

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Symphytum officinale*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	ALLANTOIN	Leaf	1100.0	20000.0	1.0	--
12	ALLANTOIN	Root	6000.0	25500.0	1.414211703032736	--
5	ALUMINUM	Leaf	26.0	237.0	-0.5262242971508979	--
5	ALUMINUM	Root		237.0	-0.18531623688311008	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
112	ASCORBIC-ACID	Leaf	88.0	800.0	-0.3696902910647434	--
112	ASCORBIC-ACID	Root		132.0	-0.5705165097451346	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ASH	Leaf	3960.0	36000.0	-1.4597451047029075	--
0	ASH	Root		140000.0	2.0685940802719145	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	ASPARAGINE	Root	10000.0	30000.0	0.0	--
53	BETA-CAROTENE	Root		660.0	3.7837756184374194	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	BETA-CAROTENE	Leaf	12.0	108.0	-0.6676049250693852	--
0	BORNESITOL	Root				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
102	CAFFEIC-ACID	Root				--
28	CALCIUM	Root		11300.0	0.4268132451111813	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	CALCIUM	Leaf	1980.0	18000.0	-0.029871524092770517	--
0	CARBOHYDRATES	Root		759000.0	-0.9117311715674291	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CARBOHYDRATES	Leaf	83490.0	759000.0	1.1702299618640322	--
0	CAROTENES	Plant		6300.0	1.0	--
77	CHLOROGENIC-ACID	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	CHOLINE	Root				--
24	CHROMIUM	Leaf	0.2	1.8	-0.4929482981471673	--
24	CHROMIUM	Root		8.0	1.034555549691094	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	COBALT	Leaf				--
2	COBALT	Root		129.0	2.254743268218843	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	CONSOLICINE	Root				--
4	CONSOLIDINE	Root		17.0		--
0	D-MANNOSE	Root				--
3	ECHIMIDINE	Root				--
0	ECHINATINE	Root				--
0	FAT	Root		17000.0	-0.1960836859599246	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FAT	Leaf	1320.0	12000.0	-0.8859870390618501	--
15	FIBER	Root		72000.0	-0.35781867764508235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Leaf		90000.0	-0.9755416251576845	--
0	FIBER(DIETARY)	Leaf		480000.0	1.2687612918424682	--
8	FRUCTOSE	Root				--
22	GABA	Root				--
7	GLUCOSE	Root				--
4	GLUCURONIC-ACID	Root				--
0	GUM	Root	50000.0	100000.0	-0.2627053187642807	--
0	HELIOSUPINE-N-OXIDE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HYPOXANTHINE	Root				Grenand, P., Moretti, C., and Jacquemin, H. 1987. Pharmacopees Traditionnelles en Guyane. l'ORSTROM, Paris. 569 pp.
6	IRON	Leaf	1.3	12.0	-0.890161290433994	--
6	IRON	Root		810.0	0.7351070892840852	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ISOBANERENOL	Root				--
0	KILOCALORIES	Root		2170.0	-2.6349381148764963	--
0	L-ARABINOSE	Root				--
0	L-RHAMNOSE	Root				--
3	LASIOCARPINE	Root				--
3	LITHOSPERMIC-ACID	Root				--
1	LYCOPSAMINE	Root				--
65	MAGNESIUM	Leaf	77.0	700.0	-1.3227963811163561	--
65	MAGNESIUM	Root		1700.0	-0.45843259303324313	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Leaf	0.6	5.8	-0.4502436253607189	--
14	MANGANESE	Root		67.0	0.2541689976431844	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	MUCILAGE	Root		290000.0	1.2769493662553644	--
1	MUCOPOLYSACCHARIDES	Root	250000.0	300000.0		--
39	NIACIN	Root		67.0	0.48577546650469927	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
39	NIACIN	Leaf	10.0	89.0	-0.10339986544967049	--
0	OCTADECATETRAENIC-ACID	Seed				--
4	PHOSPHORUS	Root		2111.0	-0.24717782192265478	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PHOSPHORUS	Leaf	242.0	2200.0	-0.5099115436962968	--
14	POTASSIUM	Leaf	1870.0	17000.0	-0.5892446041503846	--
14	POTASSIUM	Root		15900.0	0.008875914897978466	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PROTEIN	Leaf	15400.0	140000.0	-0.7167237861233011	--
0	PROTEIN	Root		94000.0	-0.27414804901656553	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PYROCATECHINS	Root		24000.0		--
0	REDUCING-SUGARS	Root		51500.0		--
0	RESIN	Root				--
15	RIBOFLAVIN	Root		7.2	0.6839813792958593	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	RIBOFLAVIN	Leaf	0.8	7.2	-0.1441116267822773	--
57	ROSMARINIC-ACID	Leaf		5000.0	-0.34272410314857343	--
60	SELENIUM	Root		5.7	0.043025803419244356	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	SELENIUM	Leaf	0.1	1.2	-0.29034536355768803	--
1	SILICIC-ACID	Root				--
1	SILICIC-ACID	Leaf		40000.0		--
4	SILICON	Leaf	1.0	9.0	-0.38642290679786806	--
4	SILICON	Root		35.0	-0.18212553697929784	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	SITOSTEROL	Root				--
1	SODIUM	Leaf	12.0	110.0	-0.6277481449277332	--
1	SODIUM	Root		3510.0	1.1215361621673223	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	STIGMASTEROL	Root				--
14	SUCROSE	Root				--
0	SUGARS	Leaf	9900.0	90000.0	0.3611228146781439	--
0	SYMLANDINE	Plant				--
1	SYMPHYTINE	Root				--
0	SYMPHYTOCYNOGLOSSIN	Root		21.0		--
35	TANNIN	Plant	80000.0	90000.0	0.09291261850435828	--
31	THIAMIN	Root		1.2	-0.48699564487025615	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Leaf	0.2	2.2	-0.7312289774690925	--
4	TIN	Leaf	0.7	6.7	-1.0681794992129428	--
4	TIN	Root		6.7	-0.9947649249747477	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	VIRIDIFLORINE	Plant				--
0	WATER	Root		862000.0	0.6071058751570949	--
0	WATER	Leaf		890000.0	0.4109041271949558	--
3	XYLOSE	Root				--
77	ZINC	Root		2.8	-0.9363126098748169	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	ZINC	Leaf				--