

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Vanilla planifolia*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,3-BUTANEDIOL	Fruit	--	47		
0	1-(4-HYDROXY-3-METHOXYPHENYL)-2-PROPANONE	Fruit	--	31		
0	1-HEXADECANOL	Fruit	--	38		
0	1-OCTEN-3-OL	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-TETRADECANOL	Fruit	--	13		
0	10-METHYLEICOSANE	Fruit	--	25		
0	2,4,6-HEPTANETRIONE	Fruit	--	57		
0	2,4,6-TRIMETHYLACETOPHENONE	Fruit	--	69		
0	2,4-DECADIENAL	Fruit	--	25		
0	2-FURANCARBOXYLIC-ACID-METHYL-ESTER	Fruit	--	14		
0	2-HYDROXY-5-METHYL-ACETOPHENONE	Fruit	--	24		
0	2-METHOXY-PHENOL	Fruit	--	19		
0	2-METHYL-3,5-DIHYDROXY-(4H)-PYRAN-4-ONE	Fruit	--	12		
0	2-OCTEN-4-OL	Fruit	--	25		
0	2-PENTANOL	Fruit	--	95		
0	2-PHENYLETHYL-ALCOHOL	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-METHYL-BUTANAL	Fruit	--	27		
0	3-METHYL-CYCLO-PENTANONE	Fruit	--	25		
0	3-METHYLDOCOSANE	Fruit	--	--		
0	3-METHYLEICOSANE	Fruit	--	--		
0	3-METHYLHENTRIACONTANE	Fruit	--	--		
0	3-METHYLHEPTADECANE	Fruit	--	--		
0	3-METHYLHEXACOSANE	Fruit	--	--		
0	3-METHYLNONADECANE	Fruit	--	--		
0	3-METHYLPENTADECANE	Fruit	--	--		
0	3-METHYLTETRACOSANE	Fruit	--	--		
0	3-METHYLTRITRIACONTANE	Fruit	--	--		
0	3-PHENYL-PROPAN-1-OL	Fruit	--	--		
0	4,4-DIMETHYL-3-HYDROXY-DIHYDRO-2-(3H)-FURANONE	Fruit	--	51		
0	4-(4-HYDROXYPHENYL)-2-BUTANONE	Fruit	--	46		
0	4-(BETA-D-GLUCOSYL)-BENZYL-2-ISOPROPYLTARTRATE	Fruit	--	--		
0	4-HYDROXY-3-METHOXY-ACETOPHENONE	Fruit	--	37		
0	4-HYDROXY-3-METHOXY-BENZYL-ALCOHOL	Shoot	--	--		
0	4-HYDROXY-BENZOIC-ACID	Fruit	--	--		
0	4-HYDROXY-METHYL-PHENYL-BETA-D-GLUCOSIDE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	4-HYDROXYBENZALDEHYDE	Fruit	--	--		
0	5-(HYDROXYMETHYL)-2-FURANCARBOXALDEHYDE	Fruit	--	460		
0	5-ETHYLHENTRIACONTANE	Fruit	--	--		
0	5-ETHYLHEPTACOSANE	Fruit	--	--		
0	5-ETHYLHEXADECANE	Fruit	--	--		
0	5-ETHYLNONACOSANE	Fruit	--	--		
0	5-ETHYLOCTADECANE	Fruit	--	--		
0	5-ETHYLPENTACOSANE	Fruit	--	--		
0	5-ETHYLTETRADECANE	Fruit	--	--		
0	5-ETHYLTRITRIACONTANE	Fruit	--	--		
0	5-METHY-TETRAHYDRO-2-FURANMETHANOL	Fruit	--	17		
0	5-METHYL-2-FURANCARBOXALDEHYDE	Fruit	--	24		
0	5-METHYL-FURFURAL	Fruit	--	--		
0	5-METHYL-TETRAHYDRO-2-FURANMETHANOL	Fruit	--	17		
0	6,10,14-TRIMETHYL-2-PENTADECANONE	Fruit	--	23		
0	6-METHYL-3,5-DIHYDROXY-2,3-DIHYDRO-(4H)-PYRAN-4-ONE	Fruit	--	114		
0	7-NONALACTONE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	ACETALDEHYDE	Fruit	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
16	ACETIC-ACID	Fruit	--	151	-0.5995643718999257	
6	ACETOPHENONE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	ANISALDEHYDE	Fruit	--	--		
6	ANISIC-ACID	Fruit	--	49		
0	ANISIC-ACID-METHYL-ESTER	Fruit	--	--		
0	ANISIC-ALCOHOL	Fruit	--	--		
2	ANISYL-ALCOHOL	Fruit	--	9	-1	
0	ANISYL-ETHYL-ETHER	Fruit	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	ANISYLACETATE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ASH	Fruit	45000	97000	1.04452094337717	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
24	BENZALDEHYDE	Fruit	--	--		
20	BENZOIC-ACID	Fruit	--	38	-0.6086964338676627	
0	BENZOIC-ACID-METHYL-ESTER	Fruit	--	--		
0	BENZOTHIAZOLE	Fruit	--	--		
9	BENZYL-ALCOHOL	Fruit	--	--		
0	BIS-(4-(BETA-D-GLUCOSYL)-BENZYL)-2-(1-METHYL-PROPYL)-TARTRATE	Fruit	--	--		
28	CALCIUM	Fruit	19000	19000	3.494569000908142	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	CALCIUM-OXALATE	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	CAPRINIC-ACID-ESTER	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CAPROIC-ACID	Fruit	--	--		
0	CARBOHYDRATE	Fruit	305000	628000	-0.952181616641961	
0	CARBOHYDRATES	Fruit	305000	628000	-0.8282319256478781	
43	CATECHIN	Fruit	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
22	CATECHOL	Fruit	--	29		
60	CINNAMALDEHYDE	Fruit	--	--		
1	CINNAMIC-ACID-ETHYL-ESTER	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CINNAMIC-ALCOHOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	CINNAMYL-ALCOHOL	Fruit	--	--		
0	CIS-CINNAMIC-ACID-METHYL-ESTER	Fruit	--	--		
0	CIS-METHYL-CINNAMATE	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-VITISPIRANE	Fruit Essent. Oil	--	0.5		
23	CITRIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
57	COUMARIN	Fruit	--	6100		
2	CREOSOL	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	CRESOL	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DECA-2-4-DIEN-1-AL	Fruit	--	--		
0	DECAN-1-OL	Fruit	--	--		
2	DIACETYL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DIHYDROACTINIDIOLIDE	Fruit	--	--		
0	DOCOS-1-ENE	Fruit	--	--		
0	DOCOSANE	Fruit	--	22		
0	DOTRIACONT-1-ENE	Fruit	--	--		
0	EICOS-1-ENE	Fruit	--	--		
0	EICOSANE	Fruit	--	39		
0	EO	Fruit	6000	6000	-0.7033398289366377	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	ETHYL-PALMITATE	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	ETHYL-VANILLATE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ETHYL-VANILLIN	Fruit	--	--		
76	EUGENOL	Fruit	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	FAT	Fruit	47000	212000	0.9779868575999203	
61	FERULIC-ACID	Root	--	--		
15	FIBER	Fruit	153000	263000	1.1448679867489784	
13	FORMIC-ACID	Fruit	--	62	-1	
8	FRUCTOSE	Fruit	7500	7500	-0.8217893887586457	
6	FURFURAL	Fruit	--	54	-0.705230402031923	
0	FURFUROL	Fruit	--	15	-1	
1	GAMMA-HEXALACTONE	Fruit	--	--		
2	GAMMA-NONALACTONE	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-OCTALACTONE	Fruit	--	--		
2	GAMMA-UNDECALACTONE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	GLUCOSE	Fruit	7500	7500	-0.8155094091619971	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GLUCOVANILLIC-ACID	Fruit	--	--		
0	GLUCOVANILLIN	Fruit	--	--		
0	GLUCOVANILLYL-ALCOHOL	Fruit	--	--		
18	GUAIACOL	Fruit	--	19		
0	HENEICOSANE	Fruit	--	23		
0	HENTRIACONT-1-ENE	Fruit	--	--		
0	HEPTACOS-1-ENE	Fruit	--	--		
1	HEPTADECANOIC-ACID	Fruit	--	30		
0	HEPTANOIC-ACID	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HEXACOSANE	Fruit	--	24		
0	HEXADEC-1-ENE	Fruit	--	--		
0	HEXADECAN-2-ONE	Fruit	--	--		
0	HEXAN-1-OL	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ISOBUTYRIC-ACID	Fruit	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
60	LIMONENE	Fruit	--	--		
27	LINOLEIC-ACID	Fruit	--	135	-0.35349522483459317	
15	MALIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	METHYL-ACETATE	Fruit	--	84		
2	METHYL-ANISATE	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	METHYL-LINOLEATE	Fruit	--	21		
0	METHYL-PALMITATE	Fruit	--	13	1.0000000000000002	
0	METHYL-VANILLATE	Fruit	--	--		
6	MYRISTIC-ACID	Fruit	--	12	-0.268577588356776	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-CAPRYLIC-ACIDESTER	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	N-DOCOSANE	Fruit	--	--		
0	N-DOTRIACONTANE	Fruit	--	--		
0	N-EICOSANE	Fruit	--	--		
0	N-HENEICOSANE	Fruit	--	--		
3	N-HENTRIACONTANE	Fruit	--	--		
0	N-HEPTACOSANE	Fruit	--	--		
0	N-HEPTADECANE	Fruit	--	--		
2	N-HEXACOSANE	Fruit	--	--		
0	N-HEXADECANE	Fruit	--	--		
0	N-HEXATRIACONTANE	Fruit	--	--		
1	N-NONACOSANE	Fruit	--	--		
0	N-NONADECANE	Fruit	--	--		
0	N-OCTACOSANE	Fruit	--	--		
0	N-OCTADECANE	Fruit	--	--		
0	N-PENTACOSANE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-PENTADECANE	Fruit	--	--		
0	N-PENTATRIACONTANE	Fruit	--	--		
0	N-TETRACOSANE	Fruit	--	--		
0	N-TETRADECANE	Fruit	--	--		
0	N-TETRATRIACONTANE	Fruit	--	--		
0	N-TRIACONTANE	Fruit	--	--		
0	N-TRICOSANE	Fruit	--	--		
0	N-TRITRIACONTANE	Fruit	--	--		
1	NAPHTHALENE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	NONACOS-1-ENE	Fruit	--	--		
0	NONANAL	Fruit	--	53	1.8294072056713282	
2	NONANOIC-ACID	Fruit	--	31	1.4136549609901534	
4	O-COUMARIC-ACID	Fruit	--	--		
0	OCT-1-EN-3-OL	Fruit	--	--		
1	OCTADEC-1-ENE	Fruit	--	--		
0	OCTAN-1-OL	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	OCTANOIC-ACID	Fruit	--	--		
18	OLEIC-ACID	Fruit	--	13	-0.480644966010065	
9	OXALIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	P-CRESOL	Fruit	--	--		
1	P-CRESOL-METHYL-ETHER	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	P-ETHYL-GUAIACOL	Fruit	--	33		
13	P-HYDROXY-BENZOIC-ACID	Fruit	--	28	-0.7998243325890123	
0	P-HYDROXY-BENZYL-ETHYL-ETHER	Fruit	--	--		
4	P-HYDROXYBENZALDEHYDE	Fruit	--	1040		
1	P-HYDROXYBENZYL-ALCOHOL	Fruit	--	29		
0	P-HYDROXYBENZYL METHYLEETHER	Fruit	17	143		
0	P-HYDROXYMETHYL-BENZOATE	Fruit	--	36		
0	P-HYDROZYBENZYL-METHYL-ETHER	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-METHOXYBENZOIC-ACID	Fruit	--	49		
0	P-VINYL-GUAIACOL	Fruit	--	--		
13	PALMITIC-ACID	Fruit	--	258	-0.36151909573594015	
0	PENTACOS-1-ENE	Fruit	--	--		
0	PENTACOSENE	Fruit	--	39		
1	PENTADECANOIC-ACID	Fruit	--	24		
26	PHENOL	Fruit	--	28	0.9999999999999999	
2	PHENYL-ACETALDEHYDE	Fruit	--	--		
4	PHOSPHORUS	Fruit	700	700	-0.7642076833184737	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	PIPERONAL	Fruit	--	--		
2	PIPERONAL	Plant	--	--		
0	PROTEIN	Fruit	26000	100000	-0.12733205905952616	
1	PROTocatechualdehyde	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
43	PROTOCATECHUIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	RESIN	Fruit	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
7	SALICYLATES	Essential Oil	10	15		
34	SALICYLIC-ACID	Fruit	--	--		
0	SALICYLIC-ACID-METHYL-ESTER	Fruit	--	--		
8	STEARIC-ACID	Fruit	--	39	-0.2766350459688796	
14	SUCROSE	Fruit	350000	350000	1.7347732574703574	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SUGARS	Fruit	71000	350000	0.5605086704894576	
4	SYRINGALDEHYDE	Fruit	--	10		
6	SYRINGIC-ACID	Fruit	--	3000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	TANNIN	Fruit	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	TETRACOSANE	Fruit	--	13		
0	TETRADEC-1-ENE	Fruit	--	--		
0	TRANS-CINNAMIC-ACID-METHYL-ESTER	Fruit	--	--		
0	TRANS-METHYL-CINNAMATE	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-VITISPIRANE	Fruit Essent. Oil	--	0.5		
0	TRICOS-1-ENE	Fruit	--	--		
0	TRICOSANE	Fruit	--	29		
0	TRICOSENE	Fruit	--	38		
0	TRITRIACONT-1-ENE	Fruit	--	--		
22	UMBELLIFERONE	Fruit	--	--		
24	VANILLIC-ACID	Fruit	--	--		
28	VANILLIN	Root	--	--		
28	VANILLIN	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	VANILLIN	Fruit	13000	30000	0.9999999999999999	
28	VANILLIN	Shoot	--	--		
0	VANILLIN-2,3-BUTYLENEGLYCOL-ACETATE	Fruit	--	10		
0	VANILLIN-BETA-GLUCOSIDE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VANILLYL-ACETATE	Fruit	--	27		
3	VANILLYL-ALCOHOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VANILLYL-ETHYL-ETHER	Fruit	--	3		
0	VANILLYL-METHYL-ETHER	Fruit	--	13		
0	VITISPIRANE	Fruit	--	--		
0	WATER	Fruit	259000	309000	-2.006974507734663	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
13	ZINGERONE	Fruit	--	46		