

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Pinus sylvestris

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	DELTA-3-CARENE	Root Essent. Oil	400000.0	500000.0		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
8	DELTA-3-CARENE	Resin Essent. Oil	13000.0	360000.0		--
28	ALPHA-PINENE	Leaf Essent. Oil		312000.0	0.9632438931581422	--
0	CAR-3-ENE	Leaf Essent. Oil		252000.0	1.0	--
13	BETA-PINENE	Root Essent. Oil	175000.0	200000.0	1.6637047098912103	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
28	ALPHA-PINENE	Root Essent. Oil	175000.0	200000.0	1.0055904952191068	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
4	NEOABIETIC-ACID	Resin, Exudate, Sap		180000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ABIETIC-ACID	Resin, Exudate, Sap		180000.0	-1.4142135623730954	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	L-PIMARIC-ACID	Resin, Exudate, Sap		180000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
35	TANNIN	Bark		169000.0	0.2441891045370524	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	ALPHA-TERPINEOL	Leaf Essent. Oil	6500.0	167000.0	2.509529498910562	--
12	ESTRAGOLE	Resin, Exudate, Sap		106670.0		--
0	PALUSTRIC-ACID	Resin, Exudate, Sap		100000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-MUUROLENE	Leaf Essent. Oil	9900.0	93000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	D-PIMARIC-ACID	Resin, Exudate, Sap		80000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISODEXTROPIMARIC-ACID	Resin, Exudate, Sap		80000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	DEHYDROABIETIC-ACID	Resin, Exudate, Sap		70000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	BETA-PINENE	Leaf Essent. Oil		65000.0	2.10395512758855	--
35	BORNEOL	Leaf Essent. Oil	6500.0	62000.0	0.16251562096096972	--
9	CAMPHENE	Leaf Essent. Oil		35000.0	0.3677628391862796	--
13	ALPHA-TERPINENE	Leaf Essent. Oil		34500.0	2.2661395470708254	--
22	MYRCENE	Leaf Essent. Oil		34500.0	-0.23247237005406013	--
9	TERPINOLENE	Leaf Essent. Oil		26000.0	1.7189798888776386	--
8	FRUCTOSE	Leaf		25000.0	0.31537077862545454	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	DELTA-CADINENE	Leaf Essent. Oil		22300.0		--
7	GLUCOSE	Leaf		22000.0	-0.42788248580564037	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	PINITOL	Leaf		20000.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ALPHA-CADINOL	Leaf Essent. Oil		19000.0	-1.0	--
14	SUCROSE	Leaf		17000.0	-0.4419983985239393	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil		14000.0	1.4398134360490273	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil		13900.0	-0.3232063399585825	--
3	BETA-PHELLANDRENE	Leaf Essent. Oil		13000.0	0.1553903686246635	--
0	BORNEOL-ACETATE	Leaf Essent. Oil		9600.0	-0.5119486076726953	--
1	DELTA-CADINOL	Leaf Essent. Oil		9100.0		--
5	PINOSYLVIN	Wood	2500.0	8000.0		--
1	RAFFINOSE	Leaf		8000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISOABIENOL	Leaf		8000.0		--
0	3,7,7-TRIMETHYL-CYCLOHEPTA-1,3,5-TRIEN	Resin, Exudate, Sap		7000.0		--
0	EO	Leaf	2000.0	5000.0	-0.5748200656170724	--
11	GAMMA-TERPINENE	Leaf Essent. Oil		5000.0	-0.6592175679045217	--
0	MONOTERPENES	Leaf	1000.0	4850.0	-1.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	ALPHA-HUMULENE	Leaf Essent. Oil		4600.0	-0.5601171534351933	--
5	SABINENE	Leaf Essent. Oil		4500.0	-0.5646050792348103	--
0	TRICYCLENE	Leaf Essent. Oil		4400.0	1.0	--
0	BETA-GUAIENE	Leaf Essent. Oil		4100.0		--
0	GAMMA-MUUROLENE	Leaf Essent. Oil		4000.0	-1.0	--
20	CHOLINE	Flower		3400.0	0.43193421279068084	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MANOYL-OXIDE-ACID	Leaf		3100.0		--
0	MESO-INOSITOL	Leaf		3000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MELIBIOSE	Leaf		3000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
112	ASCORBIC-ACID	Leaf		3000.0	-0.165558324808047	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PINOSYLVINMONOMETHYL ETHER	Wood		3000.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LONGIFOLENE	Leaf Essent. Oil		2600.0	-1.0	--
0	GAMMA-CADINENE	Leaf Essent. Oil		2500.0	-0.6303261779642645	--
28	ALPHA-PINENE	Leaf	600.0	2500.0	-0.062233154531755666	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	T-CADINOL	Leaf Essent. Oil		2000.0	-1.0	--
16	P-CYMENE	Leaf Essent. Oil		1600.0	-0.7549604300774599	--
13	BETA-PINENE	Leaf	200.0	1500.0	1.7833577159120335	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ARABINOSE	Leaf		600.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-FARNESENE	Leaf Essent. Oil		600.0	-1.0	--
0	ALPHA-COPAENE	Leaf Essent. Oil		500.0	-1.0	--
0	ALPHA-YLANGENE	Leaf Essent. Oil		500.0	-1.0	--
0	DELTA-ELEMENE	Leaf Essent. Oil		500.0		--
0	ZINGERONE-O-BETA-D-GLUCOPYRANOSIDE	Leaf		336.0		--
0	RHEOSMIN-O-BETA-D-GLUCOPYRANOSIDE	Leaf		306.0		--
0	ROSEOSIDE	Leaf		280.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VIT-E	Leaf		280.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	XYLOSE	Leaf		200.0		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
12	BORNYL-ACETATE	Leaf	60.0	175.0	-0.314398718058706	--
0	CAROTENES	Leaf		170.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ESTERS	Leaf	64.0	122.0	-1.3541656912835798	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	8-HYDROXY-12-OXOABIET-13(14)-ENOIC-ACID	Leaf		100.0		--
0	N-(3-INDOLE-ACETYL)-ASPARTIC-ACID	Shoot		60.0		--
0	QUERCETIN-3-(6"-O-ACETYL-BETA-D-GLUCOSIDE)	Leaf		34.5		--
1	GALACTOSE	Leaf		30.0	-1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	6"-DI-O-P-COUMAROYL-TRIFOLIN	Leaf		13.0		--
0	SYLPIN	Leaf		3.0		--
0	T-MUUROLOL	Leaf Essent. Oil		1.14	-1.0	--
0	CRYPTONE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	PINOSYLVIN	Wood				--
13	ALPHA-TERPINENE	Essential Oil				--
11	ALPHA-PHELLANDRENE	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	L-HISTIDINE	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
12	STIGMASTEROL	Plant				--
0	2-(4-GLUCOSYL-OXY-3-METHOXY-PHENYL)-7-HYDROXY-3-HYDROXY-METHYL-5-(3-HYDROXY-PROPYL)-BENZOFURAN	Leaf				--
0	CAR-3-ENE	Plant				--
7	INDOLE-3-ACETIC-ACID	Sprout Seedling				--
3	CAPRIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PIMAR-15-EN-4,8-DIOL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-MUUROLENE	Essential Oil				--
0	19-NORPIMARA-8(14),15-DIEN-3-ONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	EPSILON-MUUROLENE	Leaf Essent. Oil				--
7	GLUCOSE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	QUERCETIN-3-O-BETA-D-GLUCOSIDE	Leaf				--
7	(+)-GALLOCATECHIN	Leaf				--
0	CALACORENE	Essential Oil				--
0	(-)-BETA-PINENE	Leaf				--
0	PINIFOLIC-ACID	Shoot				--
2	VIOLAXANTHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-PINENE	Twig				--
60	LIMONENE	Flower				--
0	(+)-CAMPHENE	Leaf				--
0	DEHYDROPINIFOLIC-ACID	Leaf				--
0	SABINIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	BETA-ELEMENE	Essential Oil				--
0	BETA-COPAENE	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-CADINENE	Leaf Essent. Oil				--
0	DEHYDROABIETINOL	Shoot				--
1	COPAENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-MUUROLENE	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-MUUROLENE	Essential Oil				--
0	JUNIPERIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	STACHYOSE	Plant				--
0	18-ACETOXY-ANTICOPALIC-ACID	Shoot				--
0	CAR-3-ENE	Resin, Exudate, Sap				--
16	P-CYMENE	Resin, Exudate, Sap				--
7	INDOLE-3-ACETIC-ACID	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	T-MUUROLOL	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	CAMPESTEROL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
26	PHENOL	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-MUUROLENE	Wood				--
0	19-NORISOPIMARA-8,14,15-DIEN-3-ONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	EPSILON-MUUROLENE	Essential Oil				--
0	GAMMA-MUUROLENE	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
176	QUERCETIN	Leaf				--
30	(+)-CATECHIN	Bark				--
102	CAFFEIC-ACID	Leaf				--
0	MELIBIOSE	Plant				--
0	(+)-BETA-PINENE	Leaf				--
0	EPIMANOILOXIDE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	VANILLIC-ACID	Bark				--
13	BETA-PINENE	Flower				--
60	LIMONENE	Essential Oil				--
0	DEHYDROABIETINAL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	BETA-COPAENE	Leaf Essent. Oil				--
53	BETA-CAROTENE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-CADINENE	Wood				--
5	DEHYDROABIETIC-ACID	Shoot				--
0	EPSILON-MUUROLENE	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PIMARINOL	Shoot				--
0	COPABORNEOL	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	PINOCEMBRIN	Wood				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	ALPHA-TERPINENE	Leaf				--
0	ALPHA-LONGIPINENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-MUUROLENE	Wood				--
0	ISOPIMARINAL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SCOPAROL	Leaf				--
0	18-ACETOXY-ANTICOPALIC-ACID	Leaf				--
0	CAR-3(10)-ENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
25	P-COUMARIC-ACID	Pollen Or Spore				--
2	HUMULENE	Essential Oil				--
23	TERPINEN-4-OL	Leaf Essent. Oil				--
6	BUTYRIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PARAHYDROXYBENZOIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	18-NORPIMARA-8,15-DIEN-4-ALPHA-OL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EPITESTOSTERONE	Pollen Or Spore				--
2	GAMMA-CAROTENE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PRODELPHINIDIN	Leaf				--
30	(+)-CATECHIN	Leaf				--
0	(-)-ALPHA-PINENE	Leaf				--
13	BETA-PINENE	Essential Oil				--
60	LIMONENE	Leaf Essent. Oil				--
1	YLANGENE	Essential Oil				--
0	BETA-CARYOPHYLLENE	Essential Oil				--
0	HEXAN-1-OL	Flower				--
1	MALONIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
19	ACETYL-CHOLINE	Sprout Seedling				--
3	DEHYDROABIETANE	Wood				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PIMARIC-ACID	Shoot				--
9	VALERIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
53	CITRAL	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	PINOBANKSIN	Stem				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	ALPHA-PINENE	Twig				--
7	ALPHA-CAROTENE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ISOPIMARIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	SALICYLIC-ACID-METHYL-ESTER	Flower				--
0	1-4-CINEOL	Leaf Essent. Oil				--
0	CAR-2-ENE	Essential Oil				--
0	OCTADECENOIC-ACID	Pollen Or Spore				--
0	HOMOPROTOCATECHUIC-ACID	Leaf				--
23	TERPINEN-4-OL	Essential Oil				--
0	ALPHA-FENCHOL	Essential Oil				--
0	18-NORDEHYDROYABIET-4-ALPHA-OL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Root				--
0	GAMMA-CADINENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PROCYANIDIN-C-2	Leaf				--
38	(-)-EPICATECHIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	BORNEOL-ACETATE	Essential Oil				--
2	MALTOSE	Plant				--
0	(+)-ALPHA-PINENE	Leaf				--
7	DIPENTENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	L-PIMARIC-ACID	Shoot				--
0	TRICYCLENE	Resin, Exudate, Sap				--
3	DEHYDROABIETANE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	RAFFINOSE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	GLUCOSAMINE	Shoot				--
0	M-MENTH-6-EN-8-OL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ABIETIC-ACID-METHYL-ESTER	Shoot				--
20	CITRONELLAL	Leaf Essent. Oil				--
2	PECTOLINARIN	Leaf				--
0	TETRACOSANOL-(1)	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CIS-BETA-OCIMENE	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	ALPHA-PINENE	Plant				--
11	ADENINE	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-CADINENE	Essential Oil				--
0	ISOPIMARA-7,15-DIENE	Plant				--
5	SABINENE	Essential Oil				--
0	12-OXOABIETIC-ACID	Shoot				--
41	CAMPHOR	Leaf Essent. Oil				--
0	OCTADECADIENOIC-ACID	Pollen Or Spore				--
0	3-HYDROXY-2-(2-HYDROXY-4-(3-RHAMNOSYL-OXY-PROPYL)-PHENOXY)-3-(3-METHOXY-4-HYDROXY-PHENYL)-PROPANOL	Leaf				--
0	TAXIFOLIN-3'-O-BETA-D-GLUCOSIDE	Leaf				--
0	P-MENTHANOL-4	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-FENCHENE	Leaf Essent. Oil				--
0	18-NORDEHYDROABIETAN-4-ALPHA-OL	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	DL-T-CADINOL	Stem Essent. Oil				--
1	PROCYANIDIN-B-6	Leaf				--
60	LIMONENE	Resin, Exudate, Sap				--
35	BORNEOL	Essential Oil				--
0	M-MENTHA-6,8-DIENE	Resin, Exudate, Sap				--
0	8,13-EPOXY-LABD-14-EN-19-OIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	DIHYDROQUERCETIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-YLANGENE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISOPIMARINOL	Shoot				--
1	QUINIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
20	BENZOIC-ACID	Leaf				--
7	ANISALDEHYDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	GINNOL	Pollen Or Spore				--
0	LUTEIN-EPOXIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ABIETIC-ACID	Shoot				--
77	CHLOROGENIC-ACID	Leaf				--
0	PALUSTRIC-ACID	Shoot				--
11	TESTOSTERONE	Pollen Or Spore				--
3	BETA-PHELLANDRENE	Twig				--
5	PINITOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	ALPHA-PINENE	Flower				--
0	ABIETINOL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-CADINENE	Wood				--
0	ISOPIMARA-7,15-DIEN-18-AL	Plant				--
0	12-HYDROXYABIETIC-ACID-METHYL-ESTER	Shoot				--
4	NEOABIETIC-ACID	Shoot				--
0	3-HYDROXY-2-(2-HYDROXY-4-(3-HYDROXY-PROPYL)-PHENOXY)-3-(3-METHOXY-4-XYLOSYLOXY-PHENYL)-PROPANOL	Leaf				--
17	TAXIFOLIN	Leaf				--
2	NEOXANTHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	18-NORDEHYDROABIET-4(19)-ENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DL-LIMONENE	Resin, Exudate, Sap				--
6	FURFURAL	Root				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
2	PROCYANIDIN-B-3	Leaf				--
40	EPICATECHIN	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	M-MENTHA-1,3(8)-DIENE	Resin, Exudate, Sap				--
0	9,16-DIHYDROXYHEXADECANOIC-ACID	Pollen Or Spore				--
0	DIHYDROCONIFERYL-ALCOHOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TERPINENOL	Root				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
47	BETA-SITOSTEROL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ISOPIMARIC-ACID	Shoot				--
0	TRICYCLENE	Essential Oil				--
0	D-MYRCENE	Resin, Exudate, Sap				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	QUERCETIN-7-BETA-GLUCOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
36	ANETHOLE	Leaf Essent. Oil				--
1	ANDROSTENEDIONE	Pollen Or Spore				--
0	GERANYLGERANIOL-ACETATE	Shoot				--
15	LUTEIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ABIETADIENE	Wood				--
31	CARYOPHYLLENE	Leaf Essent. Oil				--
13	PALMITIC-ACID	Pollen Or Spore				--
18	TERPINEOL	Root				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
3	BETA-PHELLANDRENE	Flower				--
10	CHAMAZULENE	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	PINIPICRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	ALPHA-PINENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ABIETINAL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	FENCHONE	Leaf Essent. Oil				--
0	12-HYDROXYABIETIC-ACID	Shoot				--
9	CAMPHERE	Essential Oil				--
0	3-HYDROXY-2-(2-HYDROXY-4-(3-HYDROXY-PROPYL)-PHENOXY)-3-(3-METHOXY-4-HYDROXY-PHENYL)-PROPANOL	Leaf				--
0	T-CADINOL	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ALPHA-COPAENE	Essential Oil				--
67	1,8-CINEOLE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DI-P-COUMAROYL-TRIFOLIN	Leaf				--
1	PROCYANIDIN-B-1	Leaf				--
31	CARYOPHYLENE	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
3	BETA-TERPINEOL	Leaf Essent. Oil				--
0	M-COUMARIC-ACID	Pollen Or Spore				--
0	8,16-DIHYDROXY-HEXADECANOIC-ACID	Pollen Or Spore				--
0	DIHYDRO-P-COUMARIC-ALCOHOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	BETA-PINENE	Resin, Exudate, Sap				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
19	D-LIMONENE	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
176	QUERCETIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	ALPHA-TERPINENE	Root				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
11	GAMMA-TERPINENE	Resin, Exudate, Sap				--
0	LONGIFOLENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ABIETA-7,13,15-TRIEN-18-OIC-ACID-METHYL-ESTER	Resin, Exudate, Sap				--
0	CAR-3-ENE	Shoot				--
5	P-METHOXY-CINNAMIC-ACID	Pollen Or Spore				--
3	BETA-PHELLANDRENE	Essential Oil				--
0	ISOPIMARADIENE	Wood				--
0	CEROTIC-ACID	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PINICORRETIN	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FENCHOL	Leaf Essent. Oil				--
0	ISOCAPROIC-ACID	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
1	RHODOXANTHIN	Leaf				--
0	(-)-T-MUUROLOL	Stem Essent. Oil				--
2	CAMPESTEROL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Twig				--
0	3-GLUCOSYL-OXY-2-(2-HYDROXY-4-(3-HYDROXY-4-(3-HYDROXY-PROPYL)-PHENOXY)-3-(3-METHOXY-4-HYDROXY-PHENYL)-PROPANOL	Leaf				--
0	ALPHA-COPAENE	Wood				--
0	(+)-PINIFOLIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
8	FRUCTOSE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	PINOSYLVIN	Shoot				--
9	CAMPHERE	Resin, Exudate, Sap				--
47	BETA-SITOSTEROL	Pollen Or Spore				--
0	10,16-DIHYDROXY-HEXADECANOIC-ACID	Pollen Or Spore				--
0	DIHYDRO-BETA-SITOSTEROL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	N-NONACOSANE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	TERPINOLENE	Flower				--
0	D-INOSITOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
43	PROTocatechuic-ACID	Bark				--
0	ALPHA-THUJENE	Leaf Essent. Oil				--
28	ALPHA-PINENE	Resin, Exudate, Sap				--
11	GAMMA-TERPINENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LONGICYCLENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SYLVESTRENE	Resin, Exudate, Sap				--
0	CAR-3-ENE	Flower				--
13	P-HYDROXY-BENZOIC-ACID	Bark				--
0	PIMARINOL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ALPHA-PHELLANDRENE	Essential Oil				--
0	ABIETA-8,11,13-TRIENE-15,18-DIOL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
12	ESTRAGOLE	Leaf Essent. Oil				--
0	GUANOSINE	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	(-)-LIMONENE	Leaf				--
0	CALAMENENE	Leaf Essent. Oil				--
22	MYRCENE	Flower				--
0	13-OXOPODOCARP-8-ENOIC-ACID	Leaf				--
30	(+)-CATECHIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
61	FERULIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PINOCARVEOL	Leaf Essent. Oil				--
35	BORNEOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LONGIFOLENE	Wood				--
9	DELTA-CADINENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	SUCROSE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MYO-INOSITOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-CALACORENE	Wood				--
0	D-DELTA-4-CARENE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PROPIONALDEHYDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-TERPINEOL ACETATE	Leaf Essent. Oil				--
0	4-CHLOROINDOLE-3-ACETIC-ACID	Seed				--
3	P-HYDROXYACETOPHENONE	Leaf				--
2	BETA-MYRCENE	Resin, Exudate, Sap				--
0	INDOLE-3-METHANOL	Sprout Seedling				--
9	TERPINOLENE	Essential Oil				--
0	CAPRONALDEHYDE	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	PIMARINAL	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	8,9-ISOPIMARIC-ACID	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	GUAIACYL-GLYCERIN-BETA-D-GLUCOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	QUERCIMERITRIN	Leaf				--
0	(-)-ALPHA-CADINOL	Stem Essent. Oil				--
0	CALAMENENE	Essential Oil				--
22	MYRCENE	Essential Oil				--
0	1,2-DEHYDROPINIDINONE	Plant				--
5	EUGENOL-METHYL-ETHER	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	PINIFOLIC-ACID-MONOMETHYL-ESTER	Leaf				--
47	BETA-SITOSTEROL	Plant				--
1	LINARIN	Leaf				--
0	(+)-CAR-3-ENE	Leaf Essent. Oil				--
14	SHIKIMIC-ACID	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-FENCHENE	Leaf Essent. Oil				--
3	BETA-PHELLANDRENE	Resin, Exudate, Sap				--
0	MUUROLENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
10	CUMINALDEHYDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-PATCHOULENE	Leaf Essent. Oil				--
2	L-LIMONENE	Leaf				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
14	SULFUR	Leaf				--
0	2-(4-RHAMNOSYL-OXY-3-METHOXY-PHENYL)-7-HYDROXY-3-HYDROXY-METHYL-5-(3-HYDROXY-PROPYL)-BENZOFURAN	Leaf				--
0	CAR-3-ENE	Essential Oil				--
0	P-CYMOL	Leaf Essent. Oil				--
0	INDOLE-3-ALDEHYDE	Seed				--
9	TERPINOLENE	Resin, Exudate, Sap				--
1	CAPROIC-ACID	Leaf				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	PIMARADIENE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	3-HYDROXY-1(4-HYDROXY-3-METHOXYPHENYL)-1-PROPANONE	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ERIODICTYOL-3'-O-BETA-D-GLUCOPYRANOSIDE	Leaf				--
0	(+)-LIMONENE	Leaf				--
0	CALACORENE	Leaf Essent. Oil				--
0	(+)-1,2-DEHYDROPINIDINOL	Plant				--
12	ESTRAGOLE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	PINIFOLIC-ACID	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	BETA-SELINENE	Wood				--
60	LIMONENE	Shoot				--
0	(-)-CAMPHENE	Leaf				--
0	SEQUOYITOL	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	BETA-MYRCENE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-DEHYDROABIETANE	Resin, Exudate, Sap				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ALPHA-CADINOL	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
9	DELTA-CADINENE	Essential Oil				--