

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Phoenix dactylifera

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Seed	0.6	29.0	-0.4579921356186253	Abstract (See species file)
77	ZINC	Fruit	3.0	4.0	-0.7913051373688869	USDA's Ag Handbook 8 and sequelae)
3	XYLOSE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	VIOLAXANTHIN	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.
3	VALINE	Fruit	5.0	2710.0	-0.3596290253078901	--
8	TYROSINE	Fruit	10.0	1730.0	-0.2853897488258916	--
29	TRYPTOPHAN	Fruit	500.0	645.0	-0.2883336982090432	USDA's Ag Handbook 8 and sequelae)
4	THREONINE	Fruit	10.0	980.0	-0.8470550566495191	--
31	THIAMIN	Fruit	0.1	1.7	-0.4650060616434584	--
35	TANNIN	Fruit	200.0	18000.0	-0.7380230311091176	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	SULFUR	Fruit	510.0	590.0	-0.5738869470964798	--
14	SUCROSE	Seed		38200.0	-0.15445921462296788	Abstract (See species file)
14	SUCROSE	Fruit	0.0	400000.0	2.089285952799339	--
12	STIGMASTEROL	Fruit				Abstract (See species file)
8	STEARIC-ACID	Seed	3000.0	10000.0	-0.3484239972825226	--
5	STARCH	Fruit		206000.0	-0.14195257090516208	Abstract (See species file)
1	STACHYOSE	Seed		2200.0	-1.4073378200507318	Abstract (See species file)
11	SORBITOL	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	SODIUM	Seed	15.0	820.0	0.5859664537894901	Abstract (See species file)
1	SODIUM	Fruit	10.0	380.0	-0.1479158132265294	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	SILICON	Fruit		660.0	1.5358789152594374	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
26	SEROTONIN	Fruit	8.0	9.0	-1.3897978667604325	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
1	SERINE	Fruit	60.0	1960.0	-0.5941860880545526	--
7	SALICYLATES	Fruit	3.0	45.0	-0.20770615344752882	--
87	RUTIN	Pollen Or Spore				Abstract (See species file)
15	RIBOFLAVIN	Fruit	0.2	1.3	-0.7944081953947483	--
1	RAFFINOSE	Seed		3000.0	-0.7470721014785289	Abstract (See species file)
176	QUERCETIN	Pollen Or Spore				Abstract (See species file)
14	POTASSIUM	Seed	28.0	2440.0	-0.8908725075191605	Abstract (See species file)
14	POTASSIUM	Fruit	6250.0	8780.0	-0.8083399078943273	USDA's Ag Handbook 8 and sequelae)
30	POLYPHENOLS	Fruit		30000.0	1.146789651247877	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	PIPECOLIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	PHYLLOQUINONE	Fruit		0.06	-0.22359887323159108	--
4	PHOSPHORUS	Seed		1120.0	-1.1187018222711056	Abstract (See species file)
4	PHOSPHORUS	Fruit	370.0	8795.0	1.69456590371845	--
7	PHENYLALANINE	Fruit	8.0	740.0	-0.8967709656324975	--
11	PANTOTHENIC-ACID	Fruit	8.0	10.0	-0.5169531369709149	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Seed				Abstract (See species file)
13	PALMITIC-ACID	Seed	15000.0	25000.0	-0.18376993157030574	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	P-HYDROXYBENZALDEHYDE	Stem				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.
13	P-HYDROXY-BENZOIC-ACID	Stem				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.
9	OXALIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Seed	27000.0	51000.0	-0.55985026693048	--
39	NIACIN	Fruit	10.0	135.0	0.9932872798882364	--
6	MYRISTIC-ACID	Seed	2400.0	4000.0	-0.24363975823939635	--
15	METHIONINE	Fruit	5.0	2190.0	1.5164823455152185	--
14	MANGANESE	Seed		16.0	-0.467393923690488	Abstract (See species file)
14	MANGANESE	Fruit	3.0	45.0	-0.10681336019281051	--
2	MALTOSE	Seed				Abstract (See species file)
65	MAGNESIUM	Fruit	325.0	790.0	-0.6203759963079205	--
4	LYSINE	Fruit	30.0	2450.0	-0.4310869639742895	--
16	LYCOPENE	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.
15	LUTEIN	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.
2	LUPEOL-ACETATE	Stem				--

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21	LUPEOL	Stem				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.
27	LINOLEIC-ACID	Seed	6000.0	10000.0	-0.8321526228533093	--
1	LEUCOANTHOCYANIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LEUCINE	Fruit	5.0	1140.0	-0.8420937960569738	--
7	LAURIC-ACID	Seed	4800.0	54000.0	-0.028060776935393963	--
4	LACTOSE	Seed				Abstract (See species file)
3	ISOLEUCINE	Fruit	20.0	4650.0	0.3040077606201815	--
4	ISOCHLOROGENIC-ACID	Fruit				Abstract (See species file)
6	IRON	Seed	5.0	17.0	-0.6216437483021793	Abstract (See species file)
6	IRON	Fruit	10.0	151.0	0.07148811973975773	--
12	IODINE	Fruit		0.06	-0.2904150459573493	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	HISTIDINE	Fruit	10.0	390.0	-0.9273080508754981	--
12	GLYCINE	Fruit	40.0	3010.0	-0.2300074341376021	--
5	GLUTAMINE	Fruit	650.0	870.0	1.1267392876723437	--
8	GLUTAMIC-ACID	Fruit	400.0	6160.0	-0.5507946581831958	--
7	GLUCOSE	Seed		16800.0	-0.14985111390158956	Abstract (See species file)
7	GLUCOSE	Fruit		357000.0	2.893929119951419	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.
22	GAMMA-AMINOBUTYRIC-ACID	Fruit	2660.0	3370.0	1.7044292848924936	Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GALLO-TANNIN	Plant	4300.0	27800.0		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.
1	GALACTOSE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
22	GABA	Fruit	2660.0	3370.0	1.407126578678398	--
8	FRUCTOSE	Seed		15300.0	1.4089399073526936	Abstract (See species file)
8	FRUCTOSE	Fruit		308000.0	4.088589817170726	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.
15	FOLACIN	Fruit	0.08	0.17	-0.7670170596960343	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Fruit	22000.0	85000.0	-0.5348255773149249	--
15	FIBER	Seed	64000.0	300000.0	1.304614634419771	--
8	ESTRONE	Pollen Or Spore				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
8	ESTRONE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
5	ERGOSTEROL	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
8	ELLAGITANNIN	Plant	0.0	9900.0		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	CYSTINE	Fruit	7.0	580.0	-0.4707560662338592	--
13	CYSTEINE	Fruit	110.0	1140.0	1.0	Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
57	COUMARIN	Leaf				Morton, J.F., Major Medicinal Plants. 1977. Atlas of Medicinal Plants of Middle America. Bahamas to Yucatan. 1981.
12	COPPER	Seed	0.6	2.0	-1.1623352892566066	Abstract (See species file)
12	COPPER	Fruit	2.0	4.0	-0.6863742487163819	--
1	CHOLESTEROL	Pollen Or Spore				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
1	CHOLESTEROL	Fruit		0.0		USDA's Ag Handbook 8 and sequelae)
21	CHLOROPHYLL	Fruit	0.0	410.0	1.542593994049385	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
77	CHLOROGENIC-ACID	Fruit				Abstract (See species file)
7	CHLORINE	Fruit	270.0	310.0	-0.4791512669647793	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
5	CAPRYLIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	CAPRIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	CAMPESTEROL	Stem				Abstract (See species file)
28	CALCIUM	Seed	18.0	436.0	-0.6814478670478287	Abstract (See species file)
28	CALCIUM	Fruit	140.0	2000.0	-0.4283573443119461	--
3	CADMIUM	Seed	0.0	9.0	4.252910566397704	Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	BORON	Fruit		7.0	-0.6629690111653129	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
47	BETA-SITOSTEROL	Pollen Or Spore				Abstract (See species file)
53	BETA-CAROTENE	Fruit	1.0	3.6	-0.14384189399264724	--
9	BETA-AMYRIN	Pollen Or Spore				Abstract (See species file)
20	BENZOIC-ACID	Stem				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	BEHENIC-ACID	Seed				Abstract (See species file)
3	ASPARTIC-ACID	Fruit	20.0	3150.0	-0.9207574415888534	--
2	ASPARAGINE	Fruit	2300.0	4500.0	2.264581694669994	Abstract (See species file)
112	ASCORBIC-ACID	Fruit	0.0	750.0	-0.23785626092666567	--
14	ARGININE	Fruit	620.0	2090.0	-0.5920936366686652	--
101	APIGENIN	Stem				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.
5	ALUMINUM	Seed	3.0	13.0	-0.34201085436666395	Abstract (See species file)
5	ALUMINUM	Fruit		51.0	-0.20868440554018103	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	ALANINE	Fruit	80.0	1290.0	-0.9501454757917915	--
6	ACETALDEHYDE	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	5-O-CAFFEYLSHIKIMIC-ACID	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.