

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cannabis sativa

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FAT	Seed	296000.0	358000.0	0.48782268431804693	--
27	LINOLEIC-ACID	Seed	207000.0	250600.0	1.229332063524583	--
0	PROTEIN	Seed	200000.0	314000.0	0.713455515228361	--
15	FIBER	Seed	165000.0	206450.0	0.565927856848296	--
0	WATER	Seed	87500.0	136000.0	-0.3515346520842564	--
0	ASH	Seed	46000.0	71000.0	0.6953913868613637	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Seed	44400.0	53700.0	-0.5376546816338774	--
0	ISOLINOLENIC-ACID	Seed	22000.0	26850.0		--
0	LINOLENIC-ACID	Seed	22000.0	26850.0	-0.11112768826023926	--
0	PHOSPHOROUS-OXIDE	Seed	16770.0	25885.0		--
0	CALCIUM-OXIDE	Seed	10875.0	16785.0	1.3857758982797648	--
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.
0	POTASSIUM-OXIDE	Seed	9290.0	14440.0	1.0	--
0	SILICON-DIOXIDE	Seed	5475.0	8450.0	-1.0	--
0	KILOCALORIES	Seed	4210.0	4870.0	0.008776742466230916	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	MAGNESIUM-OXIDE	Seed	2620.0	4050.0	-1.0	--
0	EO	Bud	1300.0	8000.0	-1.157380807116231	--
28	CALCIUM	Seed	1200.0	1389.0	-0.5064218426303934	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	IRON-OXIDE	Seed	460.0	710.0	1.0	--
0	SODIUM-OXIDE	Seed	360.0	550.0	-1.0	--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SULFUR-OXIDE	Seed	85.0	135.0	-1.0	--
0	CHLORIDE	Seed	35.0	55.0	-0.75187574414983	--
39	NIACIN	Seed	21.0	24.0	-0.5653371145111872	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	THIAMIN	Seed	3.2	3.7	-0.6881088248838246	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Seed	1.7	2.0	-0.5841625019907875	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
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.
2	CAMPESTEROL	Root				--
0	CANNABIDIVARIN	Plant				--
0	CANNABICYCLOL	Inflorescence				--
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.
0	DELTA-8-TETRAHYDROCANNABINOL	Root				--
0	CANNABICHROMANONE	Resin, Exudate, Sap		59.0		--
3	CANNABIDIOLIC-ACID	Leaf				--
0	CANNABICHROMENIC-ACID	Leaf		510.0		--
0	DELTA-1-TETRAHYDROCANNABINOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CANNABINOL	Leaf Essent. Oil				--
0	3,4'-DIHYDROXY-5-METHOXY-BIBENZYL	Leaf		2.0		--
0	GAMMA-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.
3	CANNABIGEROL	Leaf				--
0	CANNABINODIOL	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.
0	ALLO-AROMADENDRENE	Essential Oil				--
41	CAMPHOR	Leaf Essent. Oil				--
0	CANNABIELSOIC-ACID-B	Resin, Exudate, Sap				--
8	CANNABIDIOL	Seed				--
35	BORNEOL	Essential Oil				--
8	TRANS-ANETHOLE	Essential Oil				--
0	CAMPESTANOL	Seed				--
0	CANNABIDIORCOL	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.
0	CANNABICYCLOL	Leaf				--
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.
0	DELTA-8-TETRAHYDROCANNABINOL	Resin, Exudate, Sap				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABICCLOVARIN	Plant				--
0	CANNABIDIOL-MONOMETHYL-ETHER	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.
0	CAMPEST-5-EN-3-BETA-OL-7-ONE	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				--
0	CANNIBIDIOLIC-ACID	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	CANNFLAVINS	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
3	CANNABINOL	Leaf				--
0	3,4'-DIHYDROXY-5-METHOXY-BIBENZYL	Shoot				--
0	GAMMA-CADINENE	Essential Oil				--
3	CANNABIGEROL	Inflorescence				--
0	CANNABINODIOL	Resin, Exudate, Sap				--
0	ALLO-AROMADENDRENE	Resin, Exudate, Sap				--
0	CAMPHENE-HYDRATE	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.
0	CANNABIELSOIC-ACID-A	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
8	CANNABIDIOL	Leaf				--
35	BORNEOL	Resin, Exudate, Sap				--
0	PROPYL-CANNABIDIOL	Resin, Exudate, Sap				--
0	CANNABICYCLOL	Resin, Exudate, Sap				--
0	ARACHIDIC-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.
0	ISOVITEXIN-O-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	DELTA-8-TETRAHYDROCANNABINOL	Plant				--
0	CANNABAMINE-D	Leaf				--
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.
0	PROPYL-CANNABICHROMENE	Resin, Exudate, Sap				--
0	CAMPEST-5-EN-3-BETA-OL-7-ONE	Root				--
1	CANNABICHROMENE	Leaf				--
0	CANNIBIDIOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	CANNABISATIVINE	Plant				--
3	CANNABINOL	Inflorescence				--
0	3,4',5-TRIHYDROXY-BIBENZYL	Resin, Exudate, Sap		597.0		--
0	DIHYDROACTINIDIOLIDE	Essential Oil				--
3	CANNABIGEROL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABINEROLIC-ACID	Leaf		8.0		--
0	ALLO-AROMADENDRENE	Leaf Essent. Oil				--
0	CAMPHENE-HYDRATE	Essential Oil				--
0	CANNABIELSOIC-ACID-A	Resin, Exudate, Sap				--
8	CANNABIDIOL	Shoot				--
0	BISABOLENE	Plant				--
0	CANNABIDIOLIC-ACID-TETRAHYDRO-CANNABITRIOL-ESTER	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.
0	CANNABICOUMARONONE	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.
0	ARACHIDIC-ACID	Seed				--
0	DEHYDROCANNABIFURAN	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.
0	CANNABAMINE-C	Leaf				--
0	SEC-BUTYLAMINE	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.
0	CAMPEST-4-EN-3-ONE	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				--
1	CANNABICHROMENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CANNABINOL	Fruit		1275.0		--
0	3,3'-DIHYDROXY-4,5'-DIMETHOXY-BIBENZYL	Leaf		5.0		--
0	DIHYDROACTINIDIOLIDE	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	CANNABIGEROL	Root				--
8	CANNABIDIOL	Root				--
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.
0	CANNABIGEROVARINIC-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.
0	APIGENIN-7-O-P-COUMAROYL-GLUCOSIDE	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				--
0	CANNABIDIVAROLIC-ACID	Plant				--
0	CANNABIDIHYDROPHENANTHRENE	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	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
3	CANNABIDIOLIC-ACID	Root				--
0	CANNABICOUMARONIC-ACID	Resin, Exudate, Sap		84.0		--
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.
0	DEHYDROCANNABIFURAN	Resin, Exudate, Sap				--
0	CANNABAMINE-B	Leaf				--
0	P-ETHYL-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.
0	CAMPEST-4-EN-3-ONE	Root				--
1	CANNABICHROMENE	Shoot				--
3	CANNABINOL	Seed		8.0		--
0	3,3'-DIHYDROXY-4,5'-DIMETHOXY-BIBENZYL	Shoot				--
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.
3	CANNABIGEROL	Shoot				--
8	CANNABIDIOL	Leaf Essent. Oil				--
1	CANNABICHROMENE	Resin, Exudate, Sap				--
0	CANNABIGEROVARIN	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
0	APIGENIN-GLYCOSIDE	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	Essential Oil				--
0	CANNABIDIVAROL	Inflorescence				--
0	CANNABIDIHYDROPHENANTHRENE	Leaf		20.0		--
6	BETA-BISABOLENE	Leaf Essent. Oil				--
0	OXYPROLINE	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
2	DELTA-9-TETRAHYDROCANNABINOL	Inflorescence				--
3	CANNABIDIOLIC-ACID	Resin, Exudate, Sap				--
0	CANNABICITRAN	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.
0	ARABINOSE	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.
0	DEHYDROCANNABIELSONIN	Resin, Exudate, Sap				--
0	CANNABAMINE-A	Leaf				--
0	P-ETHYL-BENZYL-ACETATE	Essential Oil				--
0	CALAMENENE	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
29	TRYPTOPHAN	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	CANNABINOL	Plant				--
0	3',4'-DIHYDROXY-5,5'-DIMETHOXY-3-(3-METHYLBUT-2-ENYL)-BIBENZYL	Shoot				--
9	DELTA-CADINENE	Essential Oil				--
3	CANNABIGEROL	Sprout Seedling				--
8	CANNABIDIOL	Bud				--
1	CANNABICHROMENE	Bud				--
0	CANNABIGEROLIC-ACID-MONOMETHYL-ETHER	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.
0	2-C-METHYL-ALDOTETRONOLACTONE	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	Leaf Essent. Oil				--
0	CANNABIDIVAROL	Plant				--
0	CANNABICYCLOLIC-ACID	Plant				--
6	BETA-BISABOLENE	Flower Essent. Oil				--
4	ORIENTIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	DELTA-9-TETRAHYDROCANNABINOL	Trichome				--
3	CANNABIDIOLIC-ACID	Bark				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABICHROMEVARINIC-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.
