4-METHYL-7-ACETOXYCOUMARIN	Stem				--
0	5-METHYL-DELTA-CAPROLACTONE	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	7-ACETOXY-4-METHYLCOUMARIN	Plant				--
19	ACETYL-CHOLINE	Plant				--
3	ALANINE	Seed	8720.0	11220.0	0.22613763679768628	--
0	ALKALOIDS	Seed	130.0	3000.0	-0.6607729687762969	--
0	ALPHA-GALACTOSIDASE	Plant				--
0	ALPHA-MANNOSIDASE	Plant				--
5	ALUMINUM	Seed	46.0	350.0	0.21894815163485395	--
101	APIGENIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	ARABINOSE	Seed				--
0	ARACHIDIC-ACID	Seed				--
14	ARGININE	Seed	22230.0	27115.0	0.10478397151716012	--
14	ARGININE	Leaf				--
112	ASCORBIC-ACID	Seed	78.0	600.0	0.02175263838259632	--
112	ASCORBIC-ACID	Leaf		520.0	-0.3956707231337732	--
112	ASCORBIC-ACID	Shoot				--
0	ASH	Seed	5070.0	39000.0	-0.26709277199518927	--
3	ASPARTIC-ACID	Seed	23220.0	29790.0	0.6392747742176127	--
1	BEHENIC-ACID	Seed Oil		26400.0	1.510973047897823	--
1	BEHENIC-ACID	Plant				--
53	BETA-CAROTENE	Seed		0.2	-0.41680672721968065	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	BETA-CAROTENE	Leaf	23.0	278.0	0.07273598161233917	--
0	BETA-MANNANAN	Plant				--
47	BETA-SITOSTEROL	Plant				--
47	BETA-SITOSTEROL	Seed	800.0	1000.0	-0.24724332014320702	--
47	BETA-SITOSTEROL	Tissue Culture	8.7	400.0	-0.718471075749604	--
47	BETA-SITOSTEROL	Leaf				--
4	BIOTIN	Sprout Seedling				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
28	CALCIUM	Seed	95.0	730.0	-0.6274524303440239	--
28	CALCIUM	Leaf		12900.0	-0.3783425155679842	--
2	CAMPESTEROL	Seed		180.0	-0.2503358143318627	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	Tissue Culture		10.0	0.9999999999999998	--
0	CARBOHYDRATES	Seed	76830.0	591000.0	0.2686469686186435	--
17	CARPAIN	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	CATECHOLS	Fruit	2600.0	4900.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	CATECHOLS	Seed	2600.0	5100.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	CHLORINE	Seed		500.0	0.2870340914451406	--
7	CHLORINE	Leaf		1650.0	-0.43118238660979025	--
1	CHOLESTEROL	Seed				--
1	CHOLESTEROL	Tissue Culture		20.0		--
20	CHOLINE	Seed		500.0	-1.1034450678843846	--
20	CHOLINE	Leaf		13500.0	0.3414380440163458	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
24	CHROMIUM	Seed	0.1	0.4	-0.6242382631914585	--
2	COBALT	Seed	0.2	1.8	-0.12787540595439015	--
12	COPPER	Seed		11.0	-0.34599137524950224	USDA's Ag Handbook 8 and sequelae)
12	COPPER	Leaf		3.0	-0.6785583269823768	--
57	COUMARIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
57	COUMARIN	Seed				--
0	CYANOCOBALAMIN	Sprout Seedling				--
2	CYSTINE	Seed	2430.0	4059.0	0.6324025092049402	--
0	D-MANNOSE	Plant				--
0	DIGALACTOSYLMYOINOSITOL	Plant				--
0	DIHYDROACTINIDIOLIDE	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIHYDROBENZOFURAN	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
6	DIOSCIN	Plant				--
6	DIOSCIN	Seed				--
7	DIOSGENIN	Root		6200.0	0.7428746956965422	--
7	DIOSGENIN	Tissue Culture		18.2	-0.7063019260498711	--
7	DIOSGENIN	Seed	900.0	19000.0	1.4142135623730951	--
7	DIOSGENIN	Pericarp				--
7	DIOSGENIN	Leaf				--
7	DIOSGENIN	Stem				--
7	DIOSGENIN	Sprout Seedling				--
