

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Urtica dioica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	(+)-ISOLARICIRE SINOL	Plant				--
1	(+)-ISOLARICIRE SINOL	Root				Jim Duke's personal files.
0	(+)-NEOLIVIL	Root		43.5		Jim Duke's personal files.
0	(-)-3,4-DIVANILLYLTETRAHYDROFURAN	Root				--
0	(-)-PINORESINOL	Root				Jim Duke's personal files.
0	(-)-SECOISOLARICIRE SINOL	Root		41.5		Jim Duke's personal files.
0	(10E,12Z)-9-HYDROXY-10,12-OCTADECADIENOIC ACID	Plant				--
0	(6'-PALMITOYL)-BETA-SITOSTEROL-3-O-BETA-GLUCOSIDE	Root		30.0		--
0	13-HYDROXYOCTADECACIS-9-TRANS-11-DIENOIC ACID	Root		350.0		Jim Duke's personal files.
0	2-METHYLHEPTEN-(2)-ON-(6)	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	24R-ETHYL-5-ALPHA-CHOLESTANE-3-BETA,6-ALPHA-DIOL	Root		15.0		--
0	4-HYDROXY-3-METHOXYPHENYLPROPANE	Root				--
15	5-HYDROXYTRYPTAMINE	Leaf				Jim Duke's personal files.
15	5-HYDROXYTRYPTAMINE	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	7'(E)-4,4',7,9,9'-PENTAHYDROXY-3,3'-DIMETHOXY-8.O,4'-LIGNAN	Root		10.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	7'(E)-7-O-BETA-D-GLUCOPYRANOSYL-4,4',7,9,9'PENTAHYDROXY-3,3'-DIMETHOXY-8-O,4'-LIGNAN	Root		20.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	7-ALPHA-HYDROXY-SITOSTEROL	Root		10.0		--
0	7-ALPHA-HYDROXYDAUCOSTEROL	Root		2.0		Jim Duke's personal files.
0	7-ALPHA-HYDROXYSITOSTEROL-3-O-BETA-D-GLUCOSIDE	Root		5.0		--
0	7-BETA-HYDROXYDAUCOSTEROL	Root		2.7		Jim Duke's personal files.
0	7-BETA-HYDROXYSITOSTEROL	Root		10.0		--
0	7-BETA-HYDROXYSITOSTEROL-3-O-BETA-D-GLUCOSIDE	Root		5.0		--
0	9'-ACETYL-GLUCOSIDE	Root		60.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	9,10,13-TRIHYDROXYOCTADEC-TRANS-11-ENOIC-ACID	Root		342.0		Jim Duke's personal files.
0	9,12,13-TRIHYDROXY-OCTADEC-TRANS-10-ENOIC-ACID	Root		34.0		Jim Duke's personal files.
0	9,9'-BIACETYL-NEOLIVIL	Root		70.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	9,9'-BIACETYL-NEOOLIVIL-GLUCOSIDE	Root		100.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	9,9'-BISACETYL-NEOOLIVIL	Root		21.0		Jim Duke's personal files.
0	9-ACETYL-NEOOLIVIL	Root		10.0		--
0	9-ACETYL-NEOOLIVIL-4-O-BETA-D-GLUCOSIDE	Root		40.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
