

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Punica granatum

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
176	QUERCETIN	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
176	QUERCETIN	Plant				--
176	QUERCETIN	Leaf				--
176	QUERCETIN	Fruit				--
112	ASCORBIC-ACID	Fruit Juice				--
112	ASCORBIC-ACID	Fruit	40.0	636.0	-0.24494443809781474	--
102	CAFFEIC-ACID	Fruit Juice				--
102	CAFFEIC-ACID	Plant				--
102	CAFFEIC-ACID	Leaf				--
101	APIGENIN	Leaf				--
89	URSOLIC-ACID	Leaf		4500.0	-0.31429246959919654	--
89	URSOLIC-ACID	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
89	URSOLIC-ACID	Seed				--
89	URSOLIC-ACID	Pericarp		6000.0		Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
89	URSOLIC-ACID	Flower				--
87	RUTIN	Plant				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
87	RUTIN	Leaf				--
87	RUTIN	Fruit Juice				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
78	LUTEOLIN	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
78	LUTEOLIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
78	LUTEOLIN	Leaf				--
78	LUTEOLIN	Plant				--
77	CHLOROGENIC-ACID	Leaf				--
77	CHLOROGENIC-ACID	Fruit Juice				--
77	CHLOROGENIC-ACID	Fruit				--
75	KAEMPFEROL	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
75	KAEMPFEROL	Leaf				--
75	KAEMPFEROL	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
75	KAEMPFEROL	Plant				--
65	MAGNESIUM	Fruit		120.0	-0.9306249231592199	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
64	OLEANOLIC-ACID	Flower				--
62	GALLIC-ACID	Fruit Juice				--
62	GALLIC-ACID	Pericarp	900.0	40000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
61	FERULIC-ACID	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
51	ELLAGIC-ACID	Seed				--
51	ELLAGIC-ACID	Bark				--
51	ELLAGIC-ACID	Fruit				--
51	ELLAGIC-ACID	Stem Bark				Chemical Constituents of Oriental Herbs (3 diff. books)
51	ELLAGIC-ACID	Pericarp				--
51	ELLAGIC-ACID	Leaf				--
51	ELLAGIC-ACID	Flower				--
47	BETA-SITOSTEROL	Seed				--
47	BETA-SITOSTEROL	Leaf				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
47	BETA-SITOSTEROL	Bark				--
47	BETA-SITOSTEROL	Flower				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
47	BETA-SITOSTEROL	Fruit	16.0	800.0	0.2568637245861479	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
47	BETA-SITOSTEROL	Stem Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
43	PROTOCATECHUIC-ACID	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
43	CATECHIN	Fruit Juice				--
43	CATECHIN	Leaf				--
40	EPICATECHIN	Leaf				--
40	EPICATECHIN	Fruit Juice				--
39	NIACIN	Fruit	3.0	50.0	-0.14301520764261824	--
35	TANNIN	Root		70000.0	-0.2012194983751788	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
35	TANNIN	Stem Bark	100000.0	250000.0	1.3814745788840543	--
35	TANNIN	Root Bark	20000.0	280000.0	0.8535499454737059	--
35	TANNIN	Pericarp	104000.0	336000.0	1.0	--
35	TANNIN	Leaf		110000.0	-0.006475522921307877	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
35	TANNIN	Fruit Juice		1700.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
34	MYRICETIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
31	THIAMIN	Fruit	0.0	4.0	-0.17059389090821606	--
30	ANTHOCYANINS	Fruit				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
30	POLYPHENOLS	Fruit	2200.0	10500.0	-0.7128692426675994	--
28	CALCIUM	Fruit	30.0	650.0	-0.7398838481970706	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	LINOLEIC-ACID	Seed				--
26	SEROTONIN	Fruit Juice				--
26	SEROTONIN	Seed		12.0	-1.4142135623730947	--
25	P-COUMARIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Fruit Juice				--
24	PECTIN	Pericarp	20000.0	40000.0		--
