

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Inula helenium

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Root	1.0	3.9	-0.888135144785512	--
77	ZINC	Plant				--
0	WATER	Root		780000.0	0.07039472351276986	--
22	UMBELLIFERONE	Shoot				--
22	UMBELLIFERONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TRIDECA-12-ENE-2-4-6-8-10-PENTAYNE	Root		6.6		--
0	TOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TOMENTOSIN	Shoot		26.7		--
0	THIAMINE	Root	2.4	11.0	1.3683576310645862	--
0	TETRAHYDRO-ALANTOLACTONE	Rhizome				--
0	SYNANTHRIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	STRONTIUM	Plant				--
12	STIGMASTEROL	Root				--
1	SODIUM	Root	128.0	580.0	-0.24271578706308006	--
4	SILICON	Root				--
60	SELENIUM	Root				--
44	SCOPOLETIN	Shoot				--
44	SCOPOLETIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
15	RIBOFLAVIN	Root	0.7	3.2	-0.19138745982624014	--
0	RESIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	QUERCETIN-7-O-BETA-TRIGLUCOSIDE	Inflorescence				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Inflorescence				--
0	PSEUDOINULIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PROTEIN	Root	39600.0	180000.0	0.6915898871115741	--
14	POTASSIUM	Root	2222.0	10100.0	-0.41581998331162273	--
0	PHYTOMELANE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Root	330.0	1500.0	-0.3545362125680356	--
4	PHOSPHORUS	Plant				--
0	PECTINS	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	NONACOSAN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	NICKEL	Plant				--
39	NIACIN	Root	15.0	70.0	0.5727223514607939	--
3	MUCILAGE	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.
2	MOLYBDENUM	Plant				--
14	MANGANESE	Root	0.2	0.8	-0.5363206240063116	--
14	MANGANESE	Plant				--
65	MAGNESIUM	Root	1650.0	7500.0	2.627774557100011	--
13	ISOALANTOLACTONE	Root	1305.0	5215.0		--
13	ISOALANTOLACTONE	Shoot		13.0		--
13	ISOALANTOLACTONE	Root Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	ISOALANTOLACTONE	Rhizome	9900.0	19400.0		--
13	ISOALANTOLACTONE	Essential Oil				--
13	ISOALANTOLACTONE	Plant				--
6	IRON	Plant				--
6	IRON	Root	0.9	4.0	-0.43584204309243646	--
0	INULINASE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
19	INULIN	Root	99000.0	450000.0	0.7427321953048467	--
0	INULENIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	INOSITOL	Leaf				--
0	HELIANTHENIN	Root				--
0	HELENINE	Root Essent. Oil				--
5	HELENIN	Plant				--
5	HELENIN	Root		15600.0		--
34	HELENALIN	Root				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	GERMACRENE-D-LACTOSE	Plant				--
0	GERMACRENE-D-LACTONE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	GERMACRENE-D-LACTONE	Root		30.0		--
2	GERMACRENE-D	Root				Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-SITOSTEROL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	FRIEDELIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	FRIEDELIN	Root Essent. Oil				--
0	FIBER(DIETARY)	Root		380000.0	-0.20125931618604387	--
0	FIBER(CRUDE)	Root		140000.0	0.8495825650975791	--
0	FAT	Root	4180.0	19000.0	-0.12938651050011435	--
0	EUDESMAMOLIDES	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	EUDESMADIEN-5,7(11)-OLID-(8BETA,12)	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EUDESMADIEN-4-(15),7(11)-OLID-(8BETA,12)	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EUDESMA-5-7(11)-DIEN-8-BETA-12-OLIDE	Root				--
0	EUDESMA-5-7(11)-DIEN-13-OL-8-BETA-12-OLIDE	Root				--
0	EUDESMA-4(15)-7(11)-DIEN-8-BETA-12-OLIDE	Root				--
0	EO	Plant	5700.0	54000.0	3.3637756573619817	--
0	EO	Fruit	10000.0	40000.0	-0.042481439666032995	--
2	DIHYDROISOALANTOLACT ONE	Plant				--
2	DIHYDROISOALANTOLACT ONE	Rhizome				--
2	DIHYDROISOALANTOLACT ONE	Root				--

