Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Terminalia chebula

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	ARGININE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	ARJUNOLIC-ACID	Fruit	--	--		Lu, P. P., Liu, X. G., Li, X. C., Zhang, D. C., Yokoi, T. 1992. Triterpenes of Terminalia chebula Retz. Chih Wu Hsueh Pao 34 (2): 126-132.
112	ASCORBIC-ACID	Fruit	920	920	-0.22728617216267144	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ASPARAGINE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	BEHENIC-ACID	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.
47	BETA-SITOSTEROL	Fruit	--	--		Lu, P. P., Liu, X. J., Li, X. G., Wen, J. Q. 1991. Chemical Constituents of Fruits of Terminalia chebula Retz. Shanghai Yike Daxue Xuebao 18 (3): 233-235.
47	BETA-SITOSTEROL	Bark	--	--		Beri, R. M. 1970. Phytosterol in Some Plant Materials. Indian Oil Soap J. 35: 274-275.
8	CHEBULAGIC-ACID	Fruit	--	258.6		
8	CHEBULAGIC-ACID	Leaf	2523.8	5300	1	
1	CHEBULANIN	Fruit	--	--		Tokura, K., Kagawa, S. 1993. Anticancer Agents Containing Chebulanin from Terminalia chebula. Patent-Japan Kokai Tokyo Koho-07 138,165: 4 pp.
6	CHEBULINIC-ACID	Fruit	--	11241.3		
13	CORILAGIN	Fruit	724	8500		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	CORILAGIN	Leaf	--	293	-1	Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
5	DAUCOSTEROL	Fruit	--	--		Lu, P. P., Liu, X. J., Li, X. G., Wen, J. Q. 1991. Chemical Constituents of Fruits of Terminalia chebula Retz. Shanghai Yike Daxue Xuebao 18 (3): 233-235.
51	ELLAGIC-ACID	Leaf	--	379	-0.6995114391849991	Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
51	ELLAGIC-ACID	Fruit	--	690	-0.49557477046092807	
8	FRUCTOSE	Fruit	10000	10000	-0.7809376482767042	
62	GALLIC-ACID	Fruit	--	4310	-0.8577693162343898	
62	GALLIC-ACID	Leaf	--	53.3	-0.8698914721339668	Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
1	GALLIC-ACID-ETHYL-ESTER	Fruit	--	--		
7	GLUCOSE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	ISOQUERCITRIN	Fruit	--	--		Polovyanov, G. G. 1974. Flavonoids from the Fruit of the Yellow Myrobalan Plum. Chem. Nat. Comp. 10 (5): 690-.
27	LINOLEIC-ACID	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	LINOLEIC-ACID	Seed	80100	84800	-0.1912587968305897	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	MALTOSE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	MASLINIC-ACID	Leaf	--	312.5	1.3973453443025725	Singh, C. 1990. 2-alpha-hydroxymicromeric acid, a Pentacylic Triterpene from Terminalia chebula. Phytochemistry, 29 7: 2348-2350.
18	OLEIC-ACID	Seed	200100	213000	0.7718848508656724	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.
9	OXALIC-ACID	Bark	--	--		Bharadwaj, K., Chandra, V. 1983. Comparative Incidence of Calcium Oxalate as a Source of Oxalic Acid in Barks of Seven Species of Terminalia. Biol. Mem. 8 1/2: 54-62.
25	P-COUMARIC-ACID	Plant	--	--		Kim, J. S., Lee, G. D., Kwon, J. H., Yoon, H. S. 1993. Indentification of Phenolic Antioxidative Components in Terminalia chebula Retz. Han'guk Nonghwa Hakhoe Chi 36 4: 239-243.
13	PALMITIC-ACID	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.
13	PALMITIC-ACID	Fruit	--	--		Lu, P. P., Liu, X. J., Li, X. G., Wen, J. Q. 1991. Chemical Constituents of Fruits of Terminalia chebula Retz. Shanghai Yike Daxue Xuebao 18 (3): 233-235.
24	PECTIN	Fruit	2080	2080	-0.6055528056020009	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORIC-ACID	Fruit	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	PUNICALAGIN	Fruit	--	131		Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
12	PUNICALAGIN	Leaf	--	51429	1	Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
7	PUNICALIN	Leaf	--	117	-1	Lin,T.C.,et al.1990.Tannins and Related Compounds.CII.Structures of Terchebulin, an Ellagitannin Having a Novel Tetraphenylcarboxylic Acid (Terchebulic Acid) and Biogenetically Related Tannins from Terminalia chebula Retz. Chem Pharm Bull 38 11:3004-3008.
176	QUERCETIN	Fruit	--	--		Polovyanov, G. G. 1974. Flavonoids from the Fruit of the Yellow Myrobalan Plum. Chem. Nat. Comp. 10 (5): 690-.
1	QUINIC-ACID	Fruit	15000	15000	1.174010563697763	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
87	RUTIN	Fruit	--	--		Polovyanov, G. G. 1974. Flavonoids from the Fruit of the Yellow Myrobalan Plum. Chem. Nat. Comp. 10 (5): 690-.
1	SENNOSIDE-A	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SHIKIMIC-ACID	Fruit	22000	22000	1	
11	SORBITOL	Fruit	--	--		
8	STEARIC-ACID	Seed Oil	--	--		Miglani, B. D., Chawla, A. S. 1974. Chemical Investigation of the Oil of Terminaliaa chebula. J. Inst. Chem. (Calcutta) 46: 189-.
7	SUCCINIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SUCROSE	Fruit	10000	10000	-0.675913070766718	
35	TANNIN	Fruit	1090	355000	2.513227153575772	
1	TERCHEBIN	Fruit	--	--		
24	VANILLIC-ACID	Plant	--	--		Kim, J. S., Lee, G. D., Kwon, J. H., Yoon, H. S. 1993. Indentification of Phenolic Antioxidative Components in Terminalia chebula Retz. Han'guk Nonghwa Hakhoe Chi 36 4: 239-243.
3	XYLOSE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.