

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Angelica archangelica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	2'-ANGELOYL-3'-ISOVALERYL-VAGINATE	Root				Phytochem. Anal. 3(1):42-48. 1992
2	2-NONANONE	Root		1.0		--
10	5-METHOXY-PSORALEN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
10	5-METHOXY-PSORALEN	Fruit				--
1	8-(2-(3-METHYLBUTOXY)-3-HYDROXY-3-METHYLBUTOXY)PSORALEN	Root				Phytochem. Anal. 3(1):42-48. 1992
21	8-METHOXY-PSORALEN	Plant				--
6	ACETALDEHYDE	Seed				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
1	ACONITIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
28	ADENOSINE	Root				Pakistan Encyclopedia Planta Medica. 1986.
28	ADENOSINE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
3	ALANINE	Leaf				--
10	ALPHA-AMYRIN	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
2	ALPHA-AMYRIN-ACETATE	Fruit		26.0		--
20	ALPHA-BISABOLOL	Plant				Pakistan Encyclopedia Planta Medica. 1986.
2	ALPHA-HUMULENE	Root Essent. Oil				--
2	ALPHA-HUMULENE	Root	18.0	50.0	1.4138559108869015	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-METHYL-BUTYRIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
11	ALPHA-PHELLANDRENE	Fruit				--
11	ALPHA-PHELLANDRENE	Root				--
11	ALPHA-PHELLANDRENE	Seed Essent. Oil				--
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil		678000.0	1.751978121762097	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Root Essent. Oil		225000.0		--
