

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Origanum vulgare*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	(E)-2-HEXENAL	Plant		0.0	-0.7427413770332784	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	(E)-BETA-OCIMENE	Plant		25.0	-0.4702361796243996	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	(E,Z)-2,6-NONADIENAL	Plant		0.5		Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	(Z)-2-NONENAL	Plant		0.2	-1.0000000000000002	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	(Z)-BETA-FARNESENE	Plant		6.0	-0.5118906968889915	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	(Z)-BETA-OCIMENE	Plant		5.0	-0.7847599508687727	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(Z)-GERANYL-ACETONE	Plant		0.7	1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	1,8-CINEOL	Shoot Essent. Oil		1800.0	-0.8630493082404156	--
67	1,8-CINEOLE	Plant	1.5	800.0	-0.3371100152521458	--
67	1,8-CINEOLE	Plant	4.0	96.0	-0.534716552086043	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-NONEN-3-OL	Plant		0.2	-0.46291004988627565	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	1-OCTEN-3-OL	Plant		2.0	-0.441887841970323	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	1-OCTEN-3-OL	Plant	106.0	530.0	0.6894046536315752	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	10-(ALPHA)-CADINOL	Plant	20.0	80.0	1.3676116054901664	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	2-CAFFEOYL-OXY-3-[2-(4-HYDROXYBENZYL)-4,5-DIHYDROXY}PHENYLPROP IONIC-ACID	Leaf		21.0		--
0	2-ETHYL-1-HEXANOL	Plant		3.0	-0.2672612419124244	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	2-UNDECANONE	Plant	6.0	30.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-NONANONE	Plant		0.1	1.0000000000000002	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
2	3-OCTANOL	Plant	2.0	150.0	-0.3419992548843729	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	4-(3,4-DIHYDROXY-BENZOYL-OXY-METHYL)-PHENYL-BETA-D-GLUCOPYRANOSIDE	Leaf		2330.0		--
0	4-(3,4-DIHYDROXY-BENZOYL-OXY-METHYL)-PHENYL-BETA-D-GLUCOSIDE	Leaf		2330.0		--
0	4-HYDROXY-BENZOIC-ACID	Leaf				--
0	4-HYDROXY-BENZOIC-ACID	Plant				--
0	5-HYDROXY-3,3',4',7-TETRAMETHOXY-FLAVONE	Plant				--
0	6-METHYL-3-HEPTANOL	Plant		3.0	-0.43893274312887204	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	6-METHYL-HEPTAN-3-ONE	Plant				--
0	ALLO-AROMADENDRENE	Plant	18.0	120.0	1.5167315859586603	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALLO-AROMADENDRENE	Shoot Essent. Oil		800.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-BISABOLENE	Plant		7.5	-0.6131393394849657	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	ALPHA-BOURBONENE	Plant				--
3	ALPHA-CADINOL	Plant		20.0	-0.5542331531173925	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	ALPHA-COPAENE	Plant	18.0	90.0	-0.0830422717075718	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-FARNESENE	Plant				--
0	ALPHA-HIMACHALENE	Plant		8.0	-0.5391638660171919	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
2	ALPHA-HUMULENE	Shoot Essent. Oil		5800.0	-0.5745433232683291	--
2	ALPHA-HUMULENE	Plant		24.0	-0.5469443141887985	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
2	ALPHA-HUMULENE	Plant	6.0	376.0	2.903829073613269	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	ALPHA-LINOLENIC-ACID	Plant	4180.0	4502.0	-0.43987938539726296	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-MUUROLENE	Plant		3.5	-0.8544226254106854	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	ALPHA-MUUROLENE	Plant	3.0	15.0	1.1926315813024149	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Shoot Essent. Oil		700.0	-0.7133860764771591	--
11	ALPHA-PHELLANDRENE	Essential Oil		24400.0	-0.12076327248172064	--
11	ALPHA-PHELLANDRENE	Plant	2.0	244.0	0.5309952376954196	--
28	ALPHA-PINENE	Essential Oil		14300.0	-0.43423733371804657	--
28	ALPHA-PINENE	Shoot Essent. Oil	8400.0	8800.0	-0.3008087496515222	--
28	ALPHA-PINENE	Plant		1.0	-0.4807677514262774	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
28	ALPHA-PINENE	Plant	6.0	143.0	-0.3802760745255173	--
13	ALPHA-TERPINENE	Plant		2.0	-0.4985740128688605	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
13	ALPHA-TERPINENE	Plant	9.0	178.0	-0.233349808184638	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Shoot Essent. Oil	6200.0	13700.0	0.08830474981151562	--
23	ALPHA-TERPINEOL	Plant		18.0	-0.4665198749161101	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Shoot Essent. Oil	4200.0	8500.0	-0.5248906591678238	--
0	ALPHA-TERPINOLENE	Shoot Essent. Oil		500.0		--
0	ALPHA-THUJENE	Plant	6.0	32.0	-0.545287469129771	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Shoot Essent. Oil		11200.0	0.7911582080686764	--
