

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cannabis sativa

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Seed		0.0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Seed	0.0	0.06	-0.4255580240943812	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
41	CAMPHOR	Essential Oil				--
41	CAMPHOR	Leaf Essent. Oil				--
41	CAMPHOR	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
39	NIACIN	Seed	21.0	24.0	-0.5653371145111872	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
35	BORNEOL	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
35	BORNEOL	Essential Oil				--
35	BORNEOL	Resin, Exudate, Sap				--
31	THIAMIN	Seed	3.2	3.7	-0.6881088248838246	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
29	TRYPTOPHAN	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
28	CALCIUM	Seed	1200.0	1389.0	-0.5064218426303934	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
27	LINOLEIC-ACID	Seed	207000.0	250600.0	1.229332063524583	--
20	ALPHA-BISABOLOL	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
20	ALPHA-BISABOLOL	Essential Oil				--

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20	ALPHA-BISABOLOL	Flower Essent. Oil				--
18	OLEIC-ACID	Seed	44400.0	53700.0	-0.5376546816338774	--
16	TETRAHYDROCANNABINOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
15	TRIGONELLINE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
15	FIBER	Seed	165000.0	206450.0	0.565927856848296	--
15	RIBOFLAVIN	Seed	1.7	2.0	-0.5841625019907875	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	ARGININE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
9	CAMPHENE	Plant				--
9	CAMPHENE	Essential Oil				--
9	CAMPHENE	Leaf Essent. Oil				--
9	CAMPHENE	Flower Essent. Oil				--
9	DELTA-CADINENE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
9	CAMPHENE	Resin, Exudate, Sap				--
9	BENZYL-ACETATE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
9	DELTA-CADINENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	BENZYL-ACETATE	Essential Oil				--
8	CANNABIDIOL	Resin, Exudate, Sap				--
8	CANNABIDIOL	Plant				--
8	TRANS-ANETHOLE	Essential Oil				--
8	CANNABIDIOL	Fruit		20870.0		--
8	TRANS-ANETHOLE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
8	CANNABIDIOL	Seed				--
8	CANNABIDIOL	Root				--
8	CANNABIDIOL	Leaf				--
8	CANNABIDIOL	Leaf Essent. Oil				--
8	CANNABIDIOL	Shoot				--
8	CANNABIDIOL	Bud				--
8	CANNABIDIOL	Inflorescence				--
8	CANNABIDIOL	Sprout Seedling				--
8	AZELAIC-ACID	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
7	HISTIDINE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	PHENYLALANINE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.

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6	ACETALDEHYDE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
6	IRON	Seed	120.0	139.0	-0.05479437162869729	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	BETA-BISABOLENE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
6	BETA-BISABOLENE	Leaf Essent. Oil				--
6	BETA-BISABOLENE	Flower Essent. Oil				--
4	PHOSPHORUS	Seed	9700.0	11227.0	1.5521640659289466	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	ORIENTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
3	ALANINE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
3	CANNABIDIOLIC-ACID	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
3	ASPARTIC-ACID	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
3	CANNABINOL	Inflorescence				--

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3	CANNABIGEROL	Leaf				--
3	ACETONE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
3	CANNABIDIOLIC-ACID	Shoot				--
3	CANNABINOL	Fruit		1275.0		--
3	CANNABIGEROL	Inflorescence				--
3	CANNABIDIOLIC-ACID	Inflorescence				--
3	CANNABINOL	Seed		8.0		--
3	CANNABIGEROL	Plant				--
3	CANNABIDIOLIC-ACID	Pollen Or Spore				--
3	CANNABINOL	Plant				--
3	CANNABIGEROL	Root				--
3	CANNABIDIOLIC-ACID	Leaf				--
3	CANNABINOL	Sprout Seedling				--
3	CANNABIGEROL	Shoot				--
3	CANNABINOL	Bark				--
3	(-)-BORNEOL	Plant				--
3	CANNABIGEROL	Sprout Seedling				--
3	CANNABINOL	Bud				--
3	CANNABINOL	Shoot				--
3	CANNABIGEROL	Resin, Exudate, Sap				--
3	CANNABINOL	Flower Essent. Oil				--
3	CANNABINOL	Resin, Exudate, Sap				--
3	CANNABIDIOLIC-ACID	Root				--
3	CANNABINOL	Root				--
3	CANNABIDIOLIC-ACID	Resin, Exudate, Sap				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CANNABINOL	Leaf Essent. Oil				--
3	CANNABIDIOLIC-ACID	Bark				--
3	CANNABINOL	Leaf				--
2	DELTA-9-TETRAHYDROCANNABINOL	Inflorescence				--
2	DELTA-9-TETRAHYDROCANNABINOL	Trichome				--
2	DELTA-9-TETRAHYDROCANNABINOL	Pollen Or Spore				--
2	DELTA-9-TETRAHYDROCANNABINOL	Shoot				--
2	DELTA-9-TETRAHYDROCANNABINOL	Plant				--
2	CAMPESTEROL	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
2	CANNABIGEROLIC-ACID	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
2	CAMPESTEROL	Seed				--
2	CANNABIGEROLIC-ACID	Inflorescence				--
2	CAMPESTEROL	Root				--
2	CANNABIGEROLIC-ACID	Leaf		40.0		--
2	CADAVERINE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	GLUCOSAMINE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
1	CANNABICHROMENE	Resin, Exudate, Sap				--
1	CANNABICHROMENE	Bud				--
1	ARABITOL	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
1	CANNABICHROMENE	Inflorescence				--
1	CANNABICHROMENE	Root				--
1	CANNABICHROMENE	Sprout Seedling				--
1	CANNABICHROMENE	Plant				--
1	ISOBUTYRALDEHYDE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
1	CANNABICHROMENE	Seed				--
1	CIS-ANETHOLE	Essential Oil				--
1	CANNABICHROMENE	Leaf				--
1	BEHENIC-ACID	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
1	CIS-ANETHOLE	Plant				Turner, C. E., El Sohly, M. A., Boeren, E. G. 1980. Constituents of Cannabis sativa L. XVII. A Review of the Natural Constituents. J Natural Products, 432: 169-234.
1	CANNABICHROMENE	Resin Essent. Oil				--

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1	CANNABICHROMENE	Shoot				--