

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Citrus limon

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DEACETYL-NOMILIN	Seed				Jim Duke's personal files.
0	HERACLENOL	Fruit Essent. Oil				Jim Duke's personal files.
0	ALPHA-BERGAMOTENE	Petiole				--
0	ISORHOIFOLIN	Leaf				Jim Duke's personal files.
0	3-(4-HYDROXY-3-METHOXY-PHENYL)-1-GLUCOSYL-PROP-2-ENE	Pericarp				Jim Duke's personal files.
0	OCTAN-1-AL	Pericarp				Jim Duke's personal files.
0	NONANAL	Petiole		1.5		--
0	7-RHAMNO-GLUCOSYL-LUTEOLIN	Flower				--
0	TRIDECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMOCITROL	Pericarp				Jim Duke's personal files.
0	ALPHA-THUJENE	Essential Oil	16.0	40.0	-0.40032749008251933	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	8-GERANYLOXYPSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-8-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Plant				--
0	5,7-DIMETHOXYCOUMARIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMOCITROL-3-O-(5-ALPHA-GLUCOSYL-3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
0	CITROPTEN	Fruit Essent. Oil				Jim Duke's personal files.
0	NERYL-ACETONE	Leaf Essent. Oil		28000.0		Jim Duke's personal files.
0	D-GALACTURONIC-ACID	Fruit				--
0	NARINGOSIDE	Fruit				--
0	EO	Pericarp		2600.0	-1.1594356213080714	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ISORHAMNETIN-3-ARABINOGLUCOSIDE	Plant				--
0	XYLOSYL-VITEXIN	Flower				--
0	3',4',5-TRIHYDROXY-FLAVONONE-7-O-BETA-D-RHAMNOSYL	Plant				--
0	7-RHAMNO-GLUCOSYL-DIOSMETIN	Flower				--
0	TRANS-LIMONENE-1,2-OXIDE	Essential Oil				Jim Duke's personal files.
0	PHLORIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	ALPHA-THUJENE	Petiole		20.0		--
0	ALPHA-TERPINYL-PROPIONATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	8-GERANYL-OXY-5-METHOXY-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	3',4',5-TRIHYDROXY-FLAVONE-7-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Plant				--
0	4-(3-METHYL-2-BUTENOXY)-ACETOPHENONE	Pericarp				--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil		7500.0	0.027166291246208063	Jim Duke's personal files.
0	DICONIFERYL-ALCOHOL-4-BETA-D-GLUCOSIDE	Pericarp				Jim Duke's personal files.
0	LIMOCITRIN-3-O-(5-ALPHA-GLUCOSYL-3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
0	DECANAL	Petiole		1.5		--
0	LIMOCITRIN-3-O-(5-ALPHA-GLUCOSYL-3)	Plant				--
0	NEROL-ACETATE	Pericarp Essent. Oil				Jim Duke's personal files.
0	METHYL-HEPTANONE	Leaf Essent. Oil				Jim Duke's personal files.
0	P-ALPHA-DIMETHYLSTYRENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BYAKANGELICOL	Essential Oil				--
0	ALPHA-CUBEBENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-PROPANYL-PROPIONATE	Fruit Essent. Oil				Jim Duke's personal files.
0	3',4',5'-TRIHYDROXY-FLAVONE-7-O-BETA-D-RHAMNOSYL	Plant				--
0	OBACUNONE-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
0	7-PENTAHYDROXY-2',3',5,5'-PENTAHYDROXY-FLAVANONE-7-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSIDE	Pericarp				--
0	ISOPULEGOLE	Leaf Essent. Oil	18000.0	114000.0	1.0	Jim Duke's personal files.
0	FAT	Seed	300000.0	400000.0	0.7090517076840918	--
0	ALPHA-TERPINYL-ACETATE	Petiole		0.1		--
0	LUTEOLIN-7-O-BETA-D-RUTINOSIDE	Leaf				Jim Duke's personal files.
0	8-GERAN-OXYPORALEN	Essential Oil		387.0		Jim Duke's personal files.
0	4',7-DIHYDROXY-3'-METHOXY-FLAVONONE-8-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				Jim Duke's personal files.
0	HEXADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OBACUNONE-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	DELTA-CARENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMOCITRIN-3-O-(3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE	Pericarp				Jim Duke's personal files.
0	LIMOCITRIN-3-O-(3	Plant				--
0	GERANIOL-ACETATE	Leaf Essent. Oil		8100.0	1.0	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CITRUSIN-C	Pericarp				Jim Duke's personal files.
0	GERANIOL-ACETATE	Pericarp Essent. Oil				Jim Duke's personal files.
0	ALPHA-COPAENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-PROPANYL-ACETATE	Fruit Essent. Oil				Jim Duke's personal files.
0	2',4',5-TRIHYDROXY-FLAVONONE-7-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				--
0	LINALOL	Essential Oil	8.0	30.0	-1.0	--
0	7-GLUCOSYL-APIGENIN	Flower				Jim Duke's personal files.
0	FAT	Fruit		28000.0	-0.42739034203512904	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LINONIN	Leaf				Jim Duke's personal files.
0	CIS-LIMONENE-1,2-OXIDE	Essential Oil				Jim Duke's personal files.
0	8-(7',8'-EPOXY-GERANYLOXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-8-O-BETA-D-RHAMNOSYL	Plant				--
0	SUBEROSIN	Root				Jim Duke's personal files.
0	HESPERIDOSIDE	Fruit				--
0	DECYL-ALDEHYDE	Leaf				--
0	LIMOCITRIN-3-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSE)	Pericarp				Jim Duke's personal files.
0	NEROL-ACETATE	Essential Oil	16.0	310.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-COPAENE	Petiole		0.0		--
0	LIMOCITRIN-3-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSIDE)	Pericarp				--
0	CITRUSIN-B	Pericarp				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	OCTANOL	Petiole		2.0		--
0	BRAYLIN	Root				Jim Duke's personal files.
0	NEOHESPERIDOSIDE	Pericarp				--
0	ALPHA-BERGAMOTENE	Essential Oil		250.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-2-PROPENYL-PROPIONATE	Fruit Essent. Oil				Jim Duke's personal files.
0	WATER	Fruit	850000.0	894000.0	0.5366602504029064	--
0	2'-O-XYLOSYL-VITEXIN	Flower				--
0	O-PHENYLPHENOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Leaf Essent. Oil	17000.0	81000.0	-1.0	--
0	BERGAMOTENE	Essential Oil	16.0	40.0		--
0	6-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	PENTADECANE	Plant				--
0	LINALOOL-ACETATE	Leaf Essent. Oil		22000.0	0.409907762680937	Jim Duke's personal files.
0	CHLOROPHYLL-B	Leaf				--
0	7-(3'-METHYL-BUT-2'-ENYL-OXY)-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-8-(2',3'-DIHYDROXY-3'-METHYL-BUTYL-OXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-6-O-BETA-D-RHAMNOSYL	Plant				--
0	NONAN-1-OL	Leaf Essent. Oil		14000.0		Jim Duke's personal files.
0	LIMETTIN	Shoot				Jim Duke's personal files.
0	PENTADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NEROL-ACETATE	Leaf Essent. Oil		9000.0	1.0	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LIMOCITRIN	Pericarp				Jim Duke's personal files.
0	CITRUSIN-A	Pericarp				Jim Duke's personal files.
0	OCTANAL	Petiole		2.0		--
0	ALPHA-AMINO-BUTYRIC-ACID	Plant				--
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-2-PROPENYL-ACETATE	Fruit Essent. Oil				Jim Duke's personal files.
0	LINALOL	Pericarp Essent. Oil	7000.0	110000.0		--
0	AUREUSIDIN-6-RHAMNOGLUCOSIDE	Plant				--
0	BETA-BERGAMOTENE	Leaf Essent. Oil		8000.0		Jim Duke's personal files.
0	6-8-DI-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	TETRAHYDROGERANIOL	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL-3-BETA-D-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ERIODICTYOSIDE	Fruit				--
0	LIMONOATE-A-RING-LACTONE	Leaf				Jim Duke's personal files.
0	CHLOROPHYLL-A	Leaf				--
0	5-GERANYL-OXY-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-6,8-DI-C-GLUCOSIDE	Pericarp				--
0	NONAN-1-AL	Pericarp				Jim Duke's personal files.
0	LIMETTIN	Essential Oil		295.0		--
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-8-(2'',3''-EPOXY-3'-METHYL-BUTYL-OXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	NARIRUTIN-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	CITROPTEN	Fruit				--
0	OCTYL-ALDEHYDE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(Z)-BETA-OCIMENE	Petiole		3.5		--
0	COUMARINS	Pt				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	ALPHA,ALPHA-P-TRIMETHYLBENZYL-ALCOHOL	Plant				--
0	QUERCETIN-3,5-DIGLUCOSIDE	Plant				--
0	NONYL-ALDEHYDE	Essential Oil				--
0	1-HEXEN-3-OL	Petiole		2.0		--
0	LIMONOATE-A-RING-LACTONE	Fruit				--
0	AUREUSIDIN-6-GLUCOSIDE	Plant				--
0	6,7-DIMETHOXYCOUMARIN	Bark		162.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TETRADECANE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL-3,7,4'-TRIMETHYL-ETHER	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ERIOCITRIN	Fruit		1.0		Jim Duke's personal files.
0	LIMONIN-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-3',8-DIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				--
0	HEPTANAL	Essential Oil		4.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NOMILINIC-ACID-4-BETA-D-GLUCOSIDE	Pericarp		9.8		Jim Duke's personal files.
0	PE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Petiole		13.0		--
0	LAURALDEHYDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CITRONIN	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	FATTY-ACIDS(C12-C24)	Silk Stigma Style				Jim Duke's personal files.
0	OCTYL-ACETATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	(E)-BETA-OCIMENE	Petiole		6.0		--
0	METHYL-HEPTENONE	Leaf Essent. Oil		6000.0		--
0	LIMONIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
0	5-ISOPENTENOXY-7-METHOXYCOUMARIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TETRADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL	Pericarp				Jim Duke's personal files.
0	EPIJASMONIC-ACID-METHYL-ESTER	Pericarp				Jim Duke's personal files.
0	5-(2',3'-EPOXY-3'-METHYL-BUTYL-OXY)-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	NONYL-ACETATE	Plant				--
0	4',5,7-TRIHYDROXY-3',8-DIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSIDE	Pericarp				--
0	HEPTADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DECANAL	Essential Oil	6.0	20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ICHANGIN-4-BETA-D-GLUCOSIDE	Pericarp		19.6		Jim Duke's personal files.
0	P-MENTHA-2,8-DIEN-1-OL	Essential Oil				--
0	KILOCALORIES	Fruit		2640.0	-1.5500422105520721	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	NARINGIN-6"-MALONATE	Leaf				Jim Duke's personal files.
0	CITRONETIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ERIODICTYOSIDE	Pericarp				Jim Duke's personal files.
0	OCTOPAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-HEPTANONE	Essential Oil				--
0	BETA-HUMULENE	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EO	Pt	2000.0	6000.0	1.0	--
0	UMBELLIPRENIN	Shoot				Jim Duke's personal files.
0	PROTEIN	Fruit	10000.0	111000.0	0.020127724197141796	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Fruit		28000.0	-0.7422580290226741	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2-CARBOXYARABINITOL	Leaf				Jim Duke's personal files.
0	5-GERANYL-OXYPYSORALEN	Pericarp				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-SINENSAL	Petiole		1.5		--
0	CARBOHYDRATES	Fruit	111000.0	863000.0	0.42843384218109976	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5-(2',3'-DIHYDROXY-3'-METHYL-BUTYL-OXY)-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	NONANAL	Essential Oil	9.0	30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	4',5,7-TRIHYDROXY-3',6,8-TRIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSIDE	Plant				--
0	NOMILIN-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	ICHANGIN-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	P-MENTHA-1,8-DIEN-9-YL-ACETATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	JASMONIC-ACID-METHYL-ESTER	Pericarp				Jim Duke's personal files.
0	NARINGIN-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	ISOERIOCITRIN	Leaf				Jim Duke's personal files.
0	OCTANOL	Essential Oil	10.0	15.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	MENTH-1-EN-9-OL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	VALENCENE	Tissue Culture				Jim Duke's personal files.
0	NEOBYAKANGELICOL	Fruit Essent. Oil				Jim Duke's personal files.
0	8-GERAN-OXYPORALEN	Pericarp				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	APIGENIN-7-(6-O-ALPHA-RHAMNOSYL-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
0	5-GERANOXY-7-METHOXYPORALEN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-SINENSAL	Petiole		0.0		--
0	CNIDICIN	Fruit Essent. Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NONAN-1-AL	Essential Oil	3.0	7.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GERANYL-OXY-PYRANOCOUMARIN	Root				Jim Duke's personal files.
0	DEACETYL-NOMILIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				--
0	P-CYMOL	Essential Oil				--
0	3-HEXEN-1-OL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ERIOCITRIN	Leaf				Jim Duke's personal files.
0	NONANOL	Petiole		0.0		--
0	LUTEOLIN-7-O-BETA-RUTINOSIDE	Leaf				--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil	100.0	3500.0	-0.38515655776504104	Jim Duke's personal files.
0	BYAKANGELICOL	Fruit Essent. Oil				Jim Duke's personal files.
0	8-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	PONCIRIN	Plant				--
0	GAMMA-SITOSTEROL	Plant				--
0	LIMOCITROL-3-O-(5-ALPHA-GLUCOSYL-3	Plant				--
0	APIGENIN-C-GLYCOSIDE	Plant				--
0	ALPHA,ALPHA-P-TRIMETHYLBENZYL-ALCOHOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	5-GERANOXY-7-METHOXYCOUMARIN	Essential Oil	603.0	630.0		--
0	CITRUSIN-F	Pericarp				Jim Duke's personal files.
0	NOMILIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
0	2-DODECENAL	Petiole		0.0		--
1	NARIRUTIN	Pericarp		3600.0	1.0	Jim Duke's personal files.
1	PABULENOL	Fruit Essent. Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	XANTHYLETIN	Root				Jim Duke's personal files.
1	N-METHYL-TYRAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	XANTHOXYLETIN	Root				Jim Duke's personal files.
1	DECYL-ACETATE	Plant		5.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	SODIUM	Fruit		470.0	-0.13938121430353298	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	NARIRUTIN	Leaf				Jim Duke's personal files.
1	CARVEOL	Essential Oil				Jim Duke's personal files.
1	CARVEOL	Petiole		0.0		--
1	DODECANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	SELINENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	DECAN-1-AL	Pericarp				Jim Duke's personal files.
2	GERANYL-FORMATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	NOMILIN	Seed				Jim Duke's personal files.
2	DODECANAL	Petiole		0.0		--
2	HERACLENIN	Fruit Essent. Oil				Jim Duke's personal files.
2	ALPHA-HUMULENE	Essential Oil		10.0	-0.48105436900291004	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OCIMENE	Leaf Essent. Oil				Jim Duke's personal files.
2	CONIFERIN	Pericarp				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHELLOPTERIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	NERYL-FORMATE	Essential Oil		20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OXYPEUCEDANIN-HYDRATE	Essential Oil		64.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHYTOSTEROLS	Fruit		120.0	-1.0633155337611349	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
2	BERGAMOTTIN	Essential Oil		649.0		Jim Duke's personal files.
2	BERGAMOTTIN	Fruit Essent. Oil				Jim Duke's personal files.
2	FARNESENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	CITRONELLYL-ACETATE	Petiole		1.0		--
2	VIOLAXANTHIN	Leaf				--
2	ALPHA-HUMULENE	Petiole		1.5		--
2	DECANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHELLOPTERIN	Fruit Essent. Oil				Jim Duke's personal files.
2	AURAPTEN	Fruit Essent. Oil				Jim Duke's personal files.
2	CAMPESTEROL	Fruit		20.0	-0.48957181191497545	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
2	UNDECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	AUREUSIDIN	Plant				--
2	NEOXANTHIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CITRONELLYL-ACETATE	Plant	4.0	20.0	-0.6827759635190207	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	2-NONENAL	Petiole		1.0		--
2	DODECANAL	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	NOMILIN	Sprout Seedling				Jim Duke's personal files.
2	RHOIFOLIN	Leaf				Jim Duke's personal files.
3	DIPHENYLAMINE	Plant				Jim Duke's personal files.
3	HEXANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	GERANYL-BUTYRATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Petiole		8.0		--
3	OBACUNONE	Seed				Jim Duke's personal files.
3	ISOPULEGOL	Leaf Essent. Oil		40000.0	-1.0	Jim Duke's personal files.
3	NOOTKATONE	Essential Oil		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	NOOTKATONE	Tissue Culture				Jim Duke's personal files.
3	NOOTKATONE	Plant				--
3	SESELIN	Leaf				Jim Duke's personal files.
3	MUCILAGE	Fruit				--
3	DECANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Essential Oil		80.0	-1.254423892232491	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Leaf Essent. Oil		3300.0	-0.6449387865926303	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SESELIN	Root				Jim Duke's personal files.
3	NOOTKATONE	Petiole		0.0		--
3	BETA-PHELLANDRENE	Pericarp Essent. Oil		65900.0		Jim Duke's personal files.
4	PHOSPHORUS	Fruit	100.0	1979.0	-0.3757244939645237	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	CADINENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	NERAL	Petiole		60.0		--
4	NERAL	Pericarp Essent. Oil				Jim Duke's personal files.
4	OSTHOLE	Root				--
4	NERAL	Essential Oil	27.0	130.0	1.0	--
4	NERAL	Leaf Essent. Oil	4000.0	172700.0	1.0	Jim Duke's personal files.
4	ISOVITEXIN	Pericarp				Jim Duke's personal files.
5	ZEAXANTHIN	Leaf				--
5	BYAKANGELICIN	Fruit Essent. Oil				Jim Duke's personal files.
5	SABINENE	Essential Oil	50.0	175.0	-0.5948547061177535	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	NERYL-ACETATE	Petiole		13.0		--
5	HEXANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Leaf Essent. Oil		10000.0	-0.4720621937310914	Jim Duke's personal files.
5	GERANYL-ACETATE	Essential Oil	12.0	310.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SYNEPHRINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	BYAKANGELICIN	Essential Oil		29.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SYNEPHRINE	Pericarp				Jim Duke's personal files.
5	GERANYL-ACETATE	Petiole		12.0		--
5	LIMONIN	Seed				Jim Duke's personal files.
5	BETA-ELEMENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	LIMONIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	SABINENE	Pericarp Essent. Oil				Jim Duke's personal files.
5	OCTANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Petiole		95.0		--
6	BETA-BISABOLENE	Essential Oil	23.0	400.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BETA-BISABOLENE	Leaf Essent. Oil		8000.0	-0.45226094922261545	Jim Duke's personal files.
6	OXYPEUCEDANIN	Essential Oil		207.0		--
6	STACHYDRINE	Plant				--
6	OXYPEUCEDANIN	Fruit Essent. Oil				Jim Duke's personal files.
6	IRON	Fruit	23.0	72.0	-0.24188358819633976	--
6	NEOHESPERIDIN	Pericarp				Jim Duke's personal files.
6	BETA-BISABOLENE	Petiole		25.0		--
7	SALICYLATES	Fruit		0.0	-0.3367420403588193	--
7	LINALYL-ACETATE	Essential Oil				--
8	NOBILETIN	Pericarp				Jim Duke's personal files.
8	ISOIMPERATORIN	Fruit Essent. Oil				Jim Duke's personal files.
8	CARYOPHYLLENE-OXIDE	Leaf Essent. Oil	0.8	15600.0	1.322705019532784	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	ISOIMPERATORIN	Essential Oil				--
8	GLUTAMIC-ACID	Plant				--
8	DELTA-3-CARENE	Petiole		1.0		--
9	TERPINOLENE	Leaf Essent. Oil				Jim Duke's personal files.
9	CAMPHENE	Leaf Essent. Oil				Jim Duke's personal files.
9	SYRINGIN	Pericarp				Jim Duke's personal files.
9	TERPINOLENE	Petiole		26.0		--
9	SINAPIC-ACID	Fruit	14.0	18.0	0.6272500481871801	--
9	TERPINOLENE	Essential Oil	14.0	120.0	-0.39476259711357375	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Essential Oil	2.0	50.0	-0.6924881415674572	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Pericarp Essent. Oil				Jim Duke's personal files.
9	CAMPHENE	Petiole		3.0		--
10	NEROL	Petiole		41.0		--
10	NEROL	Pericarp Essent. Oil				Jim Duke's personal files.
10	NEROL	Pericarp				Jim Duke's personal files.
10	NEROL	Leaf Essent. Oil	8000.0	76000.0	-1.0	Jim Duke's personal files.
11	ALPHA-PHELLANDRENE	Essential Oil		20.0	-0.5926545907300464	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ISORHAMNETIN	Flower				--
11	GAMMA-TERPINENE	Pericarp				Jim Duke's personal files.
11	PERILLALDEHYDE	Fruit				--
11	ALPHA-PHELLANDRENE	Petiole		2.0		--
11	GAMMA-TERPINENE	Petiole		535.0		--
11	GAMMA-TERPINENE	Essential Oil	290.0	1400.0	-0.8030057127991168	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
11	GAMMA-TERPINENE	Leaf Essent. Oil	3000.0	44000.0	-0.14954213307604686	Jim Duke's personal files.
11	GAMMA-TERPINENE	Pericarp Essent. Oil	12000.0	83200.0		Jim Duke's personal files.
11	TYRAMINE	Leaf				--
12	NARINGIN	Pericarp				Jim Duke's personal files.
12	STIGMASTEROL	Fruit		10.0	-1.0338847831220805	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
12	VICENIN-2	Pericarp				Jim Duke's personal files.
12	NARINGIN	Leaf				Jim Duke's personal files.
13	DIOSMETIN	Plant				--
13	BETA-PINENE	Petiole		595.0		--
13	GERANIAL	Essential Oil	42.0	236.0	1.0	--
13	ALPHA-TERPINENE	Pericarp				Jim Duke's personal files.
13	GERANIAL	Pericarp Essent. Oil		17600.0		Jim Duke's personal files.
13	BETA-PINENE	Essential Oil	40.0	1270.0	-0.7021862831547401	--
13	GERANIAL	Leaf Essent. Oil	3000.0	233000.0	1.0	Jim Duke's personal files.
13	ALPHA-TERPINENE	Essential Oil		70.0	-0.7756123212065256	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Pericarp Essent. Oil				Jim Duke's personal files.
13	ALPHA-TERPINENE	Petiole		8.0		--
13	BETA-PINENE	Fruit Essent. Oil		7000.0	-0.6959144908685471	Jim Duke's personal files.
13	BETA-PINENE	Leaf Essent. Oil		7000.0	-0.6862264928828316	Jim Duke's personal files.
13	GERANIAL	Petiole		60.0		--
13	BETA-PINENE	Pericarp				Jim Duke's personal files.
14	POTASSIUM	Fruit		14700.0	-0.28457604716385243	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	FIBER	Fruit	17000.0	47000.0	-0.8934118438004772	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	OSTHOL	Root				Jim Duke's personal files.
15	LUTEIN	Fruit	0.12	1.2	-0.731124155967682	--
15	CITRONELLOL	Pericarp Essent. Oil				Jim Duke's personal files.
15	CITRONELLOL	Pericarp				Jim Duke's personal files.
15	TANGERETIN	Pericarp				Jim Duke's personal files.
15	ISOPIMPINELLIN	Plant				--
15	RIBOFLAVIN	Fruit	2.0	3.0	-0.4303249009534089	--
15	CITRONELLOL	Leaf Essent. Oil	3700.0	14000.0	-0.9724708703903254	Jim Duke's personal files.
16	P-CYMENE	Essential Oil	12.0	31.0	-0.6331366260891432	--
16	P-CYMENE	Pericarp Essent. Oil				Jim Duke's personal files.
16	P-CYMENE	Petiole		7.5		--
16	P-CYMENE	Leaf Essent. Oil	4100.0	20000.0	-0.4814765484301064	Jim Duke's personal files.
16	ACETIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
19	D-LIMONENE	Leaf Essent. Oil	99000.0	667000.0	1.0	Jim Duke's personal files.
19	D-LIMONENE	Pericarp				Jim Duke's personal files.
19	CARVONE	Essential Oil				Jim Duke's personal files.
19	D-LIMONENE	Essential Oil				Jim Duke's personal files.
19	D-LIMONENE	Pericarp Essent. Oil		694400.0		Jim Duke's personal files.
20	CITRONELLAL	Leaf Essent. Oil	25000.0	89000.0	-1.0	Jim Duke's personal files.
20	CITRONELLAL	Pericarp Essent. Oil				Jim Duke's personal files.
20	CITRONELLAL	Pericarp				Jim Duke's personal files.
20	CITRONELLAL	Essential Oil				Jim Duke's personal files.
20	CITRONELLAL	Petiole		3.0		--
22	MYRCENE	Pericarp Essent. Oil				Jim Duke's personal files.
22	MYRCENE	Pericarp				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Essential Oil	65.0	1270.0	-0.42741750795730477	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Petiole		75.0		--
22	MYRCENE	Leaf Essent. Oil	5500.0	10000.0	-0.32786228882013646	Jim Duke's personal files.
22	SCOPARONE	Leaf				Jim Duke's personal files.
22	SCOPARONE	Bark		162.5		Jim Duke's personal files.
22	UMBELLIFERONE	Shoot				Jim Duke's personal files.
23	TERPINEN-4-OL	Pericarp Essent. Oil	1000.0	11000.0		Jim Duke's personal files.
23	ALPHA-TERPINEOL	Pericarp				Jim Duke's personal files.
23	CITRIC-ACID	Fruit		59500.0	0.3223249898875974	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
23	ALPHA-TERPINEOL	Essential Oil	6.0	50.0	-0.7708262254085273	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	ALPHA-TERPINEOL	Petiole		32.0		--
23	ALPHA-TERPINEOL	Leaf Essent. Oil	4000.0	125000.0	1.6609342933031976	Jim Duke's personal files.
23	ALPHA-TERPINEOL	Pericarp Essent. Oil	4000.0	73000.0		Jim Duke's personal files.
23	TERPINEN-4-OL	Petiole		22.0		--
23	CITRIC-ACID	Fruit Juice				Jim Duke's personal files.
23	TERPINEN-4-OL	Essential Oil	1.0	40.0	-0.6167580897613645	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Leaf Essent. Oil	29600.0	31000.0	-0.2861319108695746	Jim Duke's personal files.
24	PECTIN	Pericarp				--
24	PECTIN	Exocarp				Jim Duke's personal files.
25	P-COUMARIC-ACID	Fruit	6.0	102.0	-0.20876433550573723	--
25	IMPERATORIN	Fruit Essent. Oil				Jim Duke's personal files.
25	IMPERATORIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
26	BERGAPTEN	Essential Oil		10.0		Jim Duke's personal files.
26	BERGAPTEN	Plant				Jim Duke's personal files.
26	BERGAPTEN	Fruit Essent. Oil				Jim Duke's personal files.
28	ALPHA-PINENE	Fruit Essent. Oil		7000.0	-0.7563238037559155	Jim Duke's personal files.
28	ALPHA-PINENE	Pericarp				Jim Duke's personal files.
28	ALPHA-PINENE	Petiole		90.0		--
28	ADENOSINE	Pericarp				Jim Duke's personal files.
28	ALPHA-PINENE	Essential Oil	40.0	500.0	-0.5556700287286983	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	CALCIUM	Fruit	700.0	3227.0	-0.14521436633635507	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	ALPHA-PINENE	Leaf Essent. Oil	500.0	2000.0	-0.7421534872468563	Jim Duke's personal files.
28	ALPHA-PINENE	Pericarp Essent. Oil	5000.0	14000.0		Jim Duke's personal files.
31	THIAMIN	Fruit	4.0	6.0	0.08541669233982067	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	HESPERIDIN	Pericarp	20500.0	68800.0	0.9831655478788394	Jim Duke's personal files.
31	HESPERIDIN	Fruit				Jim Duke's personal files.
31	CARYOPHYLLENE	Essential Oil	11.0	28.0	-0.7680967243064245	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Leaf Essent. Oil				Jim Duke's personal files.
31	HESPERIDIN	Leaf				Jim Duke's personal files.
34	DIOSMIN	Leaf				Jim Duke's personal files.
34	DIOSMIN	Fruit		5.0		--
35	GERANIOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Pericarp				Jim Duke's personal files.
35	GERANIOL	Leaf Essent. Oil	13000.0	60200.0	-0.6318280565838599	Jim Duke's personal files.
35	GERANIOL	Petiole		80.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Fruit	10.0	19.0	-0.5574314089774005	--
44	SCOPOLETIN	Leaf				Jim Duke's personal files.
44	SCOPOLETIN	Shoot				Jim Duke's personal files.
47	BETA-SITOSTEROL	Fruit		80.0	-0.6891305552196143	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
47	BETA-SITOSTEROL	Plant				--
53	BETA-CAROTENE	Fruit	0.0	2.0	-0.14693466516508752	--
53	LINALOOL	Petiole		12.0		--
53	CITRAL	Essential Oil	250.0	300.0	-0.7878308981922465	--
53	LINALOOL	Essential Oil	8.0	30.0	-0.583010006932893	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Pericarp				Jim Duke's personal files.
53	LINALOOL	Leaf Essent. Oil	18000.0	81000.0	-0.1829511978385886	Jim Duke's personal files.
53	LINALOOL	Pericarp Essent. Oil	7000.0	111000.0		Jim Duke's personal files.
53	CITRAL	Pericarp				--
53	CITRAL	Fruit Essent. Oil		6000.0		Jim Duke's personal files.
56	NARINGENIN	Pericarp				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
60	LIMONENE	Essential Oil	2796.0	8000.0	-0.6910184174131357	--
60	LIMONENE	Leaf Essent. Oil	284000.0	754000.0	2.654734671831716	--
60	LIMONENE	Pericarp Essent. Oil	512000.0	774000.0		--
60	LIMONENE	Petiole		3090.0		--
60	LIMONENE	Fruit Essent. Oil	512000.0	980000.0	1.267182025507371	Jim Duke's personal files.
61	FERULIC-ACID	Fruit	14.0	40.0	-0.3813850356982369	--
62	CAFFEINE	Flower		50.0	0.21997067253202995	--
67	1,8-CINEOLE	Leaf Essent. Oil	11000.0	50000.0	-0.6565847961763176	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
71	THYMOL	Leaf Essent. Oil		11000.0	1.0	Jim Duke's personal files.
71	THYMOL	Pericarp Essent. Oil	53000.0	111000.0		Jim Duke's personal files.
78	LUTEOLIN	Flower				--
87	RUTIN	Leaf				Jim Duke's personal files.
87	RUTIN	Fruit	1.0	2.0	-0.6531383244068485	--
102	CAFFEIC-ACID	Fruit	21.0	35.0	-0.3324337022744836	--
112	ASCORBIC-ACID	Fruit Juice				Jim Duke's personal files.
112	ASCORBIC-ACID	Fruit	5208.0	5566.0	0.061588136058018224	--
176	QUERCETIN	Flower				--