24	PECTIN	Fruit		2700.0	-0.5981917795860573	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
23	CITRIC-ACID	Fruit Juice	8100.0	12300.0	-1.0	--
23	MELATONIN	Fruit Juice				--
22	BETULINIC-ACID	Leaf		2000.0	-0.5044387413900017	--
22	BETULINIC-ACID	Bark		1500.0	-0.4974322894297812	--
22	ISOQUERCITRIN	Pericarp				--
19	INULIN	Pericarp		10000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
19	INULIN	Petiole		10000.0		--
19	CYANIDIN-3-O-GLUCOSIDE	Fruit Juice				--
18	OLEIC-ACID	Seed				--
18	CINNAMIC-ACID	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
18	MANNITOL	Twig		5000.0		Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
18	MANNITOL	Pericarp	8000.0	19000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	METHYL-GALLATE	Heart Wood				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
15	MALIC-ACID	Fruit Juice				--
15	MALIC-ACID	Fruit				--
15	RIBOFLAVIN	Fruit	0.0	4.0	-0.21615825716438572	--
15	FIBER	Seed		224000.0	0.7045056542441206	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	METHIONINE	Fruit				--
15	FIBER	Fruit	2000.0	232000.0	0.8523370851423435	--
14	SUCROSE	Fruit				--
14	GAMMA-TOCOPHEROL	Seed				--
14	POTASSIUM	Fruit	1330.0	18950.0	0.09143685961055947	--
14	SULFUR	Fruit		120.0	-0.900998529900953	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	COUMESTROL	Seed				--
13	COUMESTROL	Plant				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
13	CORILAGIN	Leaf				--
13	LIGNIN	Seed				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
13	PALMITIC-ACID	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	NARINGIN	Plant				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
12	STIGMASTEROL	Seed				--
12	PELLETIERINE	Bark				--
12	PUNICALAGIN	Root Bark				--
12	PUNICALAGIN	Bark				--
12	PUNICALAGIN	Leaf				--
12	COPPER	Fruit		2.0	-0.8420331371823149	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	PELLETIERINE	Root Bark				--
12	PELLETIERINE	Leaf				--
12	NARINGIN	Leaf				--
12	PUNICALAGIN	Stem Bark		1400.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
12	PELLETIERINE	Stem Bark				--
12	PUNICALAGIN	Pericarp				--
11	TESTOSTERONE	Seed				--
11	SORBITOL	Plant				--
11	SORBITOL	Twig		9100.0		--
11	PANTOTHENIC-ACID	Fruit	6.0	31.0	0.8225607496139891	USDA's Ag Handbook 8 and sequela)
9	OXALIC-ACID	Fruit		140.0	-0.2986291034837599	--
9	PEDUNCULAGIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	DELPHINIDIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
9	PEDUNCULAGIN	Stem Bark		80.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
8	ELLAGITANNIN	Stem Bark				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.
8	STEARIC-ACID	Seed				--
8	ESTRONE	Seed	4.0	17.0	1.0	--
8	ELLAGITANNIN	Bark				--
8	FRUCTOSE	Fruit				--
8	FRUCTOSE	Fruit Juice				--
8	ELLAGITANNIN	Leaf				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
8	PUNICIC-ACID	Seed	26395.0	147100.0	1.0	--
7	PELARGONIDIN	Leaf				--
7	TELLIMAGRANIN-I	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
7	CYANIDIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	PUNICALIN	Root Bark				--
7	SUCCINIC-ACID	Fruit				--
7	TELLIMAGRANIN-I	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
7	PUNICALIN	Bark				--
7	GLUCOSE	Fruit Juice				--
7	PUNICALIN	Leaf				--
7	GLUCOSE	Fruit	50000.0	110000.0	0.27238028821747395	--
7	FUMARIC-ACID	Fruit				--
7	PUNICALIN	Stem Bark		550.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
7	SALICYLATES	Fruit	0.7	3.5	-0.32670591582127445	--
7	PUNICALIN	Pericarp				--
7	CHLORINE	Fruit		20.0	-0.688701507537518	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	MALVIDIN	Fruit				--
6	QUERCIMERITRIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
6	IRON	Fruit	3.0	16.0	-0.4640204950877506	USDA's Ag Handbook 8 and sequelae)
