

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Althaea officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4-AMINO-BUTYRIC-ACID	Root				--
0	4-HYDROXY-BENZOIC-ACID	Leaf				--
0	4-HYDROXY-BENZOIC-ACID	Root				--
0	4-HYDROXY-BENZOIC-ACID	Flower				--
0	8-HYDROXY-3'-SULFO-8-O-BETA-D-GLUCOSIDE-DIOSMETIN	Leaf				--
0	8-HYDROXY-DIOSMETIN-8-GLUCOSIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	8-HYDROXY-LUTEOLIN-8-BETA-GENTIOBIOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	8-HYDROXY-LUTEOLIN-8-BETA-GLUCOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	8-O-GENTIOBIOSIDE-HYPOLAETIN	Flower				--
32	AESCULETIN	Root				--
32	AESCULETIN	Shoot				--
33	AESCULIN	Root				--
33	AESCULIN	Shoot				--
3	ALANINE	Root				--
0	ALPHA-L-ARABINOFURANOSYL	Plant				--
0	ALTHAEA-D-GLUCAN	Leaf				--
1	ALTHAEA-MUCILAGE-O	Root		2200.0		--
0	ALTHAEA-MUCILAGE-OL	Leaf		550.0		--
0	ALTHAEA-MUCILAGE-POLYSACCHARIDE	Root				--
0	ALTHAEA-MUCOPOLYSACCHARIDE	Root				--
0	ALTHEIN	Root		20000.0		--
5	ALUMINUM	Root	73.0	680.0	0.052378446056560675	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ANTHAEA-MUCILAGE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
6	ARABINO GALACTAN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	ARABINOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
112	ASCORBIC-ACID	Seed		1640.0	0.6461153960063319	--
112	ASCORBIC-ACID	Root	177.0	1640.0	0.29152337636866393	--
0	ASH	Root	8640.0	80000.0	0.35526479427075014	--
2	ASPARAGINE	Root	10000.0	20000.0	-1.2247448713915892	--
0	ASPARAGINIC-ACID	Root				--
7	ASTRAGALIN	Flower				--
7	ASTRAGALIN	Leaf				--
53	BETA-CAROTENE	Root				--
14	BETAINE	Root		40000.0	2.8276326231219104	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	BUTYRIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
102	CAFFEIC-ACID	Leaf				--
102	CAFFEIC-ACID	Root				--
102	CAFFEIC-ACID	Flower				--
28	CALCIUM	Root	881.0	8160.0	0.08292658679020891	--
4	CALCIUM-OXALATE	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	CALCIUM-PHOSPHATE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	CARBOHYDRATES	Root	87156.0	807000.0	-0.2956796137192111	--
77	CHLOROGENIC-ACID	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Root				--
77	CHLOROGENIC-ACID	Flower				--
20	CHOLINE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
24	CHROMIUM	Root	0.2	1.5	-0.26097057892644915	--
0	CICHORIN	Root				--
0	CICHORIN	Shoot				--
2	COBALT	Root	0.4	3.3	-0.473581959958559	--
57	COUMARIN	Root				--
57	COUMARIN	Shoot				--
0	D-GALACTOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	D-GALACTURONIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	D-GALACTURONIC-ACID	Root				--
0	D-GALACTURONIC-ACID	Leaf				--
0	D-GLUCOSAMINES	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	D-GLUCURONIC-ACID	Leaf				--
0	D-GLUCURONIC-ACID	Root				--
0	DODECASACCHARIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	EO	Leaf		200.0	-0.99702714807754	Wealth of India.
0	EO	Root	54.0	2000.0	-0.5605870943160192	--
0	EO	Flower		200.0	-0.41666386041507664	Wealth of India.
2	ERUCIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	FAT	Seed	128000.0	172000.0	-0.49190584773158025	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Root	540.0	5000.0	-0.596266738718786	--
61	FERULIC-ACID	Root				--
61	FERULIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
61	FERULIC-ACID	Flower				--
61	FERULIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
15	FIBER	Root		83000.0	-0.11352696502722416	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Root		83000.0	-0.8363237735654434	--
0	FIBER(DIETARY)	Root		523000.0	1.3604505714281423	--
0	GALACTURONIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	GALACTURONO-RHAMNANS	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	GALACTURONORHAMNOS E	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	GLUCAN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	GLUCOSAN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
7	GLUCOSE	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	HEMICELLULOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
12	HERNIARIN	Root				--
12	HERNIARIN	Shoot				--
0	HEXASACCHARIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	HEXOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	HYDROXYCINNAMIC-ACID	Plant				Wealth of India.
0	HYPOLAETIN-4'-METHYL-ETHER-8-O-GLUCOSIDE-3'-SULPHATE	Leaf				--
0	HYPOLAETIN-4'-O-METHYL-ETHER-8-O-BETA-D-GLUCOSIDE	Flower				--
0	HYPOLAETIN-8-GENTIOBIOSIDE	Leaf	2500.0	4200.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HYPOLAETIN-8-O-BETA-D-GLUCOSIDE	Root		14.0		--
6	IRON	Root	12.0	115.0	-0.2745822990554713	--
22	ISOQUERCITRIN	Flower				--
22	ISOQUERCITRIN	Leaf				--
1	ISOSCOPOLETIN	Root				--
1	ISOSCOPOLETIN	Shoot				--
75	KAEMPFEROL	Root				--
75	KAEMPFEROL	Leaf				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	KAEMPFEROL-3-O-GLUCOSIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	KAEMPFEROL-3-BETA-D-(6'-O-P-HYDROXYCINNAMOYL)-GLUCOSIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	L-ARABINAN	Plant				--