7	DIOSGENIN	Plant		5000.0		--
3	ELEMENE	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	ENDO-BETA-MANNANASE	Plant				--
0	EO	Seed		100.0	-0.5492360119370758	--
0	EPISARSASAPOGENIN	Seed				--
0	EPISMILAGENIN	Seed				--
0	FAT	Seed	8320.0	64000.0	-1.0607804792442668	--
0	FENUGREEK-INHIBITOR-TFI-A-8	Seed				--
0	FENUGREEK-INHIBITOR-TFI-B-2	Seed				--
0	FENUGREEK-INHIBITOR-TFN-N-2	Seed				--
10	FENUGREEKINE	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	FENUGREEKINE	Plant	98.0	267.0		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	FENUGRIN-A	Seed				--
0	FENUGRIN-B	Plant				--
0	FENUGRIN-B	Seed				--
0	FENUGRIN-C	Seed				--
0	FENUGRIN-D	Seed				--
0	FENUGRIN-E	Seed				--
15	FIBER	Seed	10000.0	500000.0	2.8838487927767456	--
0	FIBER(CRUDE)	Seed		87000.0	-0.3491112461944153	--
0	FIBER(DIETARY)	Seed		480000.0	-1.3792903687155267	--
0	FIXED-OIL	Seed	103000.0	200000.0	-0.40690786874402224	--
0	FLAVONOLS	Seed	16100.0	27400.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	FLAVONOLS	Fruit	7100.0	15500.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	FOENUGRAECIN	Seed				--
15	FOLACIN	Plant		1.0	-1.102281018951309	Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of <i>Glycyrrhiza-glabra</i> . <i>Nippon Gogeikagaku Kaishi</i> 61(9): 1119-1122.
23	FOLIC-ACID	Plant		1.0	-0.9356817836851675	Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of <i>Glycyrrhiza-glabra</i> . <i>Nippon Gogeikagaku Kaishi</i> 61(9): 1119-1122.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	FORMONONETIN	Plant				--
8	FRUCTOSE	Plant				--
8	FRUCTOSE	Seed				--
0	FUROS-5-ENE-3-BETA-22-26-TRIOL	Seed				--
0	GALACTINOL	Plant				--
0	GALACTOMANNAN	Plant				--
0	GALACTOMANNAN	Seed				--
22	GAMMA-AMINOBUTYRIC-ACID	Plant				--
81	GENISTEIN	Seed		10.0	-0.30362224719004427	--
24	GENTIANINE	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
1	GITOGENIN	Plant				--
1	GITOGENIN	Tissue Culture		10.7		--
1	GITOGENIN	Pericarp				--
1	GITOGENIN	Leaf				--
1	GITOGENIN	Seed	100.0	130.0		--
1	GITOGENIN	Stem				--
1	GITOGENIN	Root				--
8	GLUTAMIC-ACID	Seed	39880.0	43870.0	0.0909967435301507	--
12	GLYCINE	Seed	10630.0	14366.0	0.4935776829173641	--
0	GRAECUNIN-A	Leaf				--
0	GRAECUNIN-B	Leaf				--
0	GRAECUNIN-B	Plant				--
0	GRAECUNIN-C	Plant				--
0	GRAECUNIN-C	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GRAECUNIN-D	Leaf				--
0	GRAECUNIN-E	Leaf				--
0	GRAECUNIN-F	Leaf				--
0	GRAECUNIN-G	Leaf				--
0	GRAECUNIN-H-1	Seed				--
0	GRAECUNIN-H-2	Seed				--
0	GRAECUNIN-H-3	Seed				--
0	GRAECUNIN-H-4	Seed				--
0	GRAECUNIN-H...	Seed				--
0	GRAECUNIN-H...	Plant				--
0	GRAECUNIN-I	Seed				--
0	GRAECUNIN-J	Seed				--
0	GRAECUNIN-K	Seed				--
0	GRAECUNIN-L	Seed				--
0	GRAECUNIN-M	Seed				--
0	GRAECUNIN-N	Plant				--
0	GRAECUNIN-N	Seed				--
0	GRIGONELLOSIDE	Seed				--
0	HEXADECANE	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	HISTIDINE	Seed	4850.0	7350.0	0.32590737566576017	--
0	HOMOORIENTIN	Plant				--
6	IRON	Seed	7.3	56.0	-0.4404378000213121	--
3	ISOLEUCINE	Seed	10710.0	13650.0	0.40302242203179	--
3	ISOLEUCINE	Leaf				--
4	ISOORIENTIN	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISOORIENTIN-ARABINOSIDE	Seed		800.0		--
22	ISOQUERCITRIN	Plant				--
4	ISOVITEXIN	Seed				--
0	JAMOGENIN	Seed				--
75	KAEMPFEROL	Leaf				--
75	KAEMPFEROL	Plant				--
75	KAEMPFEROL	Flower				--
0	KAEMPFEROL-3,7-DIGLUCOSIDE	Plant				--
0	KAEMPFEROL-3-7-DIGLYCOSIDE	Plant				--
0	KAEMPFEROL-3-GLYCOSIDE	Plant				--
0	KILOCALORIES	Seed	2570.0	3400.0	-1.1417032572473902	--
1	L-ARGININE	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	L-HISTIDINE	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
20	LECITHIN	Plant				--
2	LEUCINE	Leaf				--
2	LEUCINE	Seed	16160.0	19327.0	0.2149413681166838	--
13	LIGNIN	Plant		280000.0	0.9327752465712993	--
27	LINOLEIC-ACID	Seed Oil	68000.0	449000.0	0.2276468200186951	--
0	LINOLENIC-ACID	Seed Oil	79000.0	178400.0	-0.3717950413698519	--
78	LUTEOLIN	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
78	LUTEOLIN	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
4	LYSINE	Seed	15310.0	18525.0	0.8704886437054995	--
4	LYSINE	Leaf				--
65	MAGNESIUM	Seed	157.0	1210.0	-0.6859232662349359	--
14	MANGANESE	Seed	0.3	2.1	-0.640542768950903	--
15	METHIONINE	Leaf				--
15	METHIONINE	Seed	3120.0	3720.0	-0.15358821377657803	--
3	MUCILAGE	Seed	180000.0	500000.0	1.906004826929004	--
0	MUCIN	Seed		280000.0		--
0	MUUROLENE	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	MYO-INOSITOL	Plant				--
0	NEO-BETA-CAROTENE	Seed				--
0	NEODIOSGENIN	Seed				--
0	NEOGITOGENIN	Seed		26.0		--
0	NEOGITOGENIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	NEOTIGOGENIN	Seed				--
0	NEOTIGONENIN	Seed				--
39	NIACIN	Seed	2.1	16.0	-0.8048100092621951	--
2	NICOTINAMIDE	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	NICOTINIC-ACID	Seed	0.007	35.0	1.0	--
0	OCTADECATRIENOIC-ACID	Seed Oil		300000.0		--
18	OLEIC-ACID	Seed				--
18	OLEIC-ACID	Seed Oil	186000.0	319800.0	-0.007287021917190672	--
4	ORIENTIN	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	ORIENTIN-ARABINOSIDE	Seed				--
0	ORIENTIN-ARABINOSIDE	Plant				--
9	OXALIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Plant				--
25	P-COUMARIC-ACID	Stem				--
13	PALMITIC-ACID	Seed Oil		276300.0	0.6280218333755967	--
13	PALMITIC-ACID	Plant				--
2	PALMITOLEIC-ACID	Seed Oil		2100.0	-0.670863179255864	--
0	PEROXIDASE	Sprout Seedling				--
0	PHENOLS	Seed	9420.0	19450.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	PHENOLS	Fruit	6170.0	14730.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
7	PHENYLALANINE	Leaf				--
7	PHENYLALANINE	Seed	10320.0	11980.0	0.05249244529323463	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHENYLALANINE-AMMONIA-LYASE	Tissue Culture				--
0	PHOSPHATASE	Seed				--
4	PHOSPHORUS	Seed	374.0	2880.0	-0.6536059517623403	--
0	PHYTASE	Seed				--
0	PHYTATE	Seed	6450.0	29760.0	2.200314527047847	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	PHYTATE	Fruit	6600.0	24520.0	2.4805336186053295	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
9	PHYTIC-ACID	Seed				--
2	PHYTOSTEROLS	Seed		1400.0	-0.2662273492149403	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. <i>CRC Handbook of Lipids in Human Nutrition</i> . CRC Press. Boca Raton, FL. 233 pp.)