6	MASLINIC-ACID	Flower				--
6	TARTARIC-ACID	Fruit				--
6	ESTRIOL	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	DAUCOSTEROL	Flower				--
5	STARCH	Seed		0.0	-1.2559710465133322	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	ISOPELLETIERINE	Bark				--
5	DAUCOSTEROL	Seed				--
4	CASUARININ	Stem Bark		3200.0		--
4	CASUARININ	Plant				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	CASUARININ	Bark				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
4	1,2,6-TRI-O-GALLOYL-BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
4	TRYPTAMINE	Fruit Juice				--
4	CALCIUM-OXALATE	Petiole		40000.0		--
4	CASUARININ	Leaf				--
4	PHOSPHORUS	Fruit	80.0	3182.0	-0.010325528528400199	--
4	CALCIUM-OXALATE	Pericarp		40000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	ESTRADIOL	Seed				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
3	FLUORIDE	Plant	0.2	0.3	-0.8323167879989225	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	VALINE	Fruit				--
3	MUCILAGE	Petiole	6000.0	340000.0		--
3	MUCILAGE	Pericarp	6000.0	340000.0		--
3	CONJUGATED-LINOLEIC-ACID	Seed				--
2	BREVIFOLIN	Leaf				--
2	EPIGALLOCATECHIN-3-GALLATE	Leaf				--
2	1,2,3,4,6-PENTA-O-GALLOYL-BETA-D-GLUCOSE	Leaf				--
2	GRANATIN-A	Leaf				--
2	EPIGALLOCATECHIN-3-GALLATE	Fruit Juice				--
2	PHOSPHATIDYL-CHOLINE	Seed				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
2	MALTOSE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	GRANATIN-A	Pericarp				--
2	FRIEDELIN	Stem Bark				--
2	NEO-CHLOROGENIC-ACID	Fruit				--
2	ELAIDIC-ACID	Pericarp		5500.0		Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
2	FRIEDELIN	Bark				--
2	CONIINE	Plant				Willaman, J. J., Schubert, B. G. 1961. Alkaloid Bearing Plants and their Contained Alkaloids. ARS, USDA, Tech. Bull. 1234, Supt. Doc., Washington D.C.
2	PHYTOSTEROLS	Fruit	170.0	892.0	-0.06876203739451835	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Seed				--
1	STRICTININ	Leaf				--
1	PUNICACORTEIN-C	Stem Bark		950.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
1	PUNICAFOLIN	Plant				--
1	CASTALAGIN	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
1	ASIATIC-ACID	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
1	GLYCERIN	Twig		300.0		Hegnauer, R. 1962-1997. Chemotaxonomie der Pflanzen, Bde 1-11. Birkhauser Verlag Basel, Boston, Berlin.
1	ASIATIC-ACID	Flower				--
1	CHOLESTEROL	Seed				--
1	SODIUM	Fruit	9.0	350.0	-0.1507606795341949	--
1	ETHYL-BREVIFOLIN-CARBOXYLATE	Flower				--
1	CYANIDIN-3-RUTINOSIDE	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
1	QUINIC-ACID	Leaf				--
1	PUNICAFOLIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PROCYANIDIN-B-2	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
1	17-BETA-ESTRADIOL	Seed				--
1	QUINIC-ACID	Fruit				--
1	DELPHINIDIN-3-GLUCOSIDE	Fruit				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
1	PROCYANIDIN-B-1	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
1	CATECHINS	Fruit				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
1	TELLIMAGRANIN	Leaf				--
1	PUNICACORTEIN-C	Root Bark				--
1	PUNICACORTEIN-C	Bark				--
1	BORIC-ACID	Fruit		50.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	BREVIFOLIN-CARBOXYLIC-ACID	Leaf				--
1	1,2,4,6-TETRA-O-GALLOYL-BETA-D-GLUCOSE	Leaf				--
0	PUNICACORTEIN-B	Root Bark				--
0	FAT	Seed	50000.0	200000.0	-0.34441983215421706	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GRANATIN-B	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PUNICACORTEINS	Stem Bark				--
