

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in Plantago major**

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
28	CALCIUM	Seed	7020.0	23400.0	3.536073250184055	--
20	AUCUBIN	Plant		3700.0	2.955240724583692	--
0	WATER	Seed		700000.0	1.812768610737736	--
20	AUCUBIN	Leaf		10000.0	1.3016181818933938	--
0	FIBER(CRUDE)	Seed		190000.0	1.0339063829603843	--
0	FIBER(DIETARY)	Seed		640000.0	0.9601420587878392	--
39	NIACIN	Seed	20.0	65.0	0.6619614710877286	--
15	FIBER	Seed		190000.0	0.4360358473234348	--
0	ASH	Seed	18600.0	62000.0	0.4246927171829582	--
3	MUCILAGE	Seed	75000.0	250000.0	0.3314188553069996	--
1	SODIUM	Seed	180.0	600.0	0.2367344663001361	--
0	GUM	Seed	30000.0	100000.0	-0.03920441342337547	--
2	COBALT	Seed	0.8	2.5	-0.0975154003240051	--
60	SELENIUM	Seed	0.3	1.0	-0.2538712073855823	--
18	OLEIC-ACID	Seed	37000.0	74000.0	-0.3707767625520139	--
35	TANNIN	Plant	40000.0	57000.0	-0.3888703791391115	--
0	PROTEIN	Seed	57000.0	190000.0	-0.3895887016486292	--
14	POTASSIUM	Seed	2400.0	8000.0	-0.40190663629015044	--
0	ALKALOIDS	Plant		1000.0	-0.4132951284504129	--
0	FAT	Seed	54000.0	180000.0	-0.44976698613804794	--
27	LINOLEIC-ACID	Seed	25000.0	50000.0	-0.48942865171816513	--
24	CHROMIUM	Seed	0.4	1.2	-0.5076863634193026	--
0	LINOLENIC-ACID	Seed	900.0	1800.0	-0.548438614387999	--
0	EO	Plant		2000.0	-0.5881321355977028	--
6	IRON	Seed	5.0	18.0	-0.6169974419360033	--
14	MANGANESE	Seed	0.5	1.6	-0.646771144679695	--
34	SALICYLIC-ACID	Plant		1.0	-0.6866202509403907	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
65	MAGNESIUM	Seed	318.0	1060.0	-0.745187282729651	--
28	CALCIUM	Shoot	860.0	1340.0	-0.9779450201815306	--
4	SILICON	Seed	3.0	8.2	-1.1430339245316348	--
77	ZINC	Seed	0.8	2.5	-1.2103323917766955	--
4	PHOSPHORUS	Seed	180.0	600.0	-1.256116511285059	--
24	VANILLIC-ACID	Plant				--
0	PLANTAGOSIDE	Leaf				--
0	DI-O-METHYLGALACTOSE	Plant				--
0	LUTEOLIN-7-O-BETA-D-GLUCURONIDE	Plant				--
50	BAICALEIN	Leaf				--
0	THIAMINE	Seed				--
7	HISPIDULIN	Leaf				--
1	ACETOSIDE	Plant				--
0	SITOSTEROL	Plant				--
89	URSOLIC-ACID	Plant				--
0	PLANTAGONINE	Plant		500.0		--
0	D-XYLOSE	Plant				--
0	LUTEOLIN-7-O-BETA-D-GLUCOSIDE	Plant				--
20	AUCUBIN	Seed				--
0	GLUCORAPHENINE	Plant				--
0	9-HYDROXY-CIS-11-OCTADECANOIC-ACID	Seed				--
0	SCUTELLARIN	Leaf				--
1	TYROSOL	Plant				--
0	PLANTAGIC-ACIS	Plant				--
1	D-GLUCOSE	Plant				--
78	LUTEOLIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	6'-O-BETA-GLUCOSYLAUCUBIN	Leaf				--
8	GENTISIC-ACID	Plant				--
8	TYROSINE	Plant				--
0	PHENOLCARBONIC-ACIDS	Plant				--
23	CITRIC-ACID	Plant				--
0	LOLIOLID	Plant				--
0	3,4-DIHYDROAUCUBIN	Leaf				--
0	SACCHAROSE	Plant				--
10	GENIPOSIDIC-ACID	Plant				--
13	P-HYDROXY-BENZOIC-ACID	Plant				--
18	CINNAMIC-ACID	Plant				--
9	ASPERULOSIDE	Flower		2.0		--
15	RIBOFLAVIN	Seed				--
0	RHAMNOSE	Plant				--
7	FUMARIC-ACID	Leaf				--
9	SYRINGIN	Plant				--
25	P-COUMARIC-ACID	Plant				--
20	CHOLINE	Seed				--
112	ASCORBIC-ACID	Plant				--
0	RESIN	Plant				--
77	CHLOROGENIC-ACID	Plant				--
1	LIGNOCERIC-ACID	Plant				--
0	APIGENIN-7-GLUCOSIDE	Leaf				--
61	FERULIC-ACID	Plant				--
64	OLEANOLIC-ACID	Leaf				--
3	CATALPOL	Leaf				--
6	SYRINGIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	L-FRUCTOSE	Plant				--
101	APIGENIN	Leaf				--
53	BETA-CAROTENE	Seed				--
0	POTASSIUM-SALTS	Plant		4600.0		--
4	NEPETIN	Leaf				--
102	CAFFEIC-ACID	Plant				--
0	INVERTIN	Plant				--
12	ALLANTOIN	Plant				--
0	SULFORAPHENE	Plant				--
0	PLANTEOLIC-ACID	Plant				--
2	NEO-CHLOROGENIC-ACID	Leaf				--
20	BENZOIC-ACID	Leaf				--
0	INDICAINE	Plant				--
7	SUCCINIC-ACID	Plant				--
112	ASCORBIC-ACID	Seed				--
0	PLANTEASE	Seed	0.0	220.0		--
0	EMULSIN	Plant				--
3	MUCILAGE	Plant				--
40	BAICALIN	Plant				--
0	HYDROXYCINNAMIC-ACID	Leaf				--
11	ADENINE	Plant				--
11	SORBITOL	Plant		15000.0		--