0	ARABINIC-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.
0	CANNABINOL-MONOMETHYL-ETHER	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.
0	(+)-D-BORNESITOL	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.
0	P-ETHYLBENZALDEHYDE	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	Sprout Seedling				--
0	ALPHA-BERGAMOTENE	Leaf Essent. Oil				--
1	CIS-ANETHOLE	Essential Oil				--
3	CANNABIGEROL	Resin, Exudate, Sap				--
8	CANNABIDIOL	Inflorescence				--
0	CALAMENENE	Leaf Essent. Oil				--
1	CANNABICHROMENE	Inflorescence				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABIGEROLIC-ACID-MONOMETHYL-ETHER	Leaf		20.0		--
0	2-C-METHYL-ALDOTETRONIC-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.
9	CAMPHERE	Flower Essent. Oil				--
0	CANNABIDIVARINIC-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.
0	CANNABICYCLOLIC-ACID	Inflorescence				--
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.
2	DELTA-9-TETRAHYDROCANNABINOL	Pollen Or Spore				--
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.
0	CANNABICHROMEVARIN	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.
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.

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0	GLYCOCOLL	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CANNABINOL-METHYL-ETHER	Resin, Exudate, Sap				--
3	(-)-BORNEOL	Plant				--
0	P-ETHYLBENZALDEHYDE	Essential Oil				--
112	ASCORBIC-ACID	Seed		0.0	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	CANNABINOL	Bark				--
0	4-HYDROXYBENZOIC-ACID-METHYL-ESTER	Plant				--
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.
0	CANNABIFURAN	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	Sprout Seedling				--
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.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
9	CAMPHENE	Resin, Exudate, Sap				--
0	CANNABIDIVARINIC-ACID	Shoot				--
0	CANNABICYCLOL	Shoot				--
9	BENZYL-ACETATE	Essential Oil				--
2	DELTA-9-TETRAHYDROCANNABINOL	Shoot				--
1	CANNABICHROMENE	Root				--
2	CANNABIGEROLIC-ACID	Inflorescence				--
3	CANNABIDIOLIC-ACID	Shoot				--
0	CANNABICHROMENIC-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.
16	TETRAHYDROCANNABINOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	CANNABINOL	Bud				--
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.
0	N-BUTYL-AMINE	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
0	APIGENOL-O-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
3	CANNABINOL	Shoot				--
0	4-HYDROXY-BENZOIC-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.
0	CANABISPIRAN	Leaf				--
0	CANNABIFURAN	Resin, Exudate, Sap				--
8	CANNABIDIOL	Resin, Exudate, Sap				--
0	BORNEOL-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.
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.
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.
0	CANNABIDIVARIN	Shoot				--
0	CANNABICYCLOL	Plant				--
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.
2	DELTA-9-TETRAHYDROCANNABINOL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	CANNABICHROMENE	Sprout Seedling				--
3	CANNABIDIOLIC-ACID	Inflorescence				--
0	CANNABICHROMENIC-ACID	Resin, Exudate, Sap				--
0	MUSCARINE	Seed				--
3	CANNABINOL	Flower Essent. Oil				--
20	ALPHA-BISABOLOL	Essential Oil				--
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.
2	CANNABIGEROLIC-ACID	Leaf		40.0		--
3	CANNABINOL	Resin, Exudate, Sap				--
0	1-METHYL-4-ISOPROPENYL-BENZENE	Plant				--
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.
0	CANNABIELSOIN	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	Plant				--
0	BORNEOL-ACETATE	Essential Oil				--
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.
2	CAMPESTEROL	Seed				--
0	CANNABIDIVARIN	Inflorescence				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABICYCLOL	Root				--
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.
0	DELTA-8-TETRAHYDROCANNABINOL	Inflorescence				--
0	CANNABICHROMANONE	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	Pollen Or Spore				--
0	CANNABICHROMENIC-ACID	Inflorescence				--
0	EDESTIN	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
3	CANNABINOL	Root				--
20	ALPHA-BISABOLOL	Flower Essent. Oil				--
0	ISOBUTYL-AMINE	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.
0	CANNABIGEROL-MONOMETHYL-ETHER	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.
0	CANNABINODIVARIN	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
0	ALLO-AROMADENDRENE	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.
41	CAMPHOR	Essential Oil				--
0	CANNABIELSOIC-ACID-B	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	Fruit		20870.0		--
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.