

P **Cyamopsis tetragonoloba**

Common Name(s)

Cluster-Bean, Guar, Siam-Bean

How Used

F

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
0	2,3,4-TRIHYDROXY-BENZOIC-ACID	Leaf	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	3-EPIKATONIC-ACID	Seed	--	--	Coxon, D. T., Wells, J. W. 1980. 3-epikatonic acid from Guar Meal, Cyamopsis tetragonoloba. Phytochemistry, 19: 1247-1248.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
0	7-O-BETA-(2-RHAMNOSYL-GLUCOSYL)-MYRICETIN	Leaf	--	--		Singh, J., Kaushal, G. P., Sood, R. 1989. A New Flavonol Glycoside from Guar (Cyamopsis tetragonoloba L. Taub). J Indian Chem Soc, 66(11): 833-834.
0	7-O-BETA-(2-RHAMNOSYL-GLUCOSYL)-MYRICETIN	Seed	--	--		Singh, J., Kaushal, G. P., Sood, R. 1989. A New Flavonol Glycoside from Guar (Cyamopsis tetragonoloba L. Taub). J Indian Chem Soc, 66(11): 833-834.
0	7-O-BETA-D-GLUCOSIDE-3-O-(2-DIRHAMNOSYL-GLUCOSYL)-KAEMPFEROL	Leaf	--	--		Singh, J., Kaushal, G. P. 1992. A New Flavonoltetraglycoside From Guar (Cyamopsis tetragonoloba) Leaves. J Indian Chem Soc, 69(6): 345-346.
112	ASCORBIC-ACID	Fruit	--	490	-0.2540222790363039	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
112	ASCORBIC-ACID	Shoot	--	2800	-0.23555395280964694	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	ASH	Shoot	75000	80000	-0.5227382651464656	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Fruit	--	14000	-1.1047928929878599	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Leaf	144000	165000	0.8130765270791607	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	33000	43000	-0.14678225213812016	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	ASTRAGALIN	Seed	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
7	ASTRAGALIN	Leaf	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
53	BETA-CAROTENE	Shoot	--	11	-0.67444401420904678	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Fruit	--	2	-0.14693466516508752	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
102	CAFFEIC-ACID	Seed	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
28	CALCIUM	Fruit	--	1300	-0.5898896055857143	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
28	CALCIUM	Leaf	--	24200	0.3937598773084697	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Shoot	7430	19800	0.3692304919069643	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Shoot	697000	782000	1.0817725502152693	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Fruit	--	122000	-3.5340739619094204	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Leaf	574000	707000	0.7566939770077538	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
77	CHLOROGENIC-ACID	Seed	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
77	CHLOROGENIC-ACID	Leaf	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
6	CONIFERYL-ALCOHOL	Fruit	--	--		Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonolobus). Plant Biochem J, 5: 140-145.
0	DAIDZEIN-7-O-BETA-D-GLUCOSIDE	Leaf	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
51	ELLAGIC-ACID	Seed	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	FAT	Fruit	--	2000	-0.6259762506792121	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Leaf	--	9000	-0.9457674024745288	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	--	27000	-1.255672714114354	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Shoot	2400	24000	-0.4258935674266053	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Leaf	97000	228000	0.8219169280936776	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Shoot	131000	258000	0.8880777335227723	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Fruit	--	23000	-1.1198873805281946	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
0	FLUROACETIC-ACID	Gum	--	9.5	Vartiainen, T., Gynther, J. 1984. Fluoroacetic Acid in Guar Gum. Food Chem Toxicol, 22(4): 307-308.
0	FLUROACETIC-ACID	Fruit	--	1	Vartiainen, T., Gynther, J. 1984. Fluoroacetic Acid in Guar Gum. Food Chem Toxicol, 22(4): 307-308.
62	GALLIC-ACID	Fruit	--	--	Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonolobus). Plant Biochem J, 5: 140-145.
62	GALLIC-ACID	Seed	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
8	GENTISIC-ACID	Fruit	--	--	Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonolobus). Plant Biochem J, 5: 140-145.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	GUARAN	Seed	--	--		Karaw-Ya, M. S., Ammar, N. M., Al-Okbl, S. Y. 1994. Studies on Guaran as Hypoglycemic Agent. Fac. Pharmacy, Cairo University, Cairo 11562 Egypt. Egypt J Food Sci, 22(1): 1-12.
6	IRON	Shoot	--	331	-0.2250517161113515	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	IRON	Fruit	--	58	-0.29741781491919245	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	JUGLANIN	Fruit	--	--		Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonolobus). Plant Biochem J, 5: 140-145.
75	KAEMPFEROL	Fruit	--	--		Daniel, M. 1989. Polyphenols of Some Indian Vegetables. Curr Sci, 58(23): 1332-1334.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
0	KAEMPFEROL-3-O-RUTINOSIDE	Seed	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	KAEMPFEROL-3-O-RUTINOSIDE	Leaf	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	KAEMPFEROL-7-O-BETA-D-GLUCOSIDE-3-GLYCOSIDE	Leaf	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	KAEMPFEROL-7-O-BETA-D-GLUCOSIDE-3-GLYCOSIDE	Seed	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
27	LINOLEIC-ACID	Seed Oil	--	472000	0.3180948503279217	Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.
0	MYRICETIN-7-O-BETA-D-GLUCOSIDE-3-GLYCOSIDE	Seed	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	MYRICETIN-7-O-BETA-D-GLUCOSIDE-3-GLYCOSIDE	Leaf	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
6	MYRISTIC-ACID	Seed Oil	--	--		Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.

Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference	Citation
18	OLEIC-ACID	Seed Oil	--	290000	-0.16298033837697343	Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.
25	P-COUMARIC-ACID	Silk Stigma Style	--	--	--	Kandasamy, M. K. 1986. The Stigmatic Exudate of Cyamopsis tetragonoloba L. Taub. Biochem Physiol Pflanz, 181(8): 571-575.
0	P-COUMAROYL-QUINIC-ACID	Leaf	--	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	P-HYDROXYCINNAMYL-ALCOHOL	Fruit	--	--	--	Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonoloba). Plant Biochem J, 5: 140-145.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
13	PALMITIC-ACID	Seed Oil	--	179000	-0.01895036765611912	Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.
4	PHOSPHORUS	Leaf	--	2700	-0.41791805519896574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Shoot	1600	2855	-0.24195509734336013	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Fruit	--	500	-0.8249556409969647	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Shoot	--	19100	-0.3338334397526517	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Shoot	119000	211000	0.0029003981990752305	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
0	PROTEIN	Fruit	--	37000	-0.9718744540749881	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Leaf	225000	252000	0.4005844311513218	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Seed	242000	362000	1.1404403733742927	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
43	PROTOCATECHUIC-ACID	Fruit	--	--		Bajaj, K. L., Rani, M., Arora, Y. K. 1978. Polyphenols and Lignins of Mature Guar Pods (Cyamopsis tetragonolobus). Plant Biochem J, 5: 140-145.
176	QUERCETIN	Fruit	--	--		Daniel, M. 1989. Polyphenols of Some Indian Vegetables. Curr Sci, 58(23): 1332-1334.
0	QUERCETIN-3-O-BETA-D-RUTINOSIDE	Leaf	--	--		Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference	Citation
8	STEARIC-ACID	Seed Oil	--	58000	-0.46568311898509607	Varade, P. B., Misra, B. K., Sikka, K. C., Singh, S. P. 1984. Nutritive Assessment of Guar Oil (Cyamopsis tetragonoloba L. Taub). J Agr Food Chem, 32(5): 1073-1075.
0	TEXASIN-7-O-BETA-D-GLUCOSIDE	Leaf	--	--	--	Kaushal, G. P., Bhatia, I. S. 1982. A Study of Polyphenols in the Seeds and Leaves of Guar (Cyamopsis tetragonoloba L. Taub). J Sci Food Agr, 33: 461-470.
0	WATER	Fruit	--	825000	0.236641791750783	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses