

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Asparagus officinalis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	22-SPIROSTAN-3BETA-OL	Shoot				--
4	4-VINYL-GUAIACOL	Shoot				--
0	4-VINYL-PHENOL	Shoot				--
3	ALANINE	Seed	1440.0	18581.0	1.7909389852517676	--
0	ALPHA-AMINODIMETHYL-GAMMA-BUTYROTHETIN	Rhizome				--
7	ALPHA-CAROTENE	Plant				--
15	ALPHA-LINOLENIC-ACID	Shoot	50.0	645.0	-1.414213562373095	--
5	ALUMINIUM	Shoot	13.0	700.0	-1.6477130198375833	--
14	ARGININE	Shoot	1430.0	18452.0	-1.0	--
2	ARSENIC	Shoot	0.005	0.006		--
112	ASCORBIC-ACID	Root	398.0	3976.0	1.6268848975635133	--
112	ASCORBIC-ACID	Shoot	100.0	5714.0	-0.09444764278082439	--
0	ASH	Root	2900.0	29000.0	-1.101065098830239	--
0	ASH	Shoot	6000.0	171000.0	1.5844820733270641	--
2	ASPARAGINE	Shoot				--
0	ASPARAGOSIDES	Shoot				--
4	ASPARAGUSIC-ACID	Shoot				--
0	ASPARASAPONINS	Plant				--
3	ASPARTIC-ACID	Shoot	3550.0	45805.0	0.7703735908865186	--
0	BARIUM	Shoot	2.0	70.0	-1.0441007999682068	--
53	BETA-CAROTENE	Root	6.5	65.0	-0.020796675608213463	--
53	BETA-CAROTENE	Shoot	0.3	120.0	-0.17690767722048123	--
4	BORON	Shoot	6.0	104.0	1.4929660518315542	--
3	CADMIUM	Shoot	0.018	0.07	-1.322252128482115	--
28	CALCIUM	Shoot	160.0	3840.0	-0.7954997991511278	--
28	CALCIUM	Root	265.0	2650.0	-0.5205178359322618	--
0	CARBOHYDRATES	Shoot	36000.0	602000.0	0.05567966631725951	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
20	CHOLINE	Rhizome				--
24	CHROMIUM	Shoot	0.135	0.7	-1.118810401335657	--
24	CHROMIUM	Root	0.2	1.5	-0.26097057892644915	--
2	COBALT	Shoot	0.09	0.12	-0.9190459396863638	--
2	COBALT	Root				--
2	CONIFERIN	Shoot				--
12	COPPER	Shoot	1.0	24.0	-0.185788465315953	--
0	CYANIDIN-3,5-DIGLUCOSIDE	Shoot				--
0	CYANIDIN-3-MONOGLUCOSIDE	Shoot				--
0	CYANIDIN-3-RHAMNOSYLGLUCOSIDE	Shoot				--
0	CYANIDIN-3-RHAMNOSYLGLUCOSYLGLUCOSIDE	Shoot				--
2	CYSTINE	Shoot	360.0	4645.0	-1.0	--
7	DIOSGENIN	Shoot				--
0	FAT	Root	2400.0	24000.0	0.03735642814941123	--
0	FAT	Shoot	2000.0	41000.0	-0.10454720394850912	--
15	FIBER	Shoot	7000.0	141000.0	-0.4134652874693027	--
0	FIBER(CRUDE)	Root		141000.0	0.8791598692846496	--
0	FIBER(DIETARY)	Root		390000.0	-0.0920488345347022	--
15	FOLACIN	Shoot	1.0	18.0		--
8	FRUCTOSE	Rhizome				--
7	GLUCOSE	Shoot				--
8	GLUTAMIC-ACID	Shoot	5010.0	64645.0	0.9806017011914672	--
12	GLYCINE	Shoot	990.0	12774.0	-1.0	--
18	GUAIACOL	Shoot				--
0	GUM	Root	11000.0	110000.0	0.15011732500816016	--
7	HISTIDINE	Shoot	470.0	6065.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	INOSITOL	Shoot				--
19	INULIN	Root				--
6	IRON	Root	1.2	12.0	-0.42421971919788043	--
6	IRON	Shoot	6.0	240.0	-0.3469217555094921	--
3	ISOLEUCINE	Shoot	1120.0	14452.0	-0.111550627214569	--
0	JAMOGENIN	Shoot				--
75	KAEMPFEROL	Root				--
0	KILOCALORIES	Shoot	210.0	3130.0	0.40017105290867505	--
7	LAURIC-ACID	Shoot	10.0	129.0	1.414213562373095	--
0	LEAD	Shoot	1.5	30.0	-1.1936866543211802	--
2	LEUCINE	Shoot	1330.0	17161.0	0.09014535160843963	--
27	LINOLEIC-ACID	Shoot	910.0	11742.0	1.4142135623730951	--
11	LITHIUM	Shoot	0.36	0.6	-0.7321272076061756	--
15	LUTEIN	Plant				--
4	LYSINE	Shoot	1450.0	18710.0	0.3111156963571142	--
8	M-CRESOL	Shoot				--
65	MAGNESIUM	Root	240.0	2400.0	-0.08595931629302281	--
65	MAGNESIUM	Shoot	120.0	7000.0	-0.06862350654174332	--
14	MANGANESE	Root	0.2	2.0	-0.5219915069975595	--
14	MANGANESE	Shoot	2.0	100.0	-0.975011478628626	--
0	MANNAN	Rhizome				--
1	MERCURY	Shoot	0.001	0.001	-1.4142135623730954	--
15	METHIONINE	Shoot	290.0	3742.0	-1.0	--
2	MOLYBDENUM	Shoot	0.63	1.8	-0.9425822429466852	--
13	MUFA	Shoot	70.0	903.0	-1.4142135623730951	--
6	MYRISTIC-ACID	Shoot	10.0	129.0	1.4142135623730954	--
39	NIACIN	Root	18.0	181.0	3.7897570948362946	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Shoot	11.0	366.0	3.2237146691656355	--
3	NICKEL	Shoot	0.9	1.8	-1.0503042882524072	--
6	O-CRESOL	Shoot				--
0	OFFICINALISIN-II	Root				--
18	OLEIC-ACID	Shoot	60.0	774.0	-1.4142135623730956	--
8	P-CRESOL	Shoot				--
0	PAEONIDIN-3-GLUCOSYL RHAMNOSYLGLUCOSIDE	Shoot				--
0	PAEONIDIN RHAMNOSYLGLUCOSIDE	Shoot				--
13	PALMITIC-ACID	Shoot	450.0	5806.0	1.4142135623730951	--
2	PALMITOLEIC-ACID	Shoot	10.0	129.0	1.4142135623730954	--
11	PANTOTHENIC-ACID	Shoot	2.0	22.4		--
0	PENTOSANS	Shoot		70000.0		--
26	PHENOL	Shoot				--
7	PHENYLALANINE	Shoot	720.0	9290.0	-1.0	--
0	PHILOTHION	Shoot				--
4	PHOSPHORUS	Shoot	390.0	10244.0	3.108349356664769	--
4	PHOSPHORUS	Root	746.0	7460.0	0.6926912968369884	--
5	PHYLLOQUINONE	Plant		0.6	0.4577903165311008	Booth, S. L., Suttie, J. W. 1998. Dietary intake and adequacy of vitamin K. J. Nutrition, 128(5): 785-788.
2	PHYTOSTEROLS	Shoot	246.0	3097.0		--
14	POTASSIUM	Shoot	1870.0	55200.0	2.2005736210856637	--
14	POTASSIUM	Root	3350.0	33500.0	1.2976082956719406	--
0	PROLINE	Shoot	1620.0	20903.0	1.4024674410990334	--
0	PROTEIN	Shoot	22000.0	394840.0	1.6568117461224718	--
0	PROTEIN	Root	30000.0	300000.0	2.039131193336885	--
0	PSEUDOASPARAGOSE	Rhizome				--

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4	PUFA	Shoot	960.0	12387.0	1.4142135623730958	--
176	QUERCETIN	Root				--
0	RHAMNOSE	Shoot				--
15	RIBOFLAVIN	Shoot	1.0	36.0	1.7066843792550757	--
15	RIBOFLAVIN	Root	2.4	24.0	4.360530503608677	--
87	RUTIN	Root				--
2	SARSAPOGENIN	Shoot				--
60	SELENIUM	Shoot	0.041	0.078	-0.4102298070132233	--
60	SELENIUM	Root	0.1	1.0	-0.29131634494743897	--
1	SERINE	Shoot	1160.0	14968.0	-1.0	--
0	SFA	Shoot	500.0	6452.0	-1.414213562373095	--
4	SILICON	Root				--
3	SILVER	Shoot	0.09	0.12	-0.7169197678305071	--
1	SODIUM	Root	24.0	239.0	-0.4014905019735126	--
1	SODIUM	Shoot	18.0	685.0	1.246977776398358	--
8	STEARIC-ACID	Shoot	30.0	387.0	-1.4142135623730951	--
0	STRONTIUM	Shoot	19.0	200.0	-0.873636463236932	--
7	SUCCINIC-ACID	Shoot				--
14	SUCROSE	Rhizome				--
0	SUGAR	Shoot		15000.0		--
14	SULFUR	Shoot	56.0	864.0	-0.721231049722943	--
31	THIAMIN	Shoot	1.0	26.0	1.1875606145407158	--
0	THIAMINE	Root	2.0	22.0	3.605177535715055	--
4	THREONINE	Shoot	850.0	10968.0	-0.13544765054428673	--
0	TITANIUM	Shoot	0.45	180.0	1.569028364276006	--
93	TOCOPHEROL	Shoot	19.8	256.0		--
29	TRYPTOPHAN	Shoot	300.0	3871.0	-0.6503748891557393	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
8	TYROSINE	Shoot	480.0	6194.0	-1.0	--
3	VALINE	Shoot	1180.0	15226.0	0.1421680361092609	--
16	VANADIUM	Shoot	0.3	2.0	0.4059276058571796	--
0	WATER	Root		900000.0	0.8558256771386106	--
0	WATER	Plant	914000.0	950000.0	0.7666043229601914	--
5	ZEAXANTHIN	Plant				--
77	ZINC	Root	0.2	2.3	-0.9582114576426829	--
77	ZINC	Shoot	12.0	124.0	-0.49520977085345347	--
0	ZIRCONIUM	Shoot	1.8	2.4	-0.9985790401347907	--