

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

**Chemicals Found in Phyllanthus emblica**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-6-DI-O-GALLOYL-GLUCOSE	Shoot	--	--		
0	3-6-DI-O-GALLOYL-GLUCOSE	Fruit	--	--		
3	ALANINE	Fruit	240	1190	-0.9894482876135823	
0	AMLAIC-ACID	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	ARGININE	Fruit	176	871	-0.917246591835053	
112	ASCORBIC-ACID	Plant	--	15610	3.070904500002226	
112	ASCORBIC-ACID	Fruit	110	27293	1.4125076570892114	
0	ASH	Fruit	4000	25000	-0.8199440713009283	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ASPARTIC-ACID	Fruit	361	1785	-1.1000857447014651	
7	ASTRAGALIN	Leaf	--	--		
53	BETA-CAROTENE	Fruit	--	4	-0.1430687011995372	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
47	BETA-SITOSTEROL	Seed Oil	--	--		
47	BETA-SITOSTEROL	Bark	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Tissue Culture	--	5500	1.4141523521229236	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
47	BETA-SITOSTEROL	Shoot	--	--		
4	BORON	Fruit	2	11	-0.582433861690495	
28	CALCIUM	Fruit	120	2660	-0.2760554979681074	
0	CARBOHYDRATES	Fruit	141000	952000	0.9043625797844146	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	CHEBULAGIC-ACID	Fruit	--	--		
8	CHEBULAGIC-ACID	Shoot	--	--		
0	CHEBULAGINIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CHEBULIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CHEBULININIC-ACID	Fruit	--	--		
0	CHIBULINIC-ACID	Shoot	--	--		
0	CHIBULINIC-ACID	Fruit	--	--		
0	CHLORIDE	Fruit	355	1757	1	
12	COPPER	Fruit	3	14	0.0919201936132837	
0	CORILAGIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	CORILAGIN	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	CORILAGIN	Fruit	--	--		
2	CYSTINE	Fruit	--	--	-1.075785675630745	
0	D-FRUCTOSE	Fruit	--	--		
1	D-GLUCOSE	Fruit	--	--		
51	ELLAGIC-ACID	Leaf	--	--		
51	ELLAGIC-ACID	Pericarp	--	--		
51	ELLAGIC-ACID	Root	--	--		
51	ELLAGIC-ACID	Shoot	--	--		
51	ELLAGIC-ACID	Fruit	--	--		
0	EMBLICOL	Pericarp	--	45000		
0	EMBLICOL	Fruit	--	--		
5	ETHYL-GALLATE	Fruit	--	--		Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
0	FAT	Seed	160000	160000	-0.5551141401218788	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	FAT	Fruit	1000	31000	-0.40447658334542713	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Fruit	19000	180000	0.3616400888989561	
62	GALLIC-ACID	Pericarp	--	50000	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
62	GALLIC-ACID	Fruit	50000	50000	1.434639526593213	
62	GALLIC-ACID	Shoot	--	--		
1	GALLIC-ACID-ETHYL-ESTER	Fruit	--	800		
1	GALLIC-ACID-ETHYL-ESTER	Tissue Culture	3700	5200		
2	GALLO-TANNIN	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GIBBERELLIN-A-1	Fruit	--	--		
0	GIBBERELLIN-A-3	Fruit	--	--		
0	GIBBERELLIN-A-4	Fruit	--	--		
0	GIBBERELLIN-A-7	Fruit	--	--		
0	GIBBERELLIN-A-9	Fruit	--	--		
0	GLUCOGALLIN	Fruit	--	--		
0	GLUCOGALLIN	Shoot	--	--		
7	GLUCOSE	Fruit	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	GLUTAMIC-ACID	Fruit	1320	6535	-0.5216116668720676	
12	GLYCINE	Fruit	198	980	-1.0152885967994074	
7	HISTIDINE	Fruit	133	658	-0.7394079114058618	
6	IRON	Fruit	5	163	0.11908888550220292	
3	ISOLEUCINE	Fruit	120	595	-0.913891281353512	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
75	KAEMPFEROL	Leaf	--	--		
0	KAEMPFEROL-3-O-GLUCOSIDE	Leaf	--	--		
4	KAEMPFEROL-3-O-GLUCOSIDE	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	KILOCALORIES	Fruit	580	3650	-0.016026665378878268	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	LEUCINE	Fruit	219	1084	-0.853998735930291	
2	LEUCODELPHINIDIN	Bark	--	37500		
27	LINOLEIC-ACID	Seed Oil	--	--		