16	ACETIC-ACID	Plant				--
6	ACETOPHENONE	Plant				--
19	ACETYL-CHOLINE	Leaf		20.0	1.0000000000000002	--
19	ACETYL-CHOLINE	Plant				--
28	ADENOSINE	Root		20.0	-1.0	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
32	AESCULETIN	Plant				Jim Duke's personal files.
3	ALANINE	Leaf				Jim Duke's personal files.
0	ALLANTOIC-ACID	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
32	ALPHA-TOCOPHEROL	Leaf	16.0	94.0	-0.8129439021724595	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
32	ALPHA-TOCOPHEROL	Seed	230.0	380.0	0.47597526565915266	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
5	ALUMINUM	Leaf	28.0	138.0	-0.6324716569216356	--
0	APS-SULFOTRANSFERASE	Leaf				Jim Duke's personal files.
0	ARABINOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
14	ARGININE	Leaf				Jim Duke's personal files.
14	ARGININE	Plant				--
2	ARSENIC	Leaf	0.02	0.11	-0.26026388090430685	ACTA AGRIC SCAND SUPPL 22: 1980
112	ASCORBIC-ACID	Plant	640.0	2200.0	-0.07721563654398624	Jim Duke's personal files.
112	ASCORBIC-ACID	Leaf	166.0	830.0	-0.3669066733430616	--
0	ASH	Leaf	16800.0	84000.0	-0.6140440324119054	--
2	ASPARAGINE	Plant				--
3	ASPARTIC-ACID	Leaf				Jim Duke's personal files.
7	ASTRAGALIN	Inflorescence				Jim Duke's personal files.
7	ASTRAGALIN	Plant		20.0		--
53	BETA-CAROTENE	Leaf	19.0	94.0	-0.7285741762078801	--
53	BETA-CAROTENE	Seed	10.0	25.0	1.1334230048701306	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-FRUCTOFURANOSIDASES	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
47	BETA-SITOSTEROL	Flower		1000.0	-0.8260909440879352	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
47	BETA-SITOSTEROL	Root	290.0	640.0	-0.26037086832978534	--
47	BETA-SITOSTEROL	Shoot				--
0	BETA-SITOSTEROL-3-O-BETA-GLUCOSIDE	Root	300.0	5000.0		--
14	BETAINE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
14	BETAINE	Plant				Jim Duke's personal files.
4	BORON	Leaf	6.0	47.0	-0.3883219582065485	--
0	BROMINE	Leaf	20.0	110.0	1.4890734782768131	ACTA AGRIC SCAND SUPPL 22: 1980
6	BUTYRIC-ACID	Plant				--
3	CADMIUM	Leaf	0.01	0.05	-0.8368052753337135	ACTA AGRIC SCAND SUPPL 22: 1980
102	CAFFEIC-ACID	Leaf				Jim Duke's personal files.
102	CAFFEIC-ACID	Plant				--
1	CAFFEIC-ACID-MALATE	Leaf				Jim Duke's personal files.
0	CAFFEOYL-MALIC-ACID	Flower				--
0	CAFFEOYL-MALIC-ACID	Plant	300.0	16000.0		--
0	CAFFEOYL-MALIC-ACID	Leaf				Jim Duke's personal files.
0	CAFFEOYL-MALIC-ACID	Root				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAFFEYOYL-MALIC-ACID	Shoot				Jim Duke's personal files.
28	CALCIUM	Leaf	5800.0	29000.0	0.7217325751674943	--
2	CAMPESTEROL	Shoot				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)
2	CAMPESTEROL	Root				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	CARBOHYDRATES	Leaf		396000.0	-1.7165693170365268	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CARBONIC-ACID	Plant				--
0	CAROTENOIDS	Seed				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
1	CELLULOSE	Leaf		103000.0	-0.7130404629592589	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CERAMIDES	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
7	CHLORINE	Leaf	1800.0	2700.0	-0.2861725242633269	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Leaf				Jim Duke's personal files.
77	CHLOROGENIC-ACID	Flower				--
77	CHLOROGENIC-ACID	Shoot				Jim Duke's personal files.
77	CHLOROGENIC-ACID	Plant	200.0	5000.0	1.4138737841527487	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	CHLOROPHYLLINS	Leaf	40.0	200.0		--
0	CHLOROPHYLLS	Leaf	157.0	10000.0		--
20	CHOLINE	Inflorescence		4800.0		Jim Duke's personal files.
20	CHOLINE	Leaf		4900.0	-0.18794929272516134	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CHOLINE-ACETYLTRANSFERASE	Plant				--
24	CHROMIUM	Leaf	0.8	3.9	-0.3134050642689804	--
18	CINNAMIC-ACID	Plant				--
53	CITRAL	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
23	CITRIC-ACID	Plant				--
2	COBALT	Leaf	2.6	13.2	-0.22042813771298392	--
12	COPPER	Leaf	2.0	15.0	-0.3483233590115694	--
57	COUMARIN	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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	DAUCOSTEROL	Root		109.0	-0.39151872333431886	Jim Duke's personal files.