0	L-ARABINOFURANAN	Root				--
0	L-RHAMNOSE	Leaf				Pakistan Encyclopedia Planta Medica. 1986.
0	L-RHAMNOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	LANOLIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
20	LECITHIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
27	LINOLEIC-ACID	Seed	67710.0	91000.0	-0.13813658130464232	Wealth of India.
0	LINOLENIC-ACID	Seed	3200.0	4300.0	-0.5047948093852286	Wealth of India.
65	MAGNESIUM	Root	559.0	5180.0	1.3932916970467093	--
0	MALVALIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	MANGANESE	Root	0.5	4.4	-0.49333327298005497	--
3	MANNOSE	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	METHYL-PENTOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
3	MUCILAGE	Root	50000.0	350000.0	1.8163629857243206	--
3	MUCILAGE	Plant		210000.0	0.7288213596117523	--
3	MUCILAGE	Leaf	60000.0	157000.0	1.32247213063027	--
0	NARINGENIN-4'-O-BETA-D-GLUCOSIDE	Flower				--
0	NARINGENIN-4'-O-GLUCOSIDE	Flower				--
39	NIACIN	Root	3.4	31.0	-0.5575871529684362	--
0	NONA-SACCHARIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
18	OLEIC-ACID	Seed	39425.0	52975.0	-0.5436146073153726	Wealth of India.
25	P-COUMARIC-ACID	Root				--
25	P-COUMARIC-ACID	Flower				--
25	P-COUMARIC-ACID	Leaf				--
13	P-HYDROXY-BENZOIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	P-HYDROXYACETIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	P-HYDROXYPHENYLACETIC-ACID	Flower				--
0	P-HYDROXYPHENYLACETIC-ACID	Leaf				--
0	P-HYDROXYPHENYLACETIC-ACID	Root				--
13	PALMITIC-ACID	Seed	12415.0	16685.0	-0.3553353614139409	Wealth of India.
4	PARAFFIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
24	PECTIN	Root	110000.0	350000.0	1.9565371321871459	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PENTOSANS	Plant				Pakistan Encyclopedia Planta Medica. 1986.
4	PHOSPHORUS	Root	277.0	2560.0	-0.1682843400899607	--
2	PHYTOSTEROLS	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	POLYSACCHARIDE	Root				--
0	POLYSACCHARIDES	Root	250000.0	350000.0		--
0	POPULNIN	Flower				--
14	POTASSIUM	Root	1307.0	12100.0	-0.26937312186003615	--
0	PROTEIN	Seed	227000.0	237000.0	0.02850063861926227	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Root	11664.0	108000.0	-0.11693489662361256	--
43	PROTocatechuic-acid	Flower				--
43	PROTocatechuic-acid	Leaf				--
176	QUERCETIN	Root				--
176	QUERCETIN	Leaf				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.
2	QUERCETIN-3'-GLUCOSIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
0	RHAMNOGALACTURONAN S	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
15	RIBOFLAVIN	Root	0.1	0.5	-0.7822614262336574	--
34	SALICYLIC-ACID	Root				--
34	SALICYLIC-ACID	Flower				--
34	SALICYLIC-ACID	Leaf				--
5	SAPONINS	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
44	SCOPOLETIN	Shoot				--
44	SCOPOLETIN	Root				--
44	SCOPOLETIN	Flower				--
44	SCOPOLETIN	Leaf				--
3	SCOPOLIN	Root				--
3	SCOPOLIN	Shoot				--
0	SCOPOLINE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	SCYLLITOL	Leaf		800.0	-1.0	--
60	SELENIUM	Root	0.4	3.3	-0.12770210212970026	--
4	SILICON	Root	0.3	3.0	-0.32912368458456387	--
9	SINAPIC-ACID	Flower				--
9	SINAPIC-ACID	Leaf				--
1	SODIUM	Root	148.0	1370.0	0.12512006272941759	--
0	SODIUM-BORATE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
11	SORBITOL	Plant				Pakistan Encyclopedia Planta Medica. 1986.
4	SPIRAEOSIDE	Flower				--
4	SPIRAEOSIDE	Leaf				--
5	STARCH	Root	39960.0	370000.0	0.2269958278173157	--
8	STEARIC-ACID	Seed	12415.0	16685.0	-0.20338219754526743	Wealth of India.
0	STEROLS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
14	SUCROSE	Plant				Wealth of India.
0	SUGAR	Root	50000.0	110000.0	1.0259914748998127	--
0	SUGARS	Root	11880.0	110000.0	0.05921602494532206	--
6	SYRINGIC-ACID	Flower				--
6	SYRINGIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	SYRINGIC-ACID	Root				--
35	TANNIN	Root		20000.0	-1.7590478728926933	--
31	THIAMIN	Root		1.0	-0.5047871686237749	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Root	0.1	1.0	-0.665115009526749	--
3	TILIROSIDE	Leaf		2500.0		--
3	TILIROSIDE	Flower		1900.0		--
4	TIN	Root	3.0	29.0	1.2720232250646093	--
22	UMBELLIFERONE	Root				--
22	UMBELLIFERONE	Shoot				--
0	URONIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
3	VALINE	Root				--
24	VANILLIC-ACID	Leaf				--
24	VANILLIC-ACID	Flower				--
24	VANILLIC-ACID	Root				--
0	WATER	Root		892000.0	0.8034636135635553	--
0	XYLAN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
3	XYLOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
77	ZINC	Root				--