

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Laurus nobilis*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-ACTINODAPHNINE	Root				--
0	(+)-ACTINODAPHNINE	Stem Bark				--
0	(+)-ACTINODAPHNINE	Leaf				--
0	(+)-BOLDINE	Leaf				--
30	(+)-CATECHIN	Leaf				--
0	(+)-CRYPTODORINE	Leaf				--
7	(+)-GALLOCATECHIN	Leaf				--
0	(+)-ISODOMESTICINE	Leaf				--
0	(+)-LAUNOBINE	Root				--
0	(+)-LAUNOBINE	Stem Bark				--
0	(+)-LAUNOBINE	Leaf				--
0	(+)-LIMONENE	Leaf Essent. Oil		29000.0		--
0	(+)-LINALOOL	Leaf Essent. Oil				--
0	(+)-N-METHYL- ACTINODAPHNINE	Leaf				--
0	(+)-NANDIGERINE	Leaf				--
0	(+)-NEOLITSINE	Leaf				--
0	(+)-NOR-ISODOMESTICINE	Leaf				--
0	(+)-RETICULINE	Stem Bark				--
0	(+)-RETICULINE	Leaf				--
0	(-)-ALPHA-PINENE	Fruit Essent. Oil				--
0	(-)-ALPHA-TERPINEOL	Leaf Essent. Oil				--
0	(-)-BETA-PINENE	Fruit Essent. Oil				--
38	(-)-EPICATECHIN	Leaf				--
21	(-)-EPIGALLOCATECHIN	Leaf				--
0	(-)-LINALOOL	Leaf				--
0	(E)-SABINENE-HYDRATE	Leaf	7.0	100.0		Tucker, et al, EB46(1):21-24.1992
0	(Z)-P-MENTH-2-EN-1-OL	Leaf	4.0	65.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Leaf	375.0	24800.0	2.6596919560245604	--
67	1,8-CINEOLE	Essential Oil				--
67	1,8-CINEOLE	Fruit Essent. Oil	228000.0	283700.0	-0.8958928253130353	--
67	1,8-CINEOLE	Leaf Essent. Oil	211400.0	620000.0	1.287251771450938	--
0	1-EPI-BICYCLOSEQUIPELLAN DRENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-PENTEN-3-OL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	11-HYDROXYTRIACONTAN-9-ONE	Fruit				--
0	2-ETHYL-FURAN	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYL-BUTANAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYL-PROPANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYL-PROPIONIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYL-PROPYL-2-METHYL-PROPIONATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYLETHYL-2-METHYLPROPIONATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-METHYLPROPYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3,4-DIMETHOXY-ALLYL-BENZENE	Leaf				--
0	3-METHYL-BUTANAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-METHYL-BUTANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	4-TERPINEOL	Leaf Essent. Oil				--
0	8-ACETOXYCARVOTANACETONE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	ACETIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ACETOEUGENOL	Leaf	1.0	42.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ACETONE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	ACETYL-EUGENOL	Leaf Essent. Oil				--
2	ACTINODAPHNINE	Bark		100.0		--
2	ACTINODAPHNINE	Stem Bark				--
2	ACTINODAPHNINE	Wood				--
0	ALLO-AROMADENDRENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-AMORPHENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-BOURBONENE	Plant				--
0	ALPHA-CADINENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-CARYOPHYLLENE	Fruit Essent. Oil				--
0	ALPHA-COPAENE	Plant				--
0	ALPHA-CUBEBENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-GUAIENE	Leaf Essent. Oil				--
0	ALPHA-GUAIENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-GURJUNENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-MUUROLENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Fruit Essent. Oil		100700.0	1.1856174256264056	--
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil				--
11	ALPHA-PHELLANDRENE	Leaf	0.0	120.0	-0.22922005050208058	--
28	ALPHA-PINENE	Wood		0.0		--
28	ALPHA-PINENE	Fruit Essent. Oil		93000.0	0.38198728895825224	--
28	ALPHA-PINENE	Bark		27.0	-1.0	--
28	ALPHA-PINENE	Leaf Essent. Oil	1300.0	76600.0	-0.3317578595752018	--
28	ALPHA-PINENE	Leaf		125.0	-0.21642895495470849	--
28	ALPHA-PINENE	Flower		0.0	-0.8461946767360643	--
3	ALPHA-SELINENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Leaf Essent. Oil				--
13	ALPHA-TERPINENE	Leaf	14.0	300.0	-0.1573418694572951	--
23	ALPHA-TERPINEOL	Fruit Essent. Oil		58500.0	1.7711701171427547	--
23	ALPHA-TERPINEOL	Leaf Essent. Oil	4000.0	92700.0	1.0083241708956292	--
23	ALPHA-TERPINEOL	Leaf	140.0	1380.0	1.8321956980210965	--
0	ALPHA-TERPINEOL ACETATE	Leaf Essent. Oil	38000.0	71400.0	1.3978316223846603	--
0	ALPHA-TERPINOLENE	Leaf Essent. Oil				--
0	ALPHA-TERPINYL-ACETATE	Leaf	540.0	4000.0	1.7299987299076585	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-TERPINYL-FORMATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Leaf		5.7	-0.5610992820608867	--
0	ALPHA-THUJENE	Bark		0.0		--
0	ALPHA-THUJENE	Flower		12.6	-0.9999999999999996	--
0	ALPHA-THUJENE	Leaf Essent. Oil				--
0	ALPHA-THUJENE	Wood		0.0		--
0	ALPHA-YLANGENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	ARTECANIN	Leaf				--
1	ARTEMORIN	Leaf	140.0	5000.0		--
7	ASTRAGALIN	Leaf				--
0	BASSORIN	Plant				--
24	BENZALDEHYDE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BETA-BISABOLENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Leaf	4.0	180.0	-0.24669811339827577	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil		200.0	-0.4048138384151673	--
0	BETA-CUBEBENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Plant				--
5	BETA-ELEMENE	Leaf Essent. Oil				--
13	BETA-EUDES MOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-EUDESOL	Leaf Essent. Oil				--
2	BETA-MYRCENE	Leaf Essent. Oil				--
3	BETA-PHELLANDRENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Leaf	130.0	2080.0	2.63885283535404	--
13	BETA-PINENE	Leaf Essent. Oil	1600.0	54000.0	1.5747827512922534	--
3	BETA-SELINENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
47	BETA-SITOSTEROL	Leaf		1450.0	-0.2944657138376137	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	BICYCLOGERMACRENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BICYCLOSEQUIPELLANDRENE	Plant				--
29	BOLDINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
35	BORNEOL	Leaf Essent. Oil		4700.0	-0.6211151011481656	--
35	BORNEOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BORNEOL-ACETATE	Leaf Essent. Oil				--
12	BORNYL-ACETATE	Plant				--
4	BORON	Leaf	9.0	16.0	-1.2328645872256474	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
0	BUTANAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BUTANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BUTYRIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CADINA-1(6),5-DIENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CADINA-1(6),5-DIENE	Plant				--
0	CADINA-3,5-DIENE	Plant				--
0	CADINA-3,5-DIENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
102	CAFFEIC-ACID	Leaf				--
102	CAFFEIC-ACID	Fruit				--
0	CALAMENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	CAMPESTEROL	Leaf		60.0	-0.5558506974492348	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
9	CAMPHENE	Leaf	24.0	186.0	-0.1223873321341401	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Leaf Essent. Oil		7000.0	-0.6281133210860443	--
41	CAMPHOR	Plant				--
41	CAMPHOR	Leaf Essent. Oil				--
1	CAPROIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	CAPROIC-ACID	Plant				--
5	CAPRYLIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAR-3-ENE	Leaf Essent. Oil				--
37	CARVACROL	Leaf Essent. Oil				--
19	CARVONE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Plant				--
1	CATECHINS	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
18	CINNAMIC-ACID	Fruit Essent. Oil		90000.0		--
18	CINNAMIC-ACID	Fruit				--
18	CINNAMIC-ACID	Leaf				--
0	CINNAMIC-ACID-METHYL-ESTER	Fruit Essent. Oil		172000.0		--
3	CINNAMYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-3-HEXANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CIS-3-HEXENOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-ALPHA-BISABOLENE	Plant				--
3	CIS-OCIMENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-P-MENTH-2-EN-1-OL	Leaf				--
0	CIS-P-MENTHA-2,8-DIEN-1-OL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-THUJ-2-EN-4-OL	Leaf				--
53	CITRAL	Fruit Essent. Oil				--
53	CITRAL	Leaf				--
12	COPPER	Leaf		4.0	-0.6510387463181428	USDA's Ag Handbook 8 and sequelae)
9	COSTUNOLIDE	Leaf	1191.0	18000.0		--
9	COSTUNOLIDE	Fruit		2560.0		--
9	COSTUNOLIDE	Root		3100.0		--
0	CUBEBENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMAMBRIN-A	Leaf				--
2	CUMAMBRIN-B	Leaf				--
0	CUMINYL-ALCOHOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	CYANIDIN	Plant				--
0	CYCLOSATIVENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	DEACETYLLAURENOBIOLIDE	Leaf		50.0		--
0	DEACETYLMATRICARIN	Leaf				--
0	DEHYDRO-1,8-CINEOLE	Essential Oil				--
0	DEHYDRO-1,8-CINEOLE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	DEHYDROCOSTUS-LACTONE	Leaf				--
4	DEHYDROCOSTUS-LACTONE	Fruit		14000.0		--
8	DELTA-3-CARENE	Leaf	15.0	162.0	2.232520909065303	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Leaf Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	DELTA-CADINENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DESACETYLLAURENOBIOLIDE	Leaf		60.0		--
0	DIHYDROPARTHENOLIDE	Leaf				--
0	DOCOSAN-1-OL-TETRADECANOATE	Fruit				--
0	E-PINOCARVEOL	Leaf	25.0	125.0		Tucker, et al, EB46(1):21-24.1992
16	ELEMICIN	Plant				--
0	ENANTHIC-ACID	Plant				--
0	ENANTHIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	EO	Wood		700.0	-1.3424749827061675	--
0	EO	Leaf		5700.0	-0.513248199424921	--
0	EO	Fruit	10000.0	40000.0	-0.042481439666032995	--
0	EO	Bark		6800.0	-0.37118729728006783	--
0	EO	Flower		1800.0	-0.3633963855473398	--
4	EREMANTHIN	Fruit		14000.0		--
12	ESTRAGOLE	Leaf Essent. Oil				--
0	ETHYL-2-METHYL-PROPIONATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ETHYL-PENTANOATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
76	EUGENOL	Leaf	18.0	1335.0	-0.6593393775367795	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
76	EUGENOL	Leaf Essent. Oil		10200.0	-1.023260533180429	--
76	EUGENOL	Essential Oil				--
1	EUGENOL-ACETATE	Leaf Essent. Oil		5000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	EUGENOL-METHYL-ETHER	Leaf Essent. Oil	5000.0	77000.0	-1.0	--
5	EUGENOL-METHYL-ETHER	Essential Oil				--
6	EUGENYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	FAT	Fruit	200000.0	550000.0	3.5596036699730003	--
13	FORMIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-CADINENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-ELEMENE	Plant				--
0	GAMMA-MUUROLENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Leaf Essent. Oil		1700.0	-0.7023439508515464	--
11	GAMMA-TERPINENE	Leaf	35.0	290.0	0.1872301001508422	--
35	GERANIOL	Leaf				--
35	GERANIOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Leaf Essent. Oil		13000.0	-1.1455624970792637	--
0	GERANIOL-ACETATE	Leaf Essent. Oil				--
5	GERANYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GERMACRANOLIDES	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	GUAJAJVERIN	Leaf				--
0	GUM	Plant				--
0	HEX-CIS-3-EN-1-OL-OXYLOSIDE	Leaf		16.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEXADECANE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	HEXANAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	HEXANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	HUMULENE	Leaf Essent. Oil				--
2	ISOBUTYRIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISODOMESTICINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
22	ISOQUERCITRIN	Leaf				--
1	JUGLANIN	Leaf				--
75	KAEMPFEROL	Plant				--
0	KAEMPFEROL-3-O-ALPHA-L-(2",4"-CIS-P-COUMAROYL)-RHAMNOSIDE	Leaf		21.0		--
0	KAEMPFEROL-3-O-ALPHA-L-(2"-TRANS-P-COUMAROYL)-RHAMNOSIDE	Leaf		3.3		--
0	KAEMPFEROL-3-O-ALPHA-L-(3",4"-DI-TRANS-P-COUMAROYL)-RHAMNOSIDE	Leaf		20.0		--
0	KAEMPFEROL-3-O-ALPHA-L-GALACTOSIDE	Leaf				--
0	KAEMPFEROL-3-O-ALPHA-L-RHAMNOSIDE	Leaf				--
0	KAEMPFEROL-3-O-BETA-D-RUTINOSIDE	Leaf				--
0	LAUNDOBINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LAUNOBINE	Plant				--
1	LAURENOBIOLIDE	Leaf				--
1	LAURENOBIOLIDE	Plant				--
1	LAURENOBIOLIDE	Root	600.0	2000.0		--
0	LAURENOLIDE	Leaf				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	LAURENONIOLIDE	Root				--
7	LAURIC-ACID	Fruit	60000.0	192500.0	1.9272892561696446	--
0	LEDENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	LEUCOCYANIDIN	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Leaf	55.0	500.0	0.07821612616499558	--
60	LIMONENE	Leaf Essent. Oil				--
0	LINALOL	Leaf	800.0	3340.0	1.5357435137562112	--
53	LINALOOL	Leaf Essent. Oil	4000.0	183700.0	0.46735098325491625	--
53	LINALOOL	Essential Oil				--
53	LINALOOL	Leaf	20.0	3340.0	1.6654663919658252	--
0	LINALOOL-ACETATE	Leaf Essent. Oil				--
27	LINOLEIC-ACID	Fruit	36000.0	176000.0	2.127693140200353	--
27	LINOLEIC-ACID	Plant				--
0	LINOLENIC-ACID	Plant				--
14	MANGANESE	Leaf		82.0	-0.3235642905289543	USDA's Ag Handbook 8 and sequelae)
18	MANNITOL	Root		6422.0	-1.3246166156133767	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	METHANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	METHYL-CINNAMATE	Fruit				--
20	METHYL-EUGENOL	Leaf	20.0	2608.0	-0.4181165295687271	--
0	METHYL-HEPTENONE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Leaf	5.0	320.0	-0.0572027272100166	--
22	MYRCENE	Leaf Essent. Oil		46800.0	-0.1845827373674177	--
5	MYRTENAL	Leaf	18.0	90.0	1.2943376979698786	--
2	MYRTENOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	N-DECANE	Leaf Essent. Oil				--
0	N-NONANE	Leaf Essent. Oil				--
0	N-TRIDECANE	Leaf Essent. Oil				--
0	N-UNDECANE	Leaf Essent. Oil				--
0	NANDIGERINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	NEOLITSINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	NERAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
10	NEROL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	NERYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	OLEIC-ACID	Fruit	66000.0	220000.0	1.2148685350373452	--
18	OLEIC-ACID	Plant				--
25	P-COUMARIC-ACID	Leaf		192.0	-0.2995654865435739	--
25	P-COUMARIC-ACID	Fruit		20.0	-0.6771858047250778	--
16	P-CYMENE	Leaf Essent. Oil		198300.0	2.1686417177504986	--
16	P-CYMENE	Leaf	62.0	540.0	0.04851679017072622	--
13	PALMITIC-ACID	Fruit	20000.0	60500.0	0.5763214413284119	--
27	PARTHENOLIDE	Leaf				--
0	PELARGONIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PENTANAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PENTANOIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PENTANOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PENTYL-ACETATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	PERILLYL-ALCOHOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PHELLANDRAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHENYLHYDRAZINE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Seed		1510.0	-0.23598595676506973	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
1	PINOCARVONE	Leaf	35.0	170.0	1.5478706392651775	Tucker, et al, EB46(1):21-24.1992
10	PIPERIDINE	Leaf				--
34	PROANTHOCYANIDINS	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	PROCYANIDIN-B-2	Leaf				--
4	PROCYANIDIN-B-4	Leaf				--
0	PROCYANIDIN-B-5	Leaf				--
0	PROCYANIDIN-B-7	Leaf				--
6	PROPIONIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
176	QUERCETIN	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	QUERCETIN-3-O-ALPHA-L-GALACTOSIDE	Leaf				--
44	QUERCITRIN	Leaf				--
10	RETICULINE	Leaf				--
1	REYNOSIN	Leaf	67.0	2500.0		--
0	RIDENTIN-B	Leaf				--
0	ROTHIN-B	Leaf				--
87	RUTIN	Leaf				--
5	SABINENE	Leaf	25.0	2650.0	1.4272110708644	--
5	SABINENE	Leaf Essent. Oil	42000.0	82900.0	0.7545516886727462	--
7	SALICYLATES	Leaf	10.0	25.0	-0.5226078387767185	--
5	SANTAMARIN	Leaf		73.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SANTAMARINE	Leaf	44.0	1500.0		--
0	SCHIZANDRASIDE	Leaf		24.0		--
0	SPATHULENOL	Leaf Essent. Oil				--
23	TERPINEN-4-OL	Essential Oil				--
23	TERPINEN-4-OL	Leaf	190.0	1380.0	0.44764477349717596	--
23	TERPINEN-4-OL	Leaf Essent. Oil	7800.0	22000.0	-0.3624984026500584	--
18	TERPINEOL	Fruit Essent. Oil		109000.0	1.0	--
9	TERPINOLENE	Leaf	4.0	200.0	0.022680174029978174	--
5	TERPINYL-ACETATE	Essential Oil				--
0	TETRADECANE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	THUJ-2-EN-4-OL	Leaf				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
71	THYMOL	Leaf Essent. Oil				--
1	TOLUENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	TRANS-2-HEXENAL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	TRANS-CARVEOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-METHYL-EUGENOL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-OCIMENE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	TRANS-PINOCARVEOL	Leaf Essent. Oil				--
0	TRANS-SABINENE-HYDRATE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRIDECANE	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRILAURIN	Fruit	72000.0	132000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	TULIPINOLIDE	Leaf				--
2	TULIPINOLIDE	Root				--
1	VALERIANIC-ACID	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	VERLATORIN	Leaf	90.0	1400.0		--
1	VIRIDIFLOROL	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	VISCIDULIN-C	Leaf				--
0	ZALUZANIN-D	Fruit		3200.0		--