0	DAUCOSTEROL-6'-O-PALMITATE	Root		5.6		Jim Duke's personal files.
0	DEHYDROCONIFERYL-ALCOHOL	Root		440.0		--
0	DEHYDRODICONIFERYL-ALCOHOL	Root				--
0	ETHYL-KETONE	Leaf				--
0	FAT	Seed	231000.0	382000.0	0.6142392690986439	--
0	FAT	Leaf	4600.0	23000.0	-0.666792373215361	--
0	FE	Leaf				Jim Duke's personal files.
61	FERULIC-ACID	Plant				--
0	FIBER(CRUDE)	Leaf		110000.0	-0.4537065804968128	--
0	FIBER(DIETARY)	Leaf		430000.0	0.6674526227228147	--
0	FLAVONOIDS	Shoot	7000.0	18000.0	-0.568448613769355	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	FLAVONOL-GLYCOSIDES	Flower		2000.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	FLUORINE	Leaf	1.4	7.8	1.2716109571456782	ACTA AGRIC SCAND SUPPL 22: 1980
15	FOLACIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	FORMIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	FRUCTOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	FUCOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
7	FUMARIC-ACID	Plant				--
22	GABA	Root		250.0	-0.6993602042690977	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	GALACTINOL	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
1	GALACTOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	GALACTOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
62	GALLIC-ACID	Plant				--
1	GLUCOSAMINE	Root		250.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
7	GLUCOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
4	GLUCURONIC-ACID	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	GLUTAMATE-DECARBOXYLASE	Leaf				Jim Duke's personal files.
8	GLUTAMIC-ACID	Leaf				Jim Duke's personal files.
3	GLYCERIC-ACID	Plant				--
8	GLYCEROL	Seed	6975.0	9045.0	-1.0	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	GLYCINE	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	GLYCOLIC-ACID	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
18	HISTAMINE	Leaf		30.0		--
18	HISTAMINE	Plant				--
7	HISTIDINE	Leaf				Jim Duke's personal files.
0	HOMOVANILLIN	Root				--
0	HOMOVANILLYL-ALCOHOL	Root		20.0		--
0	HOMOVANILLYL-ALCOHOL	Plant				--
0	HOMOVANILLYL-ALCOHOL-4'-O-BETA-D-GLUCOSIDE	Root		30.0		--
0	HOMOVANILLYL-ALCOHOL-GLUCOSIDE	Plant				--
0	IRESINOL	Root				--
6	IRON	Seed		57.0	-0.43579149365513603	--
6	IRON	Root		63.0	-0.3501274043700856	--
6	IRON	Leaf	8.0	42.0	-0.8141191647126649	--
0	ISOCITRIC-ACID	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	ISOLARIC	Root				--
3	ISOLEUCINE	Leaf				Jim Duke's personal files.
0	ISOPENTENYL-ADENOSINE	Plant				--
22	ISOQUERCITRIN	Shoot				Jim Duke's personal files.
22	ISOQUERCITRIN	Flower	100.0	200.0		--
22	ISOQUERCITRIN	Root				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	ISOQUERCITRIN	Leaf				Jim Duke's personal files.
