

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Inula helenium

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	EO	Plant	5700.0	54000.0	3.3637756573619817	--
65	MAGNESIUM	Root	1650.0	7500.0	2.627774557100011	--
0	THIAMINE	Root	2.4	11.0	1.3683576310645862	--
9	COSTUNOLIDE	Shoot		20.0	1.0	--
0	FIBER(CRUDE)	Root		140000.0	0.8495825650975791	--
19	INULIN	Root	99000.0	450000.0	0.7427321953048467	--
0	PROTEIN	Root	39600.0	180000.0	0.6915898871115741	--
39	NIACIN	Root	15.0	70.0	0.5727223514607939	--
28	CALCIUM	Root	2200.0	10000.0	0.28443978784453666	--
0	ASH	Root	15840.0	72000.0	0.12682088947059497	--
0	WATER	Root		780000.0	0.07039472351276986	--
0	EO	Fruit	10000.0	40000.0	-0.042481439666032995	--
0	FAT	Root	4180.0	19000.0	-0.12938651050011435	--
15	RIBOFLAVIN	Root	0.7	3.2	-0.19138745982624014	--
0	FIBER(DIETARY)	Root		380000.0	-0.20125931618604387	--
1	SODIUM	Root	128.0	580.0	-0.24271578706308006	--
4	PHOSPHORUS	Root	330.0	1500.0	-0.3545362125680356	--
24	CHROMIUM	Root	0.2	1.0	-0.3606264349739525	--
14	POTASSIUM	Root	2222.0	10100.0	-0.41581998331162273	--
6	IRON	Root	0.9	4.0	-0.43584204309243646	--
2	COBALT	Root	0.4	1.8	-0.5061395402470722	--
14	MANGANESE	Root	0.2	0.8	-0.5363206240063116	--
112	ASCORBIC-ACID	Root	4.4	20.0	-0.6345406922681753	--
77	ZINC	Root	1.0	3.9	-0.888135144785512	--
0	PHYTOMELANE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	9-ISOVALERYLOXY-COSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-BETA-ISO-BUTYROYL-OXY-COSTUNOLIDE	Shoot		4.0		--
0	DIHYDROALANTOLACTONE	Rhizome				--
44	SCOPOLETIN	Shoot				--
2	GERMACRENE-D	Root				Abstract (See species file)
0	TOMENTOSIN	Shoot		26.7		--
0	1-DEOXY-8-EPIIVANGUSTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
13	ISOALANTOLACTONE	Root Essent. Oil				--
47	BETA-SITOSTEROL	Root				--
0	BETA-HUMULENE	Root		66.0		--
0	1BETA,10ALPHA-EPOXY-1,10-H-CIS-INUNOLIDE	Shoot		16.7		--
0	PECTINS	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	9-ISOBUTYRYLOXY-COSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-BETA-(2-METHYL-BUTYROYL-OXY)-COSTUNOLIDE	Shoot		20.0		--
0	DAMARADIENOL	Root				--
13	ISOALANTOLACTONE	Plant				--
0	GAMMA-SITOSTEROL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	STRONTIUM	Plant				--
10	AZULENE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HELENINE	Root Essent. Oil				--
0	8-EPITOMENTOSIN	Shoot		16.7		--
0	NONACOSAN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	8-EPITOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	4BETA,5ALPHA-EPOXY-4,5-CIS-INUNOLIDE	Shoot		33.0		--
2	FRIEDELIN	Root Essent. Oil				--
2	FRIEDELIN	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				--
112	ASCORBIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GERMACRENE-D-LACTONE	Root		30.0		--
0	4-EPIISOINUVISCOLIDE	Shoot		6.6		--
13	ISOALANTOLACTONE	Root	1305.0	5215.0		--
0	8-EPIIVANGUSTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
1	CARABRONE	Plant				--
0	4ALPHA-H-CONFERTIN	Shoot		1.3		--
6	IRON	Plant				--
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.
4	3-METHYLQUERCETIN	Inflorescence				--
0	EUDESMA-5-7(11)-DIEN-8-BETA-12-OLIDE	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	INOSITOL	Leaf				--
0	ALANTOPICRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	ISOALANTOLACTONE	Rhizome	9900.0	19400.0		--
0	TOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	INULINASE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
53	BETA-CAROTENE	Root				--
0	4H-TOMENTOSIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
1	CARABRONE	Shoot	34.0	40.0		--
0	2-OXOALANTOLACTONE	Shoot		5.0		--
12	COPPER	Plant				--
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.
176	QUERCETIN	Inflorescence				--
22	UMBELLIFERONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ALANTOLIC-ACID	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-13-OL-8-BETA-12-OLIDE	Root				--
13	ISOALANTOLACTONE	Essential Oil				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4BETA,5ALPHA-EPOXY-4,5-CIS-INUNOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	CAMPESTEROL	Root				--
0	1-DEOXY-8-EPIIVANGUSTIN	Root		180.0		--
4	PHOSPHORUS	Plant				--
0	SYNANTHRIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
36	ALANTOLACTONE	Root	435.0	1740.0		--
0	EUDESMA-4(15)-7(11)-DIEN-8-BETA-12-OLIDE	Root				--
5	HELENIN	Plant				--
0	GERMACRENE-D-LACTONE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	INULENIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4ALPHA-H-CONFERTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	1-(1-ISO-BUTYROXY-METHYL-1-2-OXIDO-ETHYL)-2-ISO-BUTYROXY-4-METHYL-BENZENE	Root		5.0		--
36	ALANTOLACTONE	Root Essent. Oil				--
2	DIHYDROISOALANTOLACTONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	NICKEL	Plant				--
12	STIGMASTEROL	Root				--

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0	ALANTOL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	11(13)-DEHYDRO-ERIOLIN	Shoot		37.5		--
0	EUDESMAMOLIDES	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	HELIANTHENIN	Root				--
0	(-)-INOSITOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4-EPIISOINUVISCOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
5	ALUMINUM	Plant				--
36	ALANTOLACTONE	Rhizome	5000.0	15100.0		--
0	DIHYDROALANTOLACTONE	Root				--
2	MOLYBDENUM	Plant				--
44	SCOPOLETIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
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	DAMMARADIENOL-ACETATE	Root		20000.0		--
2	DIHYDROISOALANTOLACTONE	Plant				--
0	8,9-EPOXY-10-ISOBUTYRYLOXYTHYMOL-ISOBUTYRATE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
5	HELENIN	Root		15600.0		--
77	ZINC	Plant				--

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0	2-OXOALANTOLACTONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TETRAHYDRO-ALANTOLACTONE	Rhizome				--
36	ALANTOLACTONE	Plant				--
0	DAMMARADIENYL-ACETATE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	MANGANESE	Plant				--
0	RESIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	9BETA-HYDROXYCOSTULONIDE	Plant				J.S. Glasby Dict.Pl's Containing 2ndary Metabolite. 1991.
0	DAMMADIEN-3-BETA-OL	Root		60.0		--
2	DIHYDROISOALANTOLACTONE	Rhizome				--
0	4,5-DIHYDRO-5,6-DEHYDROALANTOLACTONE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
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	8-EPI-ISOVANGUSTIN	Shoot		40.0		--
0	1BETA-HYDROXYALANTOLACTONE	Plant				J.S. Glasby Dict.Pl's Containing 2ndary Metabolite. 1991.
1	2-ALPHA-HYDROXYALANTOLACTONE	Shoot		56.0		--

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3	DAMMARADIENOL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4-ALPHA-5-ALPHA-EPOXY-10-ALPHA-4(H)-INUVISCOLIDE	Shoot		700.0		--
22	UMBELLIFERONE	Shoot				--
4	SILICON	Root				--
0	PSEUDOINULIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	9BETA-(2-METHYLBUTYRYLOXY)-COSTULONIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	9-BETA-ISO-VALEROYL-OXY-COSTUNOLIDE	Shoot		20.0		--
2	DIHYDROISOALANTOLACTONE	Root				--
0	1-BETA-HYDROXYISOALANTOLACTONE	Shoot		3.3		--
0	GERMACRENE-D-LACTOSE	Plant				--
0	TRIDECA-12-ENE-2-4-6-8-10-PENTAYNE	Root		6.6		--
0	1BETA,10ALPHA-EPOXY-1,10-H-CIS-INUNOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
13	ISOALANTOLACTONE	Shoot		13.0		--
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.
0	4-ALPHA-5-ALPHA-EPOXY-10-14(H)-INUVISCOLIDE	Shoot		27.0		--
0	9-BETA-HYDROXYCOSTUNOLIDE	Shoot		20.0		--
60	SELENIUM	Root				--