0	MALVIDIN-PENTOSE-GLYCOSIDE	Fruit Juice				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	D-MANNITOL	Root				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	D-MANNITOL	Stem Bark				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	EICOSENOIC-ACID	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNICIC-ACID-(CIS-9,TRANS-11,CIS-13-OCTADECATRIENOIC-ACID)	Seed				--
0	CEREBROSIDE	Seed				--
0	L-MALIC-ACID	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PHOSPHATIDYL-INOSITOL	Seed				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	INVERT-SUGARS	Fruit	80000.0	200000.0	-0.011529771646811144	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	3'-O-METHYL-3,4-METHYLENE-ELLAGIC-ACID	Heart Wood				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	GRANATINS	Leaf		15000.0		Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	GALLOCATECHIN-(4,8)-GALLOCATECHIN	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNICACORTEIN-B	Bark				--
0	FAT	Fruit	1000.0	38000.0	-0.3510111464027894	--
0	BETULIC-ACID	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	D-MANNITOL	Leaf				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	PUNICACORTEINS	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DI-O-PUNICYL-O-OCTADEC-8Z,11Z,13E-TRIENYLGLYCEROL	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNICACORTEIN-B	Stem Bark		30.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	LUTEOLIN-7-O-GLYCOSIDE	Leaf				--
0	LUTEOLIN-3'-O-BETA-D-XYLOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	BREVIFOLIN-CARBOXYLIC-ACID-10-MONOSULPHATE	Leaf				--
0	HYGRINE	Root Bark				--
0	1-O-ISOPENTYL-3-O-OCTADEC-2-ENOYL-GLYCEROL	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	GRANATIN-B	Pericarp				--
0	GALLOCATECHIN-(4,8)-CATECHIN	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	SINAPYL-9-O-[BETA-D-APIOFURANOSYL(1-6)]-O-BETA-D-GLUCOPYRANOSIDE	Seed				--
0	PUNICACORTEIN-A	Root Bark				--
0	CASUARIIN	Stem Bark		900.0		--
0	BETULIC-ACID	Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-MANNITOL	Bark				--
0	QUERCETIN-3-O-RUTINOSIDE	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PSEUDOPELLETIERINE	Bark				--
0	DIELLAGIC-ACID-RHAMNOSYL-(1-4)-GLUCOSIDE	Heart Wood				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	APIGENIN-4'-O-BETA-GLUCOPYRANOSIDE	Leaf				--
0	PUNICACORTEIN-A	Stem Bark		30.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	CONIFERYL-9-O-[BETA-D-APIOFURANOSYL(1-6)]-O-BETA-D-GLUCOPYRANOSIDE	Seed				--
0	LUTEOLIN-4'-O-BETA-D-GLUCOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	2,3(S)-HEXAHYDROXY-DIPHENOYL-D-GLUCOSE	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	LUTEOLIN-4'-O-BETA-GLUCOPYRANOSIDE	Leaf				--
0	GALLOCATECHIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SITOSTEROL-BETA-D-GLUCOSIDE	Flower				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	ALKALOIDS	Stem Bark	1000.0	6000.0	-1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PUNICACORTEIN-A	Bark				--
0	METHYL-ISOPELLETERINE	Stem Bark				--
0	1,3,4-TRI-O-GALLOYL-BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	CYANIDIN-3-GLUCOSIDE	Fruit				--
0	GUMS	Pericarp		32000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	QUERCETIN-3,4'-DIMETHYLETHER-7-O-ALPHA-L-ARABINOFURANOSYL(1,6) BETA-D-GLUCOSIDE	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	POMEGRANATATE	Flower				--
0	CASUARIIN	Plant				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	LUTEOLIN-3'-O-BETA-D-GLUCOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PELARGONIDIN-3-GLUCOSIDE	Seed				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	APIGENIN-4'-O-BETA-D-GLUCOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	2-(2-PROPENYL)-DELTA-PIPERIDEINE	Root Bark				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	2,3(S)-HEXAHYDROXY-DIPHENOYL-D-GLUCOSE	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	LUTEOLIN-3'-O-BETA-XYLOPYRANOSIDE	Leaf				--
0	ALKALOIDS	Pericarp		1500.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	PSEUDOPELLETIERINE	Root Bark				--
0	ASH	Fruit	5000.0	35858.0	-0.5387723889485007	USDA's Ag Handbook 8 and sequelae)
0	5-O-GALLOYL-PUNICACORTEIN	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	FRIEDOOLEANAN-3-ONE	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3,6-(R)-HEXAHYDROXYDIPHENOYL-(ALPHA,BETA)-1C-4-GLUCOPYRANOSE	Leaf				--
0	1,4,6-TRI-O-GALLOYL-BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	CYANIDIN-3,5-DIGLUCOSIDE	Fruit				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	PROTEIN	Seed		25000.0	-1.8573491515252696	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CYCLIC-2,4,3,6-BIS(4,4',5,5',6,6'HEXAHYDROXYL[1,1'-BIPHENYL]2,2'-DICARBOXYLATE)1(3,4,5-TRIHYDROXYBENZOATE)BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	3,3',4'-TRI-O-METHYLELLAGIC-ACID	Seed				--
0	PHOSPHOLIPIDS	Seed				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	3,4,8,9,10-PENTAHYDROXYDIBENZO(B,D)-PYRAN-6-ONE	Leaf				--
0	CASUARIIN	Bark				--
0	PELARGONIDIN-3,5-DIGLUCOSIDE	Flower				--
0	2,3(S)-HEXAHYDROXY-DIPHENOYL-D-GLUCOSE	Root Bark		550.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LUTEOLIN-3'-O-BETA-GLUCOPYRANOSIDE	Leaf				--
0	SEDRIDINE	Root Bark				--
0	PIPERIDINES	Stem Bark		4000.0		--
0	PROLINE	Fruit				--
0	GALLAGYL-DILACTON	Leaf				--
0	2-O-GALLOYL-4,6(S,S)-GALLAGOYL-D-GLUCOSE	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	FLAVONOLS	Fruit				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
0	N-METHYLPELLETIERENE	Root Bark				--
0	PROTEIN	Fruit	7700.0	73000.0	-0.4892787997804384	--
0	3,3'-DI-O-METHYL-ELLAGIC-ACID	Seed				--
0	2-(2'-HYDROXYPROPYL-DELTA-1)-PIPERDEINE	Root Bark				--
0	17-BETA-ESTRIOL	Seed				--
0	1,4,6-TRI-O-GALLOYL-BETA-4C-1-GLUCOPYRANOSE	Leaf				--
0	CAROTENE	Fruit	0.0	2.0	-0.5854598228654656	--
0	GALLOTANNINS	Pericarp	200000.0	280000.0		--
0	PHENETHYL-RUTINOSIDE	Seed				--
0	ARACHIDIC-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRITERPENOIDS	Flower				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	RESINS	Pericarp		45000.0		--
0	FLAVONOIDS	Fruit				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
0	1,2,4-TRI-O-GALLOYL-BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	ISOQUERCETRIN	Pericarp				--
0	N-METHYLPELLETIERENE	Bark				--
0	DELPHINIDIN-3-O-GLUCOSIDE	Fruit Juice				--
0	PIPERIDINES	Root Bark		8000.0		--
0	O-COUMARINIC-ACID	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	2-(2'-PROPENYL)-DELTA-1-PIPERIDEINE	Root Bark				--
0	NORPSEUDOPELLETIERINE	Root Bark				--
0	LINOLENIC-ACID	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNICACORTEIN-D	Root Bark				--
0	KAEMPFEROL-3-O-RHAMNOGLYCOSIDE	Leaf				--
0	1,2,6-TRI-O-GALLOYL-BETA-4C-1-GLUCOPYRANOSE	Leaf				--
0	CARBOHYDRATES	Fruit	162000.0	927000.0	0.770674732143034	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PUNIGLUCONIN	Stem Bark		140.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	(-)-PELLETIERINE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	METHYL-PELLETIERINE	Bark				--
0	PSEUDOPELLETIERINE	Stem Bark				--
0	ALKALOIDS	Root Bark	1000.0	30000.0	1.4120424732511911	--
0	1-(2,5-DIHYDROXY-PHENYL)-PYRIDIUM-CHLORIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNIGLUCONIN	Bark				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	FLAVONES	Fruit				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
0	1,2,3-TRI-O-GALLOYL-BETA-D-GLUCOSE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	N-(2',5'-DIHYDROXYPHENYL)-PYRIDIUM-CHLORIDE	Leaf				--