28	ALPHA-PINENE	Seed	170.0	1500.0	-0.34027084756770226	--
28	ALPHA-PINENE	Fruit				--
28	ALPHA-PINENE	Seed Essent. Oil		149000.0	0.28611774259215744	--
28	ALPHA-PINENE	Root Essent. Oil				--
28	ALPHA-PINENE	Root	35.0	5890.0	2.1989183610646146	--
13	ALPHA-TERPINENE	Root Essent. Oil				--
13	ALPHA-TERPINENE	Fruit				--
13	ALPHA-TERPINENE	Root	0.0	6.0	-0.6602197185589468	--
23	ALPHA-TERPINEOL	Plant				--
23	ALPHA-TERPINEOL	Root	0.0	12.0	-0.5636245828350195	--
1	ANGELIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
17	ANGELICIN	Root				--
17	ANGELICIN	Root Essent. Oil		35000.0		--
17	ANGELICIN	Seed				--
3	AR-CURCUMENE	Root	0.0	6.0	-1.0	--
2	ARCHANGELICIN	Shoot				--
2	ARCHANGELICIN	Fruit				--
2	ARCHANGELICIN	Plant				--
2	ARCHANGELICIN	Root				--
2	ASPARAGINE	Leaf				--
3	ASPARTIC-ACID	Leaf				--
1	BEHENIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
26	BERGAPTEN	Seed	2.0	6800.0	1.5453742965682007	--
26	BERGAPTEN	Root				--
26	BERGAPTEN	Shoot				--
26	BERGAPTEN	Root Essent. Oil		88000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
26	BERGAPTEN	Plant				--
26	BERGAPTEN	Fruit	48.0	1300.0		--
4	BETA-AMYRIN-ACETATE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
6	BETA-BISABOLENE	Root	8.0	72.0	-1.2022170084503725	--
6	BETA-BISABOLENE	Root Essent. Oil				--
5	BETA-ELEMENE	Root	0.0	90.0	-1.0	--
5	BETA-ELEMENE	Root Essent. Oil				--
13	BETA-EUDESOL	Root	1.0	21.0	1.0	--
13	BETA-EUDESOL	Root Essent. Oil				--
2	BETA-MYRCENE	Root				--
3	BETA-PHELLANDRENE	Fruit				--
3	BETA-PHELLANDRENE	Root	50.0	5320.0	1.0	--
3	BETA-PHELLANDRENE	Root Essent. Oil				--
13	BETA-PINENE	Root	2.0	2400.0	2.065213478268315	--
13	BETA-PINENE	Fruit				--
13	BETA-PINENE	Seed Essent. Oil				--
13	BETA-PINENE	Root Essent. Oil				--
3	BETA-SELINENE	Root				--
5	BETA-SESQUIPELLANDRENE	Root	0.0	7.0	-1.0	--
47	BETA-SITOSTEROL	Seed	1.5	9.5	-0.627327401886418	--
47	BETA-SITOSTEROL	Fruit				--
47	BETA-SITOSTEROL	Plant				--
2	BISABOLANGELONE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
35	BORNEOL	Root Essent. Oil				--
35	BORNEOL	Plant				Pakistan Encyclopedia Planta Medica. 1986.
35	BORNEOL	Root				Pakistan Encyclopedia Planta Medica. 1986.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	BORNYL-ACETATE	Root	25.0	75.0	-0.5747231818271519	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BYAKANGELICIN	Root		13.0		--
1	BYAKANGELICIN-ANGELATE	Root		8.0		--
102	CAFFEIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
9	CAMPHENE	Fruit				--
9	CAMPHENE	Root Essent. Oil				--
9	CAMPHENE	Root	2.0	130.0	1.4108316199577506	--
19	CARVONE	Root	0.0	2.0	-0.7714223871650727	--
31	CARYOPHYLLENE	Root	8.0	20.0	-0.6816330830044597	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Root Essent. Oil				--
3	CEDROL	Root				--
77	CHLOROGENIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
3	CIS-OCIMENE	Root Essent. Oil				--
3	CIS-OCIMENE	Root	4.0	125.0		--
2	CONIFERIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
2	CONIFERIN	Root				Pakistan Encyclopedia Planta Medica. 1986.
1	CUPARENE	Root	3.0	10.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CUPARENE	Root Essent. Oil				--
8	DELTA-3-CARENE	Root	30.0	505.0	1.4140772728836788	--
9	DELTA-CADINENE	Root	1.0	101.0	1.4139785716108804	--
9	DELTA-CADINENE	Root Essent. Oil				--
2	DIACETYL	Root				Pakistan Encyclopedia Planta Medica. 1986.
2	ELEMOL	Root Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ELEMOL	Root	0.0	18.0		--
5	ERGOSTEROL	Fruit				--
5	ERGOSTEROL	Plant				Pakistan Encyclopedia Planta Medica. 1986.
24	ETHANOL	Root				--
1	ETHYL-LAURATE	Root				--
1	ETHYL-MYRISTATE	Root Essent. Oil				--
1	ETHYL-MYRISTATE	Root				--
1	ETHYL-OLEATE	Root				--
1	ETHYL-PALMITATE	Root		10.0		--
6	FENCHONE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
6	FENCHONE	Root Essent. Oil				--
8	FRUCTOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
7	FUMARIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
6	FURFURAL	Root				Pakistan Encyclopedia Planta Medica. 1986.
11	GAMMA-TERPINENE	Root Essent. Oil				--
11	GAMMA-TERPINENE	Root	1.0	12.0	-0.802453903453894	--
2	GERMACRENE-D	Root Essent. Oil				--
2	GERMACRENE-D	Root	2.0	26.0	1.0	--
7	GLUCOSE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
5	GLUTAMINE	Leaf				--
25	IMPERATORIN	Shoot				--
25	IMPERATORIN	Root				--
25	IMPERATORIN	Plant				--
25	IMPERATORIN	Fruit		66.0	1.940524885628408	--
25	IMPERATORIN	Seed	50.0	5000.0	0.20180777184913837	--
8	ISOIMPERATORIN	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	ISOIMPERATORIN	Plant				--
8	ISOIMPERATORIN	Shoot				--
8	ISOIMPERATORIN	Fruit		4.0	-0.9645619455667129	--
8	ISOIMPERATORIN	Seed	12.0	75.0	1.0	Wealth of India.
3	ISOLEUCINE	Leaf				--
15	ISOPIMPINELLIN	Fruit		18.0	1.0	--
15	ISOPIMPINELLIN	Root				--
15	ISOPIMPINELLIN	Plant				--
15	ISOPIMPINELLIN	Root Essent. Oil				--
7	LAURIC-ACID	Fruit				--
1	LAURIC-ACID-ETHYL-ESTER	Root Essent. Oil				--
7	LIGUSTILIDE	Root				--
7	LIGUSTILIDE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
60	LIMONENE	Root	0.0	1320.0	1.7252265137628358	--
60	LIMONENE	Root Essent. Oil		227000.0	1.5228275750660336	--
53	LINALOOL	Root Essent. Oil				--
53	LINALOOL	Root		10.0	-0.41637162119267096	--
27	LINOLEIC-ACID	Fruit				--
2	LUPEOL-ACETATE	Fruit		40.0		--
2	LUPEOL-ACETATE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
15	LUTEIN	Leaf				--
15	MALIC-ACID	Root				--
15	MALIC-ACID	Plant				--
1	MALONIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	METHANOL	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Fruit				--
22	MYRCENE	Seed Essent. Oil				--
22	MYRCENE	Root Essent. Oil				--
22	MYRCENE	Root	7.0	380.0	1.4075966148229513	--
6	MYRISTIC-ACID	Fruit				--
2	OCTYL-ISOVALERATE	Root				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OCTYL-ISOVALERATE	Root Essent. Oil				--
18	OLEIC-ACID	Seed		133000.0	0.11423787911448594	--
1	OLEIC-ACID-ETHYL-ESTER	Root Essent. Oil				--
15	OSTHOL	Root		2000.0		--
15	OSTHOL	Fruit				--
15	OSTHOL	Root Essent. Oil		530000.0		--
4	OSTHOLE	Root				--
1	OSTRUTHOL	Root		2000.0		--
1	OSTRUTHOL	Seed	9.0	57.0		Wealth of India.
9	OXALIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
6	OXYPEUCEDANIN	Plant				--
6	OXYPEUCEDANIN	Root	0.0	385.0	-1.0	--
6	OXYPEUCEDANIN	Shoot				--
6	OXYPEUCEDANIN	Fruit				--
2	OXYPEUCEDANIN-HYDRATE	Plant				--
2	OXYPEUCEDANIN-HYDRATE	Seed	0.6	3.8	-1.0	Wealth of India.
2	OXYPEUCEDANIN-HYDRATE	Shoot				--
2	OXYPEUCEDANIN-HYDRATE	Root		1500.0		--
2	OXYPEUCEDANIN-HYDRATE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Root Essent. Oil				--
16	P-CYMENE	Seed	800.0	5050.0	0.5834563158237798	Wealth of India.
16	P-CYMENE	Root	40.0	980.0	1.731986088156794	--
13	PALMITIC-ACID	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	PALMITIC-ACID	Fruit				--
13	PALMITIC-ACID	Root Essent. Oil		60000.0	-0.14585513924522536	--
1	PALMITIC-ACID-ETHYL-ESTER	Root Essent. Oil				--
2	PALMITOLEIC-ACID	Fruit				--
2	PALMITOLEIC-ACID	Seed				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	PENTADECANOIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
2	PHELLOPTERIN	Root				Phytochem. Anal. 3(1):42-48. 1992
2	PHELLOPTERIN	Plant				--
7	PHENYLALANINE	Leaf				--
7	PIMPINELLIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
7	PIMPINELLIN	Fruit				--
7	PIPERITONE	Root	0.0	3.0		--
31	PSORALEN	Plant				--
31	PSORALEN	Seed		100.0	-0.6857885534361138	--
31	PSORALEN	Fruit		310.0	-0.3807181031466607	--
31	PSORALEN	Root	2.0	140.0	1.2840756412696184	--
1	QUINIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
4	RUTAMARIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
5	SABINENE	Root	2.0	95.0	0.0843149140979014	--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Root Essent. Oil				--
5	SABINOL	Root	0.0	34.0		--
44	SCOPOLETIN	Root				--
44	SCOPOLETIN	Tissue Culture				--
1	SPHONDIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
8	STEARIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
8	STEARIC-ACID	Fruit				--
12	STIGMASTEROL	Fruit				--
12	STIGMASTEROL	Plant				Pakistan Encyclopedia Planta Medica. 1986.
7	SUCCINIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.
14	SUCROSE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
23	TERPINEN-4-OL	Root Essent. Oil				--
23	TERPINEN-4-OL	Root	0.0	10.0	-0.5731321285364237	--
9	TERPINOLENE	Root	0.0	16.0	-1.0	--
9	TERPINOLENE	Root Essent. Oil				--
2	THUJOPSENE	Root				--
1	TIGLIC-ACID	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
8	TRANS-ANETHOLE	Root	2.0	13.0		--
2	TRANS-BETA-FARNESENE	Root	2.0	10.0		--
1	TRANS-CARVEOL	Root Essent. Oil				--
1	TRANS-CARVEOL	Root	0.0	11.0		--
2	TRIDECANOIC-ACID	Plant				Pakistan Encyclopedia Planta Medica. 1986.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
29	TRYPTOPHAN	Leaf				--
8	TYROSINE	Leaf				--
22	UMBELLIFERONE	Plant				Pakistan Encyclopedia Planta Medica. 1986.
22	UMBELLIFERONE	Fruit				--
22	UMBELLIFERONE	Root		200.0		--
3	VALINE	Leaf				--
2	VIOLAXANTHIN	Leaf				--
1	VISNAGIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
43	XANTHOTOXIN	Plant				--
43	XANTHOTOXIN	Root				--
43	XANTHOTOXIN	Fruit		42.0	1.0	--
43	XANTHOTOXIN	Seed	2.0	1900.0	-1.0	--
43	XANTHOTOXIN	Shoot				--
5	XANTHOTOXOL	Seed				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	XANTHOTOXOL	Plant				--
5	XANTHOTOXOL	Fruit				--
1	XANTHOXYLETIN	Plant				Pakistan Encyclopedia Planta Medica. 1986.
5	ZEAXANTHIN	Leaf				--
6	ZINGIBERENE	Root	0.0	5.0	-1.0	--