27	LINOLEIC-ACID	Seed	70400	70400	-0.3146394264392416	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LINOLENIC-ACID	Seed	14050	14050	-0.3345839698744238	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LINOLENIC-ACID	Seed Oil	--	--		
0	LUPENONE	Plant	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
21	LUPEOL	Shoot	--	--		
21	LUPEOL	Bark	--	22500		
21	LUPEOL	Root	--	--		
4	LYSINE	Fruit	170	1168	-0.7631167939493619	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	118	584	-0.7157659648622006	
14	MANGANESE	Fruit	11	55	-0.04087466469001233	
15	METHIONINE	Fruit	20	355	-0.7431930889379808	
0	MYO-INOSITOL	Fruit	--	--		
6	MYRISTIC-ACID	Seed Oil	--	--		
6	MYRISTIC-ACID	Fruit	1520	1520	-0.1974364939018999	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
39	NIACIN	Fruit	2	12	-0.6510092608917062	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NITROGEN	Fruit	1100	5445	-0.6434916315554005	
18	OLEIC-ACID	Seed	45440	45440	-0.6055567314671875	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Seed Oil	--	--		
13	PALMITIC-ACID	Seed	4785	4785	-0.6008709735774114	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Seed Oil	--	--		
24	PECTIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	PHENYLALANINE	Fruit	133	658	-0.9252092363197165	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Fruit	200	1390	-0.5546272293276797	
0	PHYLLANTIDINE	Leaf	--	--		
0	PHYLLANTIDINE	Fruit	--	--		
0	PHYLLANTIDINE	Tissue Culture	--	--		
0	PHYLLANTINE	Leaf	--	--		
0	PHYLLANTINE	Tissue Culture	--	--		
0	PHYLLANTINE	Fruit	--	--		
0	PHYLLEMBLIC-ACID	Pericarp	--	63000		
0	PHYLLEMBLIC-ACID	Fruit	--	63000		
2	PHYLLEMBLIN	Fruit	--	--		Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
0	PHYLLEMBLINIC-ACID	Fruit	40000	90000		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	POLYSACCHARIDE	Fruit	--	--		
14	POTASSIUM	Fruit	1710	13960	-0.35004652975516176	
0	PROLINE	Fruit	652	3225	-0.2147695455164916	
0	PROTEIN	Fruit	700	44000	-0.8780364101843813	
176	QUERCETIN	Tissue Culture	--	11850		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	RIBOFLAVIN	Fruit	0.4	2.5	-0.5374082228479204	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
87	RUTIN	Leaf	--	21000	0.29918212389096355	
87	RUTIN	Fruit	--	4600	-0.13011199443859983	
60	SELENIUM	Fruit	2.4	12	2.5895294903487613	
1	SERINE	Fruit	183	905	-0.9666556797940374	
0	SILICA	Fruit	235	1163	-0.3884707358229476	
1	SODIUM	Fruit	42	1384	-0.05270762079665807	
5	STARCH	Fruit	1800	8910	-0.4429700505810874	
8	STEARIC-ACID	Seed	3440	3440	-0.49075372148243196	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	STEARIC-ACID	Seed Oil	--	--		
14	SUCROSE	Fruit	2600	12970	-0.6548550166641766	
14	SULFUR	Fruit	166	820	-0.41381106614961	
35	TANNIN	Twig	--	--		
35	TANNIN	Leaf	18000	22000	-1.080775391177675	
35	TANNIN	Bark	80000	166400	0.22144501897378338	
35	TANNIN	Fruit	--	280000	1.7896551540168204	



Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	TERCHEBIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	THIAMIN	Fruit	0.3	1.9	-0.43940500331865456	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	THREONINE	Fruit	135	668	-0.9767510272502877	
0	TRIGALLOYL-GLUCOSE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
29	TRYPTOPHAN	Fruit	30	131	-1.0097054340555707	Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
8	TYROSINE	Fruit	116	575	-0.7639917451145484	
3	VALINE	Fruit	159	785	-0.756809675748331	
0	WATER	Fruit	771000	841000	0.3062112894092464	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ZEATIN	Fruit	--	--		
0	ZEATIN-NUCLEOTIDE	Fruit	--	--		
0	ZEATIN-RIBOSIDE	Fruit	--	--		
77	ZINC	Fruit	18	89	1.7659944425100138	