0	POLYSACCHARIDES	Seed	19500.0	280000.0	1.4120113078902592	--
14	POTASSIUM	Seed	133.0	1020.0	-1.0157522803870012	--
0	PROLINE	Seed	11980.0	17800.0	1.269939853018089	--
0	PROTEIN	Seed	39780.0	306000.0	0.6422913722040391	--
0	PROTOPECTIN	Plant				--
0	PYRAZINE	Seed				--
43	PYRIDOXINE	Plant				--
176	QUERCETIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
176	QUERCETIN	Plant				--
176	QUERCETIN	Flower				--
0	QUERCETIN-3,7-DIGLUCOSIDE	Plant				--
44	QUERCITRIN	Plant		500.0		--
1	RAFFINOSE	Fruit	200.0	5500.0	1.0	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
1	RAFFINOSE	Seed	300.0	13500.0	1.6559299973233297	--
15	RIBOFLAVIN	Seed	0.4	3.2	-0.12425747315288925	--
87	RUTIN	Leaf				--
7	SALICYLATES	Leaf	110.0	125.0	-0.30496792674060463	--
0	SAPONARETIN	Seed				Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	SAPONIN	Fruit	1900.0	5700.0	-1.0	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	SAPONIN	Plant				--
5	SAPONINS	Seed	2800.0	15000.0	-0.29217724865695144	--
0	SARSASAPOGENIN	Leaf				--
0	SARSASAPOGENIN	Seed		56.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SELENINE	Seed				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
60	SELENIUM	Seed	0.2	1.6	-0.24792901151074112	--
1	SERINE	Seed	12150.0	13365.0	0.5348376248294764	--
4	SILICON	Seed	0.6	4.7	-1.1485311425485372	--
3	SMILAGENIN	Seed		40.0		--
3	SMILAGENIN	Leaf				--
1	SODIUM	Seed	75.0	580.0	0.2049861038011039	--
1	SODIUM	Leaf	650.0	761.0	-0.5121260660753122	--
0	SOTOLONE	Seed	4.0	25.0		--
0	SPIROSTA-3-5-DIENE	Root				--
0	SPIROSTA-3-5-DIENE	Stem				--
0	SPIROSTAN-3-5-DIENE	Seed				--
0	SPIROSTAN-3-5-DIENE	Pericarp				--
0	SPIROSTAN-3-5-DIENE	Leaf				--
0	SPIROSTAN-3-5-DIENE	Stem				--
0	SPIROSTAN-3-5-DIENE	Root				--
1	STACHYOSE	Seed	900.0	12300.0	-0.6935988302183245	--
1	STACHYOSE	Fruit	400.0	6100.0		Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
5	STARCH	Seed	19500.0	150000.0	-0.6485575814204301	--
8	STEARIC-ACID	Seed Oil		107400.0	-0.06097534681860657	--
8	STEARIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	STIGMASTEROL	Tissue Culture	12.0	400.0	1.0	--
12	STIGMASTEROL	Seed		70.0	-0.44129793216895535	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	SUCROSE	Seed	1200.0	12700.0	-0.5172181885156314	--
14	SUCROSE	Fruit	400.0	2500.0	-0.7290899750660653	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	SUGARS	Seed	44200.0	116700.0	1.5985696687508122	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
0	SUGARS	Fruit	9300.0	49300.0	-0.6806989154641467	Singh, J., Gupta, K., and Arora, S.K. 1993. Changes in the anti-nutritional factors of developing seeds and pod walls of fenugreek (<i>Trigonella foenum graecum</i> L.). <i>Plant Foods for Human Nutrition</i> . 46: 77-84, 1994.