0	DELPHINIDIN-3,5-DI-O-GLUCOSIDE	Fruit Juice				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WAX	Pericarp		8000.0	1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	17-ALPHA-ESTRADIOL	Seed				--
0	NORHYGRINE	Root Bark				--
0	6-O-GALLOYL-2,3-(S)-HEXAHYDROXYDIPHENOYL-D-GLUCOSE	Stem Bark		50.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	PUNICACORTEIN-D	Bark				--
0	FLAVOGALLOL	Pericarp				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	KAEMPFEROL-3-O-GLYCOSIDE	Leaf				--
0	METHYL-ISOPELLETERINE	Bark				--
0	DELPHINIDIN-3,5-DIGLUCOSIDE	Pericarp				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	FLAVAN-3-OL	Leaf				--
0	2-(2-PROPENYL)-DELTA-PIPERIDEINE	Leaf				--
0	2-O-GALLOYLPUNICALIN	Leaf				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	TRI-O-PUNICYLGLYCEROL	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,3,4,5-TETRAHYDRO-6-PROPENYL-PYRIDINE	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	CIS-9,TRANS-11,CIS-13-TRIENE-ACID	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	WATER	Seed		350000.0	0.46967261430564855	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	NARINGENIN-4'-METHYLEETHER-7-O-ALPHA-L-ARABINOFURANOSYL(1,6) BETA-D-GLUCOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	1,2,3-TRI-O-GALLOYL-BETA-4C1-GLUCOSE	Leaf				--
0	LIGNAN	Seed				Newman, R. A., Lansky, E. P., with Block, M. L. 2007. Pomegranate - The Most Medicinal Fruit. Basic Health Publications, Laguna Beach, CA. 120 pp.
0	2-O-GALLOYLPUNICALIN	Stem Bark		1100.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	CONJUGATED-LINOLENIC-ACID	Seed				--
0	PELARGONIDIN-3-O-GLUCOSIDE	Fruit Juice				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-MANNITOL	Stem				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	FLAVAN-3-OL	Fruit				--
0	2-(2-PROPENYL)-DELTA'-PIPERIDEINE	Leaf				--
0	TERMINALIN-GALLAYLDILACTONE	Pericarp				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	ESCHWEILENOL-C	Heart Wood				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	2,3,4,5-TETRAHYDRO-A-METHYL-2-PYRIDINE-ETHANOL	Stem Bark				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	WATER	Fruit	780000.0	823220.0	0.22890218513627894	--
0	(-)-CATECHIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	3,3',4'-TRI-O-METHYLELLAGIC-ACID	Flower				--
0	STYPTIC-ACID	Flower				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	P-COUMARINIC-ACID	Fruit				--
0	ICARISIDE-D1	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PUNICACORTEIN-D	Stem Bark		60.0		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	PELARGONIDIN-3,5-DI-O-GLUCOSIDE	Fruit Juice				--
0	D-MANNITOL	Seed				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
0	METHYL-PELLETIERINE	Stem Bark				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	TERCATAIN	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	ERIODICTYOL-7-O-ALPHA-L-ARABINOFURANOSYL-(1,6)-BETA-D-GLUCOSIDE	Leaf				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	PUNIGLUCONIN-2,3-DI-O-GALLOYL-4,6-(S)-HEXAHYDROXYDIPHENOYLGLUCONIC-ACID	Bark				--
0	GUM	Petiole		32000.0		--
0	CYANIDIN-3,5-DI-O-GLUCOSIDE	Fruit Juice				--
0	VIT-B-6	Fruit	1.0	5.0	-0.538913394725687	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHOSPHATIDYL-SERINE	Seed				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
0	CATECHIN-(4,8)-GALLOLATECHIN	Fruit				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.
0	1,2,3-TRI-O-GALLOYL-BETA-4C-1-GLUCOPYRANOSE	Leaf				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	1-O-TRANS,CIS,TRANS-OCTADECATRIENOL-GLYCEROL	Seed				Seeram, N. P., Schulman, R. N., and Heber, D., eds. 2006. Pomegranates - Ancient Roots to Modern Medicine. Taylor & Francis. Boca Raton, FL. 244 pp.