

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Serenoa repens*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAROTENE	Seed Oil				--
75	KAEMPFEROL	Fruit				By assumption; if a glycoside is reported, it is automatically assumed that the aglycone is present also in the plant, though sometimes in traces only.
17	FARNESOL	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	SERENOA-POLYPRENOL-2	Fruit		5.0		--
13	PALMITIC-ACID	Seed				--
0	3,7,11,15,19,23,27,31-OCTAMETHYL-DOTRIACONTA-2-CIS-6-CIS-10-CIS-14-CIS-18-TRANS-22-TRANS-26-TRANS-OCTAEN-1-OL	Fruit		270.0		--
5	CAPRYLIC-ACID	Seed Oil				--
0	CERAMIDES	Fruit				--
0	SABAL-SERRULATA-ACIDIC-POLYSACCHARIDE	Fruit		6000.0		--
0	P-OXYBENZOIC-ACID	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	24-METHYLENE-CYCLOARTENOL	Fruit				--
1	CAPROIC-ACID	Seed Oil				--
0	SPHINGOLIPIDES	Fruit				--
0	CAPRINIC-ACID	Fruit		18000.0		--
87	RUTIN	Fruit				--
0	P-OXYBENZALDEHYDE	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	MANNOSE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
25	P-COUMARIC-ACID	Fruit Juice				--
0	WATER	Fruit		870000.0	0.43230600391521135	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	RHAMNOSE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	CAPRIC-ACID	Seed Oil				--
2	RHOIFOLIN	Fruit				--
18	OLEIC-ACID	Seed				--
4	KAEMPFEROL-3-O-GLUCOSIDE	Fruit				--
0	OCTACOSAN-1-OL	Fruit				--
6	BETA-SITOSTEROL-D-GLUCOSIDE	Fruit		220.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	SORBITOL	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
101	APIGENIN	Fruit				By assumption; if a glycoside is reported, it is automatically assumed that the aglycone is present also in the plant, though sometimes in traces only.
0	POLYSACCHARIDE-S4	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	APIGENIN-7-O-RHAMNOGLUCOSIDE	Fruit				--
28	VANILLIN	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	POPULNIN	Fruit				--
6	MYRISTIC-ACID	Seed				--
18	MANNITOL	Seed Oil				--
2	RHOIFOLIN	Plant				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
0	POLYSACCHARIDE-S3	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	UNDECANOIC-ACID	Fruit				--
24	VANILLIC-ACID	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PHYTOL	Fruit				--
18	MANNITOL	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	GLUCURONIC-ACID	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
21	LUPEOL	Fruit				--
8	FRUCTOSE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
6	1-MONOMYRISTIN	Fruit				--
0	POLYSACCHARIDE-S2	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	TRIDECANOIC-ACID	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	TANNIN	Stem		54800.0	-0.5063597006118161	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	ISOQUERCITRIN	Fruit				--
0	LIPASE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	GLUCOSE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	LUPEN-3-ONE	Fruit				--
0	ARABINOSE	Fruit				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	BETA-SITOSTEROL-3-O-MYRISTYL-BETA-GLUCOSIDES	Plant				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
6	1-MONOLAURIN	Fruit				--
0	POLYSACCHARIDE-S1	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	TRIACONTAN-1-OL	Fruit				--
35	TANNIN	Root		75800.0	-0.020511406931147124	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	3,7,11,15,19,23,31,35-NONAMETHYL-HEXATRIACONTA-2-CIS-6-CIS-10-CIS-14-CIS-18-CIS-22-TRANS-26-TRANS-30-TRANS-3,4-TRANS-NON	Fruit		19.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LAURIC-ACID	Seed				--
0	FIBER(DIETARY)	Fruit		400000.0	0.3503027017814249	--
1	GALACTOSE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	DECANOIC-ACID	Fruit				--
6	ANTHRANILIC-ACID	Fruit				--
0	BETA-SITOSTEROL-3-O-MYRISTATE	Plant				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)
3	XYLOSE	Fruit				--
2	PHYTOSTEROLS	Fruit		128.0	-1.0530092799127762	--
0	STEROLS	Mesocarp				--
6	SYRINGIC-ACID	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	HEXACOSAN-1-OL	Fruit				--
61	FERULIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FIBER(CRUDE)	Fruit		130000.0	-0.1382131172135812	--
0	ACETOVANILLONE	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-SITOSTEROL-3-O-DIGLUCOSIDE	Plant				Gruenwald, J. et al. 1998. PDR for Herbal Medicine. 1st ed. Medical Economics Co., Montvale, NJ. 1244 pp. (abbreviated as PHR or Physicians Herbal Reference in my mind)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FUCOSE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	P-HYDROXY-BENZOIC-ACID	Plant				--
0	STEROLS	Exocarp				--
4	SYRINGALDEHYDE	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	GLYCEROL	Seed Oil				--
7	CYCLOARTENOL	Fruit				--
0	ACETOSYRINGONE	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	URONIC-ACID	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.
4	P-HYDROXYBENZALDEHYDE	Plant				--
0	SERENOA-POLYPRENOL-3	Fruit		35.0		--
8	STEARIC-ACID	Seed				--
11	GERANYL-GERANIOL	Fruit		16.0		--
24	CHROMIUM	Fruit	0.2	1.4	-0.3109918416443979	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	SELENIUM	Fruit	0.3	2.6	0.2585513872614546	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
31	THIAMIN	Fruit	0.6	5.0	-0.0425885992841977	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	COBALT	Fruit	0.6	5.0	0.07018107914482831	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Fruit	0.7	5.2	-0.7552020844764787	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Fruit	0.7	5.0	0.7348687812439542	--
4	SILICON	Fruit	1.0	7.8	-0.5831009322457926	--
15	RIBOFLAVIN	Fruit	1.0	7.3	0.4905916673393905	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Fruit	1.2	8.9	-0.3448520509579119	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	TETRACOSANOL	Fruit	1.6	5.0		--
0	HEXACOSANOL	Fruit	2.0	7.0		--
53	BETA-CAROTENE	Fruit	3.0	24.0	-0.1044090615440342	--
6	IRON	Fruit	9.0	66.0	-0.26568397107756236	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
39	NIACIN	Fruit	10.0	75.0	0.19119140633704487	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
112	ASCORBIC-ACID	Fruit	11.0	88.0	-0.27901743011351393	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
12	STIGMASTEROL	Fruit	12.0	38.0	-0.6454844173695994	--
0	TRICONTANOL	Fruit	13.0	42.0		--
2	CAMPESTEROL	Fruit	28.0	90.0	0.10490824541035179	--
47	BETA-SITOSTEROL	Fruit	33.0	281.0	-0.42504048544050566	--
5	DAUCOSTEROL	Fruit	47.0	416.0		--
0	1-OCTACOSANOL	Fruit	58.0	187.0		--
1	SODIUM	Fruit	65.0	495.0	-0.1370104923804784	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LINOLENIC-ACID	Fruit	240.0	770.0	-0.8207413427736995	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	510.0	3930.0	0.8336264369951842	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	CAPROIC-ACID	Fruit	600.0	1920.0		--
28	CALCIUM	Fruit	605.0	4640.0	0.18085004106340866	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
24	PECTIN	Fruit	605.0	4640.0	-0.5751588917297177	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
8	STEARIC-ACID	Fruit	720.0	2305.0	-0.12635840819349412	--
5	CAPRYLIC-ACID	Fruit	920.0	13000.0		--
3	CAPRIC-ACID	Fruit	1000.0	3200.0	1.413939973823674	--
27	LINOLEIC-ACID	Fruit	1840.0	36000.0	0.15250551841720983	--
4	PHOSPHORUS	Fruit	2105.0	16200.0	3.94375903676458	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	POTASSIUM	Fruit	2325.0	17900.0	-0.00146044676900111	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FAT	Fruit	3510.0	27000.0	-0.435028261598363	--
0	ASH	Fruit	3770.0	29000.0	-0.7163626815965894	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
13	PALMITIC-ACID	Fruit	3800.0	87000.0	0.9888703977409701	--
6	MYRISTIC-ACID	Fruit	4800.0	116000.0	5.20324818328259	--
0	EO	Fruit	5400.0	20000.0	-0.4312216686487416	--
18	OLEIC-ACID	Fruit	11400.0	332000.0	2.0780900532057363	--
7	LAURIC-ACID	Fruit	12080.0	240000.0	2.5127886336588405	--
0	SUGARS	Fruit	13000.0	100000.0	-0.4714231435724017	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PROTEIN	Fruit	14300.0	110000.0	0.006722289355626528	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	FATTY-ACIDS	Fruit	30000.0	92000.0		--