14	SULFUR	Plant		1670.0	-0.9306686293994814	--
5	SUPEROXIDE-DISMUTASE	Root				--
31	THIAMIN	Seed	3.0	14.0	1.769297997513126	--
0	THIAMINE	Seed	2.0	13.5	1.6513171973517773	--
4	THREONINE	Leaf				--
4	THREONINE	Seed	8980.0	9880.0	0.3897985305096268	--
1	TIGOGENIN	Stem				--
1	TIGOGENIN	Root				--
1	TIGOGENIN	Tissue Culture				--
1	TIGOGENIN	Seed				--
1	TIGOGENIN	Pericarp				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	TIGOGENIN	Leaf				--
4	TIN	Seed	0.6	4.2	-0.03659983312250558	--
0	TRIGOFOENOSIDE-A	Seed				--
0	TRIGOFOENOSIDE-B	Seed				--
0	TRIGOFOENOSIDE-C	Seed				--
0	TRIGOFOENOSIDE-D	Seed				--
0	TRIGOFOENOSIDE-F	Seed				--
0	TRIGOFOENOSIDE-G	Seed				--
0	TRIGOFOENOSIDES	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TRIGOFORIN	Plant				--
0	TRIGOFORIN	Stem		20.0		--
0	TRIGONELLA-FOENUM- GRACEUM-FLAVONE- GLYCOSIDE	Seed		600.0		--
0	TRIGONELLA-FOENUM- GRACEUM- GALACTOMANNAN	Seed				--
0	TRIGONELLA- GALACTOMANNAN	Seed				--
0	TRIGONELLA-GLYCOSIDE- B	Plant				--
0	TRIGONELLIC-ACID	Seed				--
15	TRIGONELLINE	Seed	1300.0	4000.0	0.5052704240518459	--
15	TRIGONELLINE	Plant				--
15	TRIGONELLINE	Tissue Culture				--
15	TRIGONELLINE	Cotyledon				--
0	TRIGONELLOSIDE-C	Seed				--
0	TRIGONELLOSIDE-C	Plant				--
0	TRIGONELLOSIDES	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TRILLIN	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRYPSIN-INHIBITOR-TFI-A-8	Seed				--
0	TRYPSIN-INHIBITOR-TFI-N-2	Seed				--
29	TRYPTOPHAN	Leaf				--
29	TRYPTOPHAN	Seed	2800.0	4300.0	0.3324763239301246	--
8	TYROSINE	Seed	6410.0	8400.0	0.15261517141910913	--
0	TYROSINE-AMMONIA-LYASE	Tissue Culture				--
0	UNDECANE	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	URIDINE-DIPHOSPHOGALACOSE-4-EPIMERASE	Sprout Seedling				--
3	VALINE	Leaf				--
3	VALINE	Seed	9410.0	12120.0	0.013358445643284094	--
1	VERBASCOSCE	Plant				--
0	VICENIN-1	Seed				--
0	VICENIN-1	Plant				--
12	VICENIN-2	Seed				--
12	VICENIN-2	Plant				--
1	VITAMIN-K	Plant	50.0	200.0		--
18	VITEXIN	Stem				--
18	VITEXIN	Plant				--
18	VITEXIN	Seed		300.0		--
0	VITEXIN-2'-O-P-COUMARATE	Plant				--
0	VITEXIN-2'-O-P-COUMARATE	Seed				--
0	VITEXIN-7-GLUCOSIDE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VITEXIN-7-GLUCOSIDE	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	VITEXIN-7-O-BETA-D-GLUCOSIDE	Seed		200.0		--
0	VITEXIN-CINNAMATE	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	WATER	Seed		870000.0	2.465129523290464	--
3	XANTHOPHYLL	Leaf		400.0		--
3	XYLOSE	Plant				--
0	YAMOGENIN	Root				--
0	YAMOGENIN	Stem				--
0	YAMOGENIN	Leaf				--
0	YAMOGENIN	Seed		3100.0		--
0	YAMOGENIN-3,26-BIGLYCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	YAMOGENIN-TETROSIDES	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	YUCCAGENIN	Seed		18.0		--
77	ZINC	Seed				--