22	ISOQUERCITRIN	Inflorescence				Jim Duke's personal files.
22	ISOQUERCITRIN	Plant		200.0	-1.0	--
11	ISORHAMNETIN	Inflorescence				Jim Duke's personal files.
11	ISORHAMNETIN	Flower				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ISORHAMNETIN-3-O-BETA-D-GLUCOSIDE	Plant		200.0		--
0	ISORHAMNETIN-3-O-GLUCOSIDE	Plant				--
0	ISORHAMNETIN-3-O-NEOHESPERIDOSIDE	Plant		150.0		--
0	ISORHAMNETIN-3-O-RUTINOSIDE	Plant		50.0		--
75	KAEMPFEROL	Inflorescence				Jim Duke's personal files.
75	KAEMPFEROL	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.
0	KAEMPFEROL-3-O-BETA-D-RUTINOSIDE	Flower		4000.0		Jim Duke's personal files.
4	KAEMPFEROL-3-O-GLUCOSIDE	Plant				--
0	KAEMPFEROL-3-O-RUTINOSIDE	Plant		400.0		--
0	KAEMPFEROL-3-O-RUTINOSIDE	Inflorescence				Jim Duke's personal files.
0	KOPROPORPHYRIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LEAD	Leaf	1.0	6.0	-0.5232620580049401	ACTA AGRIC SCAND SUPPL 22: 1980
20	LECITHIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LECTIN	Root				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LECTINS	Root		1000.0		--
2	LEUCINE	Leaf				Jim Duke's personal files.
0	LEUCOTRIENES	Plant				--
10	LIGNANS	Root				--
0	LINALOL	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
27	LINOLEIC-ACID	Seed	114235.0	317060.0	1.7987679415656253	--
27	LINOLEIC-ACID	Root				Jim Duke's personal files.
0	LINOLENIC-ACID	Seed	2080.0	3440.0	-0.5198082783061816	--
15	LUTEIN	Seed	10.0	25.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	LUTEIN-EPOXIDE	Leaf				Jim Duke's personal files.
0	LUTEOXANTHIN	Leaf				Jim Duke's personal files.
16	LYCOPENE	Plant				--
4	LYSINE	Leaf				Jim Duke's personal files.
0	LYSOPHOSPHATIDYLCHOLINE	Plant				Antonopoulou, S., Demopoulos, C. A., Andrikopoulos, N. K. 1996. Lipid separation from Urtica doica: Existence of platelet-activating factor. Journal of Agricultural and Food Chemistry 44(10): 3052-3056.
0	LYSOPHOSPHATIDYLCHOLINE	Root				Jim Duke's personal files.
65	MAGNESIUM	Leaf	1720.0	8600.0	1.727662924158556	--
65	MAGNESIUM	Fruit Juice				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Plant				--
2	MALTOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
14	MANGANESE	Leaf	2.0	7.8	-0.4469187084360006	--
14	MANGANESE	Seed		12.0	-0.5172209295208232	--
14	MANGANESE	Root		7.0	-0.4622868527944253	--
3	MANNOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
1	MERCURY	Leaf	0.005	0.028	-0.4039419089194562	ACTA AGRIC SCAND SUPPL 22: 1980
15	METHIONINE	Leaf				Jim Duke's personal files.
2	MOLYBDENUM	Leaf	0.1	3.0	0.32925538300889096	--
3	MUCILAGE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MYO-INOSITOL	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	NEOLIVIL	Root	16.6	30.0		--
0	NEOLIVIL-4-O-BETA-D-GLUCOSIDE	Root		40.0		--
39	NIACIN	Leaf	10.0	52.0	-0.553452668646589	--
3	NICKEL	Leaf	0.3	2.7	-0.3820456576377257	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NITRATES	Plant	15000.0	30000.0		--
0	NITROGEN	Leaf	10000.0	55555.0	0.5888117313284553	--
0	OCTACOSAN-14-OL	Root		1.0		Jim Duke's personal files.
64	OLEANOLIC-ACID	Flower				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
64	OLEANOLIC-ACID	Root		20.0	-0.8395460190057746	--
18	OLEIC-ACID	Seed	17825.0	23115.0	-0.7890813395215028	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	OLIVIL	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)
9	OXALIC-ACID	Plant				--
25	P-COUMARIC-ACID	Plant				--
13	PALMITIC-ACID	Seed	10000.0	13500.0	-0.4210522458459286	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	PALMITIC-ACID	Root				Jim Duke's personal files.
11	PANTOTHENIC-ACID	Leaf		10.0	-0.7191423803929201	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	PECTIN	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	PHENYLALANINE	Leaf				Jim Duke's personal files.
0	PHENYLPROPANES	Root				--
2	PHOSPHATIDYL-CHOLINE	Plant				Antonopoulou, S., Demopoulos, C. A., Andrikopoulos, N. K. 1996. Lipid separation from <i>Urtica doica</i> : Existence of platelet-activating factor. <i>Journal of Agricultural and Food Chemistry</i> 44(10): 3052-3056.
2	PHOSPHATIDYL-CHOLINE	Root				Jim Duke's personal files.
0	PHOSPHATIDYL-ETHANOLAMINE	Plant				Antonopoulou, S., Demopoulos, C. A., Andrikopoulos, N. K. 1996. Lipid separation from <i>Urtica doica</i> : Existence of platelet-activating factor. <i>Journal of Agricultural and Food Chemistry</i> 44(10): 3052-3056.
0	PHOSPHATIDYL-ETHANOLAMINE	Root				Jim Duke's personal files.
0	PHOSPHATIDYL-INOSITOL	Root				Jim Duke's personal files.
0	PHOSPHATIDYL-INOSITOL	Plant				Antonopoulou, S., Demopoulos, C. A., Andrikopoulos, N. K. 1996. Lipid separation from <i>Urtica doica</i> : Existence of platelet-activating factor. <i>Journal of Agricultural and Food Chemistry</i> 44(10): 3052-3056.
4	PHOSPHORIC-ACID	Plant				--
4	PHOSPHORUS	Leaf	894.0	4470.0	-0.09226110591841423	--
0	PINORESIONOL	Root				--
0	POLYSACCHARIDE	Root				Jim Duke's personal files.
0	PORPHYRINS	Leaf		10000.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	POTASSIUM	Seed		12190.0	-0.033423362828000784	--
14	POTASSIUM	Root		11320.0	-0.32648739782615493	--
14	POTASSIUM	Leaf	3500.0	17500.0	-0.567165721978649	--
0	PROLINE	Leaf				Jim Duke's personal files.
0	PROTEIN	Seed	155000.0	201000.0	-0.29173800499018654	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Leaf	50400.0	252000.0	0.4005844311513218	--
0	PROTOPORPHYRIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
176	QUERCETIN	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.
176	QUERCETIN	Inflorescence				Jim Duke's personal files.
0	QUERCETIN-3-O-GLUCOSIDE	Plant				--
0	QUERCETIN-3-O-RUTINOSIDE	Plant				--
1	QUINIC-ACID	Plant				--
1	RAFFINOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	RHAMNOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
15	RIBOFLAVIN	Leaf	0.9	4.3	-0.15770533507217988	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	RUBIDIUM	Leaf	3.2	17.8	-0.8639327837896538	ACTA AGRIC SCAND SUPPL 22: 1980
87	RUTIN	Root				Jim Duke's personal files.
87	RUTIN	Flower		7000.0	-0.6550504100546993	Jim Duke's personal files.
87	RUTIN	Leaf				Jim Duke's personal files.
87	RUTIN	Inflorescence				Jim Duke's personal files.
87	RUTIN	Shoot	500.0	6000.0	-0.12529127545671806	--
44	SCOPOLETIN	Root	3.0	36.0	1.0	--
44	SCOPOLETIN	Flower				--
44	SCOPOLETIN	Plant	1.0	10.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
3	SECOISOLARICIRESINOL	Root		7.7		--
0	SECOISOLARICIRESINOL-9-O-BETA-D-GLUCOSIDE	Root		40.0		--
0	SECRETIN	Plant				Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.
60	SELENIUM	Plant				--
60	SELENIUM	Leaf	0.4	2.2	-0.21351081573374203	--
1	SERINE	Leaf				Jim Duke's personal files.
26	SEROTONIN	Plant	0.2	200.0		--
0	SFA	Seed	10850.0	14070.0	-0.4401901532321724	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	SILICIC-ACID	Plant	3000.0	40000.0	-0.30253592827485043	--
4	SILICON	Leaf	2.0	10.3	-0.38255627538492865	--
9	SINAPIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	SINAPIC-ACID	Plant				Jim Duke's personal files.
0	SITOSTEROL	Root				--
0	SITOSTEROL	Flower				--
0	SITOSTEROL-BETA-D-GLUCOSIDE	Leaf	45.0	76.0		--
0	SITOSTEROL-GLUCOSIDE	Leaf		500.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	SITOSTEROL-GLUCOSIDE	Root				--
0	SITOSTEROL-GLUCOSIDE	Flower				--
1	SODIUM	Seed		660.0	0.3319795537972326	--
1	SODIUM	Root		700.0	-0.1868419870945994	--
1	SODIUM	Leaf	10.0	49.0	-0.6385821646051489	--
1	STACHYOSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
8	STEARIC-ACID	Root				Jim Duke's personal files.
1	STIGMAST-4-EN-3-ONE	Root				--
12	STIGMASTEROL	Root				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)
7	SUCCINIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SUCROSE	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
14	SULFUR	Leaf	1200.0	6665.0	0.4266822869472313	--
41	TANNIC-ACID	Plant				--
35	TANNIN	Leaf	59700.0	133000.0	0.27430739719115166	Jim Duke's personal files.
6	TARTARIC-ACID	Plant				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
31	THIAMIN	Leaf	0.3	5.4	-0.6053418322715544	--
0	THIAMINE	Leaf	1.0	5.4	0.04874859849793932	--
0	THREONIC-ACID	Plant				--
4	THREONINE	Leaf				Jim Duke's personal files.
0	THREONO-1,4-LACTONE	Plant				--
4	TIN	Leaf	5.4	27.0	1.3639151456892538	--
0	TITANIUM	Leaf		27.0	-0.577191376942311	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	TYROSINE	Leaf				Jim Duke's personal files.
89	URSOLIC-ACID	Root		15.0	-1.0	Jim Duke's personal files.
0	URTICA-ARABINOGALACTAN-RP-5	Root				Jim Duke's personal files.
0	URTICA-RHAMNOGALACTURAN-RP-3	Root				Jim Duke's personal files.
0	URTICA-RHAMNOGALACTURAN-RP-4	Root				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	URTICA-TERPENE-DIOL-1	Root				Jim Duke's personal files.
0	URTICA-TERPENE-DIOL-2	Root				Jim Duke's personal files.
0	URTICA-TERPENE-DIOL-3	Root				Jim Duke's personal files.
3	VALINE	Leaf				Jim Duke's personal files.
24	VANILLIC-ACID	Root				--
28	VANILLIN	Root				--
2	VIOLAXANTHIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	VIOLAXANTHIN	Leaf				Jim Duke's personal files.
2	VIOLAXANTHIN	Seed	10.0	25.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
0	VIT-B-1	Plant		0.8		Jim Duke's personal files.
0	VIT-K	Leaf	1.6	76.0		--
0	WATER	Leaf		800000.0	-0.03810424760004873	--
0	XANTHOPHYLL-EPOXIDE	Plant				--
3	XYLOSE	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
2	ZEATIN	Stem				Jim Duke's personal files.
2	ZEATIN	Root				Jim Duke's personal files.
2	ZEATIN	Leaf				Jim Duke's personal files.
2	ZEATIN	Plant				--
0	ZEATIN-NUCLEOTIDE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ZEATIN-O-GLUCOSIDE	Stem				Jim Duke's personal files.
0	ZEATIN-O-GLUCOSIDE	Root				Jim Duke's personal files.
0	ZEATIN-O-GLUCOSIDE	Leaf				Jim Duke's personal files.
77	ZINC	Leaf	0.9	4.7	-0.49792410997533065	--
77	ZINC	Seed		19.0	-0.741894119074501	--
77	ZINC	Root		19.0	-0.2267899421959609	--