

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in Cannabis sativa**

<b>Activity Count</b>	<b>Chemical</b>	<b>Plant Part</b>	<b>Low PPM</b>	<b>High PPM</b>	<b>StdDev</b>	<b>Reference Citation</b>
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.
3	(-)-BORNEOL	Plant	--	--		
0	1-METHYL-4-ISOPROPENYL-BENZENE	Plant	--	--		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	3',4'-DIHYDROXY-5,5'-DIMETHOXY-3-(3-METHYL-BUT-2-ENYL)-BIBENZYL	Shoot	--	--		
0	3,3'-DIHYDROXY-4,5'-DIMETHOXY-BIBENZYL	Leaf	--	5		
0	3,3'-DIHYDROXY-4,5'-DIMETHOXY-BIBENZYL	Shoot	--	--		
0	3,4',5-TRIHYDROXY-BIBENZYL	Resin, Exudate, Sap	--	597		
0	3,4'-DIHYDROXY-5-METHOXY-BIBENZYL	Shoot	--	--		
0	3,4'-DIHYDROXY-5-METHOXY-BIBENZYL	Leaf	--	2		
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	4-HYDROXYBENZOIC-ACID-METHYL-ESTER	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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	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.
0	ALLO-AROMADENDRENE	Leaf Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALLO-AROMADENDRENE	Resin, Exudate, Sap	--	--		
0	ALLO-AROMADENDRENE	Essential Oil	--	--		
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.
0	ALPHA-BERGAMOTENE	Leaf Essent. Oil	--	--		
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	Flower Essent. Oil	--	--		
20	ALPHA-BISABOLOL	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
0	APIGENOL-O-GLUCOSIDE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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	ARACHIDIC-ACID	Seed	--	--		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
112	ASCORBIC-ACID	Seed	--	--	-0.33845664486186666	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Seed	46000	71000	0.6953913868613637	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
9	BENZYL-ACETATE	Essential Oil	--	--		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	BETA-BISABOLENE	Flower Essent. Oil	--	--		
6	BETA-BISABOLENE	Leaf Essent. Oil	--	--		
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.
53	BETA-CAROTENE	Seed	--	0.06	-0.4255580240943812	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BISABOLENE	Plant	--	--		
35	BORNEOL	Resin, Exudate, Sap	--	--		
35	BORNEOL	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	BORNEOL-ACETATE	Essential Oil	--	--		
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.
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CALAMENENE	Leaf Essent. 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.
28	CALCIUM	Seed	1200	1389	-0.5064218426303934	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CALCIUM-OXIDE	Seed	10875	16785	1.3857758982797648	
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.
0	CAMPEST-4-EN-3-ONE	Root	--	--		
0	CAMPEST-5-EN-3-BETA-OL-7-ONE	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	CAMPESTANOL	Seed	--	--		
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	CAMPESTEROL	Root	--	--		
2	CAMPESTEROL	Seed	--	--		
9	CAMPHENE	Plant	--	--		
9	CAMPHENE	Resin, Exudate, Sap	--	--		
9	CAMPHENE	Flower Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	CAMPHENE	Leaf Essent. Oil	--	--		
9	CAMPHENE	Essential Oil	--	--		
0	CAMPHENE-HYDRATE	Essential Oil	--	--		
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.
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.
41	CAMPHOR	Leaf Essent. Oil	--	--		
41	CAMPHOR	Essential Oil	--	--		
0	CANABISPIRAN	Leaf	--	--		
0	CANNABAMINE-A	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABAMINE-B	Leaf	--	--		
0	CANNABAMINE-C	Leaf	--	--		
0	CANNABAMINE-D	Leaf	--	--		
0	CANNABICCLOVARIN	Plant	--	--		
0	CANNABICHROMANONE	Resin, Exudate, Sap	--	59		
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.
1	CANNABICHROMENE	Shoot	--	--		
1	CANNABICHROMENE	Sprout Seedling	--	--		
1	CANNABICHROMENE	Resin Essent. Oil	--	--		
1	CANNABICHROMENE	Root	--	--		
1	CANNABICHROMENE	Leaf	--	--		
1	CANNABICHROMENE	Inflorescence	--	--		
1	CANNABICHROMENE	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	CANNABICHROMENE	Bud	--	--		
1	CANNABICHROMENE	Resin, Exudate, Sap	--	--		
1	CANNABICHROMENE	Plant	--	--		
0	CANNABICHROMENIC-ACID	Resin, Exudate, Sap	--	--		
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.
0	CANNABICHROMENIC-ACID	Leaf	--	510		
0	CANNABICHROMENIC-ACID	Inflorescence	--	--		
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.

Activity 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	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	CANNABICOUMARONIC-ACID	Resin, Exudate, Sap	--	84		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABICYCLOL	Root	--	--		
0	CANNABICYCLOL	Plant	--	--		
0	CANNABICYCLOL	Shoot	--	--		
0	CANNABICYCLOL	Resin, Exudate, Sap	--	--		
0	CANNABICYCLOL	Leaf	--	--		
0	CANNABICYCLOL	Inflorescence	--	--		
0	CANNABICYCLOLIC-ACID	Inflorescence	--	--		
0	CANNABICYCLOLIC-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.
0	CANNABIDIHYDROPHENANTHRENE	Leaf	--	20		
8	CANNABIDIOL	Plant	--	--		
8	CANNABIDIOL	Root	--	--		
8	CANNABIDIOL	Resin, Exudate, Sap	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	CANNABIDIOL	Shoot	--	--		
8	CANNABIDIOL	Sprout Seedling	--	--		
8	CANNABIDIOL	Leaf	--	--		
8	CANNABIDIOL	Inflorescence	--	--		
8	CANNABIDIOL	Seed	--	--		
8	CANNABIDIOL	Bud	--	--		
8	CANNABIDIOL	Fruit	--	20870		
8	CANNABIDIOL	Leaf Essent. Oil	--	--		
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.
3	CANNABIDIOLIC-ACID	Root	--	--		
3	CANNABIDIOLIC-ACID	Inflorescence	--	--		
3	CANNABIDIOLIC-ACID	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	CANNABIDIOLIC-ACID	Bark	--	--		
3	CANNABIDIOLIC-ACID	Leaf	--	--		
3	CANNABIDIOLIC-ACID	Resin, Exudate, Sap	--	--		
3	CANNABIDIOLIC-ACID	Pollen Or Spore	--	--		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	CANNABIDIVARIN	Inflorescence	--	--		
0	CANNABIDIVARIN	Shoot	--	--		
0	CANNABIDIVARIN	Plant	--	--		
0	CANNABIDIVARINIC-ACID	Shoot	--	--		
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	CANNABIDIVAROL	Plant	--	--		
0	CANNABIDIVAROL	Inflorescence	--	--		
0	CANNABIDIVAROLIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABIELSOIC-ACID-A	Resin, Exudate, Sap	--	--		
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.
0	CANNABIELSOIC-ACID-B	Resin, Exudate, Sap	--	--		
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	CANNABIFURAN	Resin, Exudate, Sap	--	--		
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.
3	CANNABIGEROL	Shoot	--	--		
3	CANNABIGEROL	Root	--	--		
3	CANNABIGEROL	Plant	--	--		
3	CANNABIGEROL	Inflorescence	--	--		
3	CANNABIGEROL	Resin, Exudate, Sap	--	--		
3	CANNABIGEROL	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CANNABIGEROL	Sprout Seedling	--	--		
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.
2	CANNABIGEROLIC-ACID	Leaf	--	40		
2	CANNABIGEROLIC-ACID	Inflorescence	--	--		
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.
0	CANNABIGEROLIC-ACID-MONOMETHYL-ETHER	Leaf	--	20		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	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.
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	CANNABINEROLIC-ACID	Leaf	--	8		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CANNABINODIOL	Resin, Exudate, Sap	--	--		
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	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.
3	CANNABINOL	Root	--	--		
3	CANNABINOL	Seed	--	8		
3	CANNABINOL	Flower Essent. Oil	--	--		
3	CANNABINOL	Resin, Exudate, Sap	--	--		
3	CANNABINOL	Fruit	--	1275		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CANNABINOL	Shoot	--	--		
3	CANNABINOL	Bud	--	--		
3	CANNABINOL	Inflorescence	--	--		
3	CANNABINOL	Bark	--	--		
3	CANNABINOL	Leaf	--	--		
3	CANNABINOL	Sprout Seedling	--	--		
3	CANNABINOL	Leaf Essent. Oil	--	--		
3	CANNABINOL	Plant	--	--		
0	CANNABINOL-METHYL-ETHER	Resin, Exudate, Sap	--	--		
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	CANNABISATIVINE	Plant	--	--		
0	CANNFLAVINS	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	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	CHLORIDE	Seed	35	55	-0.75187574414983	
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	CIS-ANETHOLE	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DEHYDROCANNABIELSOIN-I	Resin, Exudate, Sap	--	--		
0	DEHYDROCANNABIFURAN	Resin, Exudate, Sap	--	--		
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	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.
0	DELTA-8-TETRAHYDROCANNABINOL	Inflorescence	--	--		
0	DELTA-8-TETRAHYDROCANNABINOL	Plant	--	--		
0	DELTA-8-TETRAHYDROCANNABINOL	Resin, Exudate, Sap	--	--		
0	DELTA-8-TETRAHYDROCANNABINOL	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	DELTA-9-TETRAHYDROCANNABINOL	Inflorescence	--	--		
2	DELTA-9-TETRAHYDROCANNABINOL	Plant	--	--		
2	DELTA-9-TETRAHYDROCANNABINOL	Shoot	--	--		
2	DELTA-9-TETRAHYDROCANNABINOL	Pollen Or Spore	--	--		
2	DELTA-9-TETRAHYDROCANNABINOL	Trichome	--	--		
9	DELTA-CADINENE	Essential 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.
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.
0	DIHYDROACTINIDIOLIDE	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	EDESTIN	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	EO	Bud	1300	8000	-1.157380807116231	
0	FAT	Seed	296000	358000	0.48782268431804693	
15	FIBER	Seed	165000	206450	0.565927856848296	
0	GAMMA-CADINENE	Essential Oil	--	--		
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.

Activity 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.
0	GLYCOCOLL	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	HISTIDINE	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	IRON	Seed	120	139	-0.05479437162869729	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	IRON-OXIDE	Seed	460	710	1	
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.
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.
0	ISOLINOLENIC-ACID	Seed	22000	26850		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISOVITEXIN-O-GLUCOSIDE	Plant	--	--		J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	KILOCALORIES	Seed	4210	4870	0.008776742466230916	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
27	LINOLEIC-ACID	Seed	207000	250600	1.229332063524583	
0	LINOLENIC-ACID	Seed	22000	26850	-0.11112768826023926	
0	MAGNESIUM-OXIDE	Seed	2620	4050	-1	
0	MUSCARINE	Seed	--	--		
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.
39	NIACIN	Seed	21	24	-0.5653371145111872	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
18	OLEIC-ACID	Seed	44400	53700	-0.5376546816338774	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	ORIENTIN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	OXYPROLINE	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	P-ETHYL-BENZYL-ACETATE	Essential Oil	--	--		
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	P-ETHYLBENZALDEHYDE	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
0	PHOSPHOROUS-OXIDE	Seed	16770	25885		
4	PHOSPHORUS	Seed	9700	11227	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	14440	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROPYL-CANNABICHROMENE	Resin, Exudate, Sap	--	--		
0	PROPYL-CANNABIDIOL	Resin, Exudate, Sap	--	--		
0	PROTEIN	Seed	200000	314000	0.713455515228361	
15	RIBOFLAVIN	Seed	1.7	2	-0.5841625019907875	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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	SILICON-DIOXIDE	Seed	5475	8450	-1	
0	SODIUM-OXIDE	Seed	360	550	-1	
0	SULFUR-OXIDE	Seed	85	135	-1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	TETRAHYDROCANNABINOL	Plant	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
31	THIAMIN	Seed	3.2	3.7	-0.6881088248838246	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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	TRANS-ANETHOLE	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
29	TRYPTOPHAN	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	WATER	Seed	87500	136000	-0.3515346520842564	