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2	DIHYDROISOALANTOLACTONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DIHYDROALANTOLACTONE	Rhizome				--
0	DIHYDROALANTOLACTONE	Root				--
0	DAMMARADIENYL-ACETATE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DAMMARADIENOL-ACETATE	Root		20000.0		--
3	DAMMARADIENOL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DAMMADIEN-3-BETA-OL	Root		60.0		--
0	DAMARADIENOL	Root				--
9	COSTUNOLIDE	Shoot		20.0	1.0	--
12	COPPER	Plant				--
2	COBALT	Root	0.4	1.8	-0.5061395402470722	--
24	CHROMIUM	Root	0.2	1.0	-0.3606264349739525	--
1	CARABRONE	Plant				--
1	CARABRONE	Shoot	34.0	40.0		--
2	CAMPESTEROL	Root				--
28	CALCIUM	Root	2200.0	10000.0	0.28443978784453666	--
0	BETA-SITOSTEROL-GLUCOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Root				--
0	BETA-HUMULENE	Root		66.0		--
53	BETA-CAROTENE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	AZULENE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ASH	Root	15840.0	72000.0	0.12682088947059497	--
112	ASCORBIC-ACID	Root	4.4	20.0	-0.6345406922681753	--
112	ASCORBIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	ALUMINUM	Plant				--
0	ALANTOPICRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALANTOLIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
36	ALANTOLACTONE	Rhizome	5000.0	15100.0		--
36	ALANTOLACTONE	Plant				--
36	ALANTOLACTONE	Root	435.0	1740.0		--
36	ALANTOLACTONE	Root Essent. Oil				--
0	ALANTOL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALANTIC-ACID	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	9BETA-HYDROXYCOSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9BETA-(2-METHYLBUTYRYLOXY)-COSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-ISOVALERYLOXY-COSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	9-ISOBUTYRYLOXY-COSTUNOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-BETA-ISO-VALEROYL-OXY-COSTUNOLIDE	Shoot		20.0		--
0	9-BETA-ISO-BUTYROYL-OXY-COSTUNOLIDE	Shoot		4.0		--
0	9-BETA-HYDROXYCOSTUNOLIDE	Shoot		20.0		--
0	9-BETA-(2-METHYL-BUTYROYL-OXY)-COSTUNOLIDE	Shoot		20.0		--
0	8-EPITOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	8-EPITOMENTOSIN	Shoot		16.7		--
0	8-EPIIVANGUSTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	8-EPI-ISOVANGUSTIN	Shoot		40.0		--
0	8,9-EPOXY-10-ISOBUTYRYLOXYTHYMOL-ISOBUTYRATE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	4H-TOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	4BETA,5ALPHA-EPOXY-4,5-CIS-INUNOLIDE	Shoot		33.0		--
0	4BETA,5ALPHA-EPOXY-4,5-CIS-INUNOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	4ALPHA-H-CONFERTIN	Shoot		1.3		--
0	4ALPHA-H-CONFERTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	4-EPIISOINUVISCOLIDE	Shoot		6.6		--
0	4-EPIISOINUVISCOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	4-ALPHA-5-ALPHA-EPOXY-10-ALPHA-4(H)-INUVISCOLIDE	Shoot		700.0		--
0	4-ALPHA-5-ALPHA-EPOXY-10-14(H)-INUVISCOLIDE	Shoot		27.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4,5-DIHYDRO-5,6-DEHYDROALANTOLACTONE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	3-METHYLQUERCETIN	Inflorescence				--
0	2-OXOALANTOLACTONE	Shoot		5.0		--
0	2-OXOALANTOLACTONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	2-ALPHA-HYDROXYALANTOLACTONE	Shoot		56.0		--
0	1BETA-HYDROXYALANTOLACTONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	1BETA,10ALPHA-EPOXY-1,10-H-CIS-INUNOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	1BETA,10ALPHA-EPOXY-1,10-H-CIS-INUNOLIDE	Shoot		16.7		--
0	11(13)-DEHYDRO-ERIOLIN	Shoot		37.5		--
0	1-DEOXY-8-EPIIVANGUSTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	1-DEOXY-8-EPIIVANGUSTIN	Root		180.0		--
0	1-BETA-HYDROXYISOALANTOLACTONE	Shoot		3.3		--
0	1-(1-ISO-BUTYROXY-METHYL-1-2-OXIDO-ETHYL)-2-ISO-BUTYROXY-4-METHYL-BENZENE	Root		5.0		--
0	(-)-INOSITOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.