6	ALPHA-THUJONE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
32	ALPHA-TOCOPHEROL	Leaf				--
0	AMYL-FURAN	Plant		0.2	-1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
101	APIGENIN	Plant				--
101	APIGENIN	Leaf				--
0	APIGENIN-7-O-BETA-D-GLUCOSIDE	Plant				Abstract (See species file)
3	AROMADENDRIN	Leaf				--
3	AROMADENDRIN	Plant				Stitt, Paul. Why George should eat broccoli.
112	ASCORBIC-ACID	Plant				--
0	ASH	Plant	69000.0	79720.0	-0.7459910499770033	USDA's Ag Handbook 8 and sequelae)
6	BETA-BISABOLENE	Shoot Essent. Oil		1500.0	-1.0	--
6	BETA-BISABOLENE	Essential Oil		38100.0	1.0	--
6	BETA-BISABOLENE	Plant	3.0	640.0	1.7448406109922843	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
6	BETA-BISABOLENE	Plant		45.0	-0.4883699141484162	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	BETA-BOURBONENE	Shoot Essent. Oil		7500.0	-0.07953213654385216	--
0	BETA-BOURBONENE	Plant		8.0	-0.46377087610651296	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	BETA-BOURBORNENE	Plant	54.0	430.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CADINENE	Plant				--
53	BETA-CAROTENE	Plant	41.0	45.0	-0.48346418761085247	USDA's Ag Handbook 8 and sequelae)
0	BETA-CARYOPHYLLENE	Essential Oil		74500.0	-0.16338482301308704	--
0	BETA-CARYOPHYLLENE	Plant				--
0	BETA-CARYOPHYLLENE	Shoot Essent. Oil	15000.0	90600.0	0.05911203848804346	--
0	BETA-CUBEBENE	Plant		0.6	-0.914808611505633	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
5	BETA-ELEMENE	Plant	6.0	30.0	-0.3646462028448172	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Shoot Essent. Oil		1100.0	-0.7456415586325718	--
13	BETA-EUDESOL	Shoot Essent. Oil		8600.0	1.0	--
0	BETA-FARNESENE	Plant				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-IONONE	Plant		3.0	-0.44307902049736897	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	BETA-OCIMENE	Shoot Essent. Oil		900.0		--
3	BETA-PHELLANDRENE	Plant		5.0	-0.7791779018578511	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
3	BETA-PHELLANDRENE	Shoot Essent. Oil		800.0	-1.0	--
3	BETA-PHELLANDRENE	Plant	12.0	60.0	-0.2540957154032198	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Plant		2.5	-0.4327872744923022	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
13	BETA-PINENE	Essential Oil		12900.0	-0.44394963816922256	--
13	BETA-PINENE	Shoot Essent. Oil	800.0	1100.0	-1.4350496146801597	--
13	BETA-PINENE	Plant	1.0	312.0	-0.0986095230981471	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-SESQUIPELLANDRENE	Plant		1.0	-0.7517309741553299	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
47	BETA-SITOSTEROL	Plant		1770.0	2.5234864995607373	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-TOCOPHEROL	Leaf				--
0	BICYCLOGERMACRENE	Plant	51.0	340.0	1.2887394603502997	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BICYCLOGERMACRENE	Shoot Essent. Oil		14300.0		--
35	BORNEOL	Plant	32.0	252.0	-0.4432092009055521	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	BORNEOL	Shoot Essent. Oil		14100.0	-0.6239581251643059	--
