

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Elaeagnus angustifolia*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTEIN	Seed	92000.0	420000.0	1.6563804103006274	--
64	OLEANOLIC-ACID	Bark		2140.0	1.0	Zhong, J. F., Jin, J. H., Li, X. P. 1991. Determination of Oleanolic Acid in Russian Olive (<i>Elaeagnus angustifolia</i>) by TLC-Scanning. <i>Chung Ts'ao Yao</i> 22 3: 398-399. Gansu Inst New Med Pharm Sci Lanzhou 730050 China.
2	ETHYL-CINNAMATE	Flower		790.0	1.0	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	OCTADECENOIC-ACID	Seed		6085.0	1.0	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	OCTADECADIENOIC-ACID	Seed	13570.0	15365.0	1.0	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	2-CARBOXYARABINITOL	Leaf		311.0	0.08903096288704487	Moore, B. D., Isidoro, E., Seemann, J. R. 1993. Distribution of 2-Carboxyarabinitol Among Plants. <i>Phytochemistry</i> 34 3: 703-707. Dept. Biochem. Univ. Nevada Reno 89557, USA.
0	FAT	Seed	18000.0	263000.0	-0.012576297105149901	--
112	ASCORBIC-ACID	Fruit	40.0	500.0	-0.25340050910901013	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PALMITOLEIC-ACID	Seed		495.0	-0.2865853497815508	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	EO	Flower		1000.0	-0.3900301229812082	--
93	TOCOPHEROL	Fruit	1.0	20.0	-0.5354215411219696	--
8	STEARIC-ACID	Seed		235.0	-0.5602913382599791	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
13	PALMITIC-ACID	Seed		1145.0	-0.6759759843568258	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	ASH	Seed		24000.0	-0.7182572214591987	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ALKALOIDS	Bark		2000.0	-0.8687069002434933	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OCTADECATRIENOIC-ACID	Seed		3170.0	-1.0	Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
8	GLUTAMIC-ACID	Root		0.48	-1.2905101027270787	Wheller, C. T., Bond, G. 1970. The Amino Acids of Non-Legume Root Nodules. Phytochemistry 9: 705-708. Dept. Botany Univ. Glasgow Glasgow, Scotland.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISORHAMNETIN-3-O-GALACTOSIDE	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	TRANS-CINNAMIC-ACID-ETHYL-ESTER	Flower Essent. Oil		788800.0		Li, Z. L., Chen, N., Xue, D. Y., Li, H. Q., Chen, Y. Z. 1989. Chemical Constituents of the Volatile Oil of Fresh Flowers of <i>Elaeagnus angultifolia</i> L. <i>Gaodeng Xuexiao Huaxue Xuebao</i> 10 8: 804-808. Anal Test Cent Lanzhou Univ Lanzhou China.
0	EO	Shoot				Isaev, V. 1932. Essential Oils of the Flora of Tadshikistan. <i>Acta Hortii Bot Tadshikistan</i> 1932: 17-.
0	TETRAHYDROHARMAN	Bark				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	10-HYDROXY-TRIDECAF-6,8-DIENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . <i>Chem. Nat. Comp.</i> 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
61	FERULIC-ACID	Leaf				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYL-1,2,3,4-TETRAHYDRO-BETA-CARBOLINE	Bark				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TETRAHYDROHARMAN	Plant				--

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11	ISORHAMNETIN	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	DIHYDROHARMAN	Plant				Nikolaeva, A. G. 1970. Alkaloids of <i>Elaeagnus angustifolia</i> . Chem Nat Comp 6 5: 659- Zaporozhie Med Inst Kaporozh USSR.
9	SINAPIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	1,2,3,4-TETRAHYDRO-BETA-CARBOLINE	Plant				--
0	CATINCIN	Fruit				Kusova, R. D., Kazakov, A. L., Luk'yanchikov, M. S. 1988. Phenolic Compounds From Fruit of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 24 3: 392-393. Pyatigorsk Farm Inst Pyatigorsk USSR.
176	QUERCETIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
51	ELLAGIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ISORHAMNETIN	Fruit				Kusova, R. D., Kazakov, A. L., Luk'yanchikov, M. S. 1988. Phenolic Compounds From Fruit of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 24 3: 392-393. Pyatigorsk Farm Inst Pyatigorsk USSR.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
102	CAFFEIC-ACID	Fruit				Kusova, R. D., Kazakov, A. L., Luk'yanchikov, M. S. 1988. Phenolic Compounds From Fruit of <i>Elaeagnus angustifolia</i> . <i>Chem. Nat. Comp.</i> 24 3: 392-393. Pyatigorsk Farm Inst Pyatigorsk USSR.
0	QUEBRACHITOL	Fruit				--
0	ELAEAGNINE	Plant				--
1	HARMOL	Shoot				Gill, S., Raszeja, W. 1973. Chromatographic Analysis of Harman Alkaloid Derivatives in Some Plant Raw Materials. <i>Rozpr Wydz 3 Nauk Mat Przyr Gdansk Tow Nauk 8: 137-143.</i> Akad Med Danzig Poland.
0	7-O-COUMAROYLKAEMPFERO L-3-O-GLUCOSIDE	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	9-HYDROXY-HEXADEC-10-ENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . <i>Chem. Nat. Comp.</i> 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
0	DIHYDROHARMAN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	HARMOL	Root Bark				Gill, S., Raszeja, W. 1973. Chromatographic Analysis of Harman Alkaloid Derivatives in Some Plant Raw Materials. <i>Rozpr Wydz 3 Nauk Mat-Przyr Gdansk Tow Nauk 8: 137-</i> . Acad Med Danzig Poland.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-O-(GLUCO-GALACTO)-FERULOYL-ISORHAMNETIN	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
0	9,10-EPOXY-OCTADEC-12-ENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
25	P-COUMARIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
64	OLEANOLIC-ACID	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
77	CHLOROGENIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	HARMINE	Shoot				Lutowski, J., Nowicka, B. 1968. Simple Carboline Alkaloids. VI. Comparative Chemical Evaluation of Alkaloid Fractions From Different Sources. Inst. Przem 14 4: 235-238. Poznan Poland.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1-ISOBUTYL-1,2,3,4-TETRAHYDRO-BETA-CARBOLINE	Root Bark				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.
2	NEO-CHLOROGENIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CALLIGONINE	Bark				--
23	HARMINE	Root				Gill, S., Raszeja, W. 1971. Chromatographic Analysis of Harman Derivatives in Some Plant Raw Materials. Gdansk Tow Nauk Rozpr Wydz 1971 8: 137-143. Akad Med Gdansk Poland.
40	EPICATECHIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	15,16-EPOXY-OCTADEC-9,12-DIENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of Eleagnus angustifolia. Chem. Nat. Comp. 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
0	N-METHYL-TETRAHYDROHARMOL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
102	CAFFEIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	HARMAN	Root				Gill, S., Raszeja, W. 1971. Chromatographic Analysis of Harman Derivatives in Some Plant Raw Materials. Gdansk Tow Nauk Rozpr Wydz 1971 8: 137-143. Akad Med Gdansk Poland.

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43	CATECHIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	12-HYDROXY-OCTADECANOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
0	N(B)-METHYL-TETRAHYDROHARMOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	HARMAN	Root Bark				Gill, S., Raszeja, W. 1973. Chromatographic Analysis of Harman Alkaloid Derivatives in Some Plant Raw Materials. Rozpr Wydz 3 Nauk Mat-Przyr Gdansk Tow Nauk 8: 137-. Acad Med Danzig Poland.
0	12-HYDROXY-OCTADECAN-8-DIENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
75	KAEMPFEROL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISORHAMNETIN-3-O-GLUCOSYL GALACTOSIDE	Plant				Hetherington, M and Steck, W. 1997. Natural chemicals from northern prairie plants - the phytochemical contents of one thousand North American species. 277 pp. Ag-West Biotech, Inc. Saskatoon, Canada. Fytokem Products, Saskatoon.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(-)-QUEBRACHITOL	Fruit				--
0	TETRAHYDROHARMOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	12,13-EPOXY-OCTADEC-9-ENOIC-ACID	Seed Oil				Goncharova, N., Plugar, V. N., Rashkes, Y. V., Isamukhamedov, A. S., Glushenkova, A. I. 1990. Oxygenated Fatty Acids of the Seeds of <i>Elaeagnus angustifolia</i> . Chem. Nat. Comp. 30 6: 661-665. Inst Chem Plant Subst Acad Sci Uzbek Ssr Tashkent Uzbek USSR.
7	HARMAN	Shoot				--