12	BORNYL-ACETATE	Plant		11.0	-0.4619671542050679	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
4	BORON	Plant	21.0	41.0	-0.3966910854291177	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).
102	CAFFEIC-ACID	Plant		6000.0	-0.13697781925712094	--
102	CAFFEIC-ACID	Leaf	106.0	1060.0	-0.568873034612085	--
102	CAFFEIC-ACID	Shoot				--
0	CALAMENE	Shoot Essent. Oil		300.0		--
0	CALAMENENE	Plant	24.0	96.0	1.7008365342162117	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	CALCIUM	Plant	14070.0	18794.0	0.5567192219235987	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	CAMPESTEROL	Plant	120.0	130.0	-0.044215768828538185	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	Essential Oil		5100.0	-0.5406818421827995	--
9	CAMPHENE	Shoot Essent. Oil	1500.0	10500.0	-0.15055766984407706	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	CAMPHENE	Plant	1.0	64.0	-0.49634722501068135	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Plant		0.5	-0.6049690826062011	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
41	CAMPHOR	Plant	0.0	40.0	-0.6336247664182881	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	CAPRIC-ACID	Plant	400.0	431.0	-0.2764618693305909	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Plant	644300.0	693911.0	0.13852418939593727	USDA's Ag Handbook 8 and sequelae)
37	CARVACROL	Plant	6.0	640.0	-0.7782520185838981	--
37	CARVACROL	Plant	1.5	3000.0	-0.4517436697504344	--
37	CARVACROL	Shoot Essent. Oil	6000.0	795800.0	1.414118386709685	--
37	CARVACROL	Shoot				--
37	CARVACROL	Flower Essent. Oil				--
37	CARVACROL	Essential Oil	136300.0	140000.0	-0.4821315368660316	--
0	CARVACROL-ACETATE	Shoot Essent. Oil		3600.0		--
0	CARVACROL-METHYL-ETHER	Shoot Essent. Oil	500.0	1100.0		--
0	CARVACRYL-METHYL-ETHER	Plant	16.0	64.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
19	CARVONE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Plant	1.0	920.0	0.6425817485297227	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	CARYOPHYLLENE-EPOXIDE	Shoot Essent. Oil		10400.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	CARYOPHYLLENE-OXIDE	Plant	84.0	336.0	0.21706461981273312	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	CATECHOL	Plant				--
77	CHLOROGENIC-ACID	Plant				--
77	CHLOROGENIC-ACID	Shoot				--
18	CINNAMIC-ACID	Plant				--
0	CIS-BETA-OCIMENE	Shoot Essent. Oil		270000.0		--
0	CIS-DIHYDROCARVONE	Shoot Essent. Oil				--
0	CIS-DIHYDROCARVONE	Plant		0.0	-0.6704238100682156	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	CIS-GAMMA-BISABOLENE	Plant	3.0	20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-LINALOOL-OXIDE	Plant				--
3	CIS-OCIMENE	Plant	270.0	1392.0	4.103231707920077	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-PIPERITOL	Plant	10.0	40.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Plant	1.0	46.0	-0.2871577509460659	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Shoot Essent. Oil		2200.0	-1.0	--
0	CIS-SABINENE-HYDRATE	Plant		0.0	-0.5659647605419179	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	COPPER	Plant		9.0	-0.5555522679388898	USDA's Ag Handbook 8 and sequelae)
4	COSMOSIIN	Shoot				--
4	COSMOSIIN	Plant				--
0	CUMINAL	Plant	2.0	10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DECANE	Plant		1.0	-0.6814003538683308	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
3	DECANOIC-ACID	Plant		10.0	1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
2	DECANOL	Plant		0.4	-0.8582741584791299	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
8	DELTA-3-CARENE	Plant	2.0	96.0	-0.31593409754470814	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	DELTA-3-CARENE	Plant	2.0	96.0	-0.31593409754470814	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Plant	2.0	480.0	2.8666601149123703	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Plant	2.0	480.0	2.8666601149123703	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
1	DELTA-CADINOL	Plant		2.5	-1.3587324409735149	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
4	DELTA-TOCOPHEROL	Leaf				--
13	DIOSMETIN	Plant				Leung, A.Y., <i>Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics</i> , John Wiley & Sons, New York, 1980.
7	DIPENTENE	Plant				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ELEMOL	Plant		1.5	-0.6325464186326382	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
0	EO	Shoot		4800.0	-0.5087496027545817	Isaev, V. 1932. Essential Oils of the Flora of Tadshikistan. <i>Acta Hortii Bot Tadshikistan</i> 1932: 17-.
0	EO	Plant		800.0	-0.6793300077429263	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
0	EO	Plant	1500.0	10000.0	0.019853678703787233	--
10	ERIODICTYOL	Leaf				--
10	ERIODICTYOL	Plant				Stitt, Paul. Why George should eat broccoli.
12	ESTRAGOLE	Plant	210.0	1400.0	-0.7156213996619503	--
76	EUGENOL	Shoot				--
0	FAT	Plant	88940.0	125000.0	1.069164232733175	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	FIBER	Plant	109900.0	203870.0	-0.1400037252309733	USDA's Ag Handbook 8 and sequelae)
13	GALANGIN	Leaf				--
62	GALLIC-ACID	Leaf				--
0	GAMMA-CADINENE	Plant		0.0	-0.6812571408752266	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	GAMMA-CADINENE	Shoot Essent. Oil	200.0	9700.0		--
0	GAMMA-CADINENE	Plant	50.0	200.0	2.481722441759754	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-ELEMENE	Plant		0.0	-0.43000939894052376	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	GAMMA-ELEMENE	Shoot Essent. Oil		2000.0	-1.0	--
0	GAMMA-ELEMENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-MUUROLENE	Plant	16.0	88.0	-0.2741182416463305	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Shoot Essent. Oil	20700.0	46100.0	1.0	--
11	GAMMA-TERPINENE	Essential Oil		147600.0	1.1933408108948367	--
11	GAMMA-TERPINENE	Plant	1.0	1476.0	0.06631233177026918	--
11	GAMMA-TERPINENE	Plant		4.0	-0.5323342516104616	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
14	GAMMA-TOCOPHEROL	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	GERANIOL	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Plant		1.5	-0.4494030123572502	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
5	GERANYL-ACETATE	Plant	1.0	96.0	-0.4518364834364953	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	GERANYL-ACETATE	Plant		11.0	-0.554267928044265	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	GERMACRENE-B	Plant				--
2	GERMACRENE-D	Shoot Essent. Oil		74500.0	1.1645401955263854	--
2	GERMACRENE-D	Plant	190.0	1192.0	0.5829825591736422	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	GERMACRENE-D	Plant		140.0	-0.30357689608063043	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	HENEICOSANE	Plant		0.6	-0.7070791112494018	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEXAHYDROFARNESYL-ACETONE	Plant		1.5	-1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
5	HEXANAL	Plant		1.0	-0.6871913303838042	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
7	INDOLE-3-ACETIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
6	IRON	Plant	325.0	598.0	-0.03407679020279113	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	ISOBORNEOL	Plant		2.5	-0.894912395678989	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. <i>J. Ess. Oil Res.</i> , 5: 425-431.
7	ISOBORNEOL	Shoot Essent. Oil		900.0		--
4	ISOVITEXIN	Plant				Stitt, Paul. Why George should eat broccoli.
75	KAEMPFEROL	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	LAURIC-ACID	Plant	200.0	215.0	-0.6690422326541493	USDA's Ag Handbook 8 and sequelae)
0	LEDENE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LEPTOSIDIN	Plant				--
60	LIMONENE	Plant	22.0	480.0	-0.1908021443610227	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
60	LIMONENE	Plant		5.0	-0.48273096170084684	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
60	LIMONENE	Shoot Essent. Oil	1400.0	35900.0	-0.5603926539497507	--
0	LINALOL	Plant	1.0	600.0	-0.2965718665143461	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Plant		15.0	-0.4288239366023661	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
53	LINALOOL	Essential Oil		380000.0	1.1206957921050447	--
53	LINALOOL	Plant	1.0	600.0	-0.5831468046531204	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Shoot Essent. Oil	1200.0	238100.0	1.0345888637999787	--
7	LINALYL-ACETATE	Plant	8.0	184.0	-0.4895856250986523	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	LINALYL-ACETATE	Plant		15.0	-0.5708548843075443	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
27	LINOLEIC-ACID	Plant	1050.0	1131.0	-0.564956755492135	USDA's Ag Handbook 8 and sequelae)
78	LUTEOLIN	Plant				--
0	LUTEOLIN-7-O-BETA-D-GLUCURONIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	LUTEOLIN-7-O-BETA-D-GLUCURONIDE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Plant	2600.0	3016.0	-0.32604672316035793	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Plant		47.0	-0.35804718798312823	USDA's Ag Handbook 8 and sequelae)
22	MYRCENE	Plant	8.0	180.0	-0.2783445471513297	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Plant		6.0	-0.46951072518303016	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
22	MYRCENE	Shoot Essent. Oil	6100.0	180900.0	1.994589844972855	--
6	MYRISTIC-ACID	Plant	1700.0	1831.0	1.0783683009274008	USDA's Ag Handbook 8 and sequelae)
56	NARINGENIN	Plant				--
12	NARINGIN	Plant				--
10	NEROL	Plant		0.6	-0.4417541258507886	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
5	NERYL-ACETATE	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Plant	62.0	67.0	-0.13615426841321743	USDA's Ag Handbook 8 and sequelae)
0	NONANAL	Plant		0.1	-0.6132152507889291	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NONANE	Plant		1.0	-0.5754863518654881	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
2	NONANOIC-ACID	Plant		0.9	0.9999999999999994	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
4	O-COUMARIC-ACID	Leaf				--
2	OCIMENE	Plant	24.0	96.0	-0.666393441279549	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OCT-1-EN-3-OL	Shoot Essent. Oil		3700.0		--
0	OCTENYL-ACETATE	Plant		1.0	-1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
64	OLEANOLIC-ACID	Plant				--
18	OLEIC-ACID	Plant	5100.0	5493.0	0.19350807817259624	USDA's Ag Handbook 8 and sequelae)
4	ORIENTIN	Plant				Stitt, Paul. Why George should eat broccoli.
25	P-COUMARIC-ACID	Leaf				--
25	P-COUMARIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	P-CYMEN-8-OL	Plant		0.0	-0.8003561253534658	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	P-CYMEN-8-OL	Shoot Essent. Oil		800.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Plant		1.0	-0.4199947603342857	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
16	P-CYMENE	Shoot Essent. Oil	23500.0	87600.0	0.5086342176670718	--
16	P-CYMENE	Essential Oil		323700.0	2.039071513364566	--
16	P-CYMENE	Plant	3.0	3237.0	0.4223771875798914	--
13	P-HYDROXY-BENZOIC-ACID	Plant				--
13	PALMITIC-ACID	Plant	17000.0	18309.0	0.11442945147299585	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Plant	1600.0	1723.0	1.0	USDA's Ag Handbook 8 and sequelae)
0	PATCHOULANE	Plant		12.0	-0.520401445159194	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	PENTYL-ALCOHOL	Plant				--
3	PEONIDIN	Plant				--
0	PERILLENE	Plant		0.2	-0.592999453328881	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
4	PHOSPHORUS	Plant	1769.0	2402.0	-0.5702325611066069	USDA's Ag Handbook 8 and sequelae)
2	PHYTOSTEROLS	Plant	2030.0	2186.0	1.7096618162343489	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Plant	16066.0	18647.0	-0.2196942633137666	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Plant	96870.0	132611.0	-0.33479838141103896	USDA's Ag Handbook 8 and sequelae)
43	PROTocatechuic-ACID	Plant				--
43	PROTocatechuic-ACID	Leaf		132.0	1.3991646855290003	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Leaf				--
176	QUERCETIN	Plant				Stitt, Paul. Why George should eat broccoli.
2	RETUSIN	Plant				--
57	ROSMARINIC-ACID	Shoot	16600.0	50000.0	1.4915919255653871	--
57	ROSMARINIC-ACID	Plant		55000.0	1.6190585490559364	Fitoterapia No.62: 166.
57	ROSMARINIC-ACID	Plant	4000.0	55000.0	1.6190585490559364	--
57	ROSMARINIC-ACID	Leaf		790.0	-0.9051861208964801	--
57	ROSMARINIC-ACID	Inflorescence		68000.0	1.3995879181949649	--
87	RUTIN	Plant				Stitt, Paul. Why George should eat broccoli.
5	SABINENE	Plant	50.0	2096.0	1.0689929276284884	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Plant	50.0	2096.0	1.0689929276284884	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Shoot Essent. Oil	400.0	14700.0	1.4105109675702203	--
0	SELIN-11-EN-4-OL	Shoot Essent. Oil		800.0		--
1	SELINENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	SODIUM	Plant	109.0	205.0	-0.2927300206668179	USDA's Ag Handbook 8 and sequelae)
0	SPATHULENOL	Shoot Essent. Oil		500.0	-1.0	--
0	SPATHULENOL	Plant		2.5	-0.6246317196041027	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	SPATHULENOL	Plant	10.0	50.0	-0.30794897137916	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	STACHYOSE	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	STACHYOSE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Plant	5800.0	6247.0	1.7106077122414611	USDA's Ag Handbook 8 and sequelae)
12	STIGMASTEROL	Plant		150.0	-0.23746415616613933	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
6	SYRINGIC-ACID	Plant				--
0	TANNINS	Plant		80000.0	-0.7353243133122137	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
17	TAXIFOLIN	Leaf				--
23	TERPINEN-4-OL	Shoot Essent. Oil		44800.0	-0.639953869859281	--
23	TERPINEN-4-OL	Essential Oil		20000.0	-0.42280878270320754	--
23	TERPINEN-4-OL	Plant	17.0	390.0	-0.11158822507826323	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Plant		0.0	-0.28148831286535375	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
9	TERPINOLENE	Plant	2.0	16.0	-0.596698368146944	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Plant		1.0	-0.7291018522032187	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
9	TERPINOLENE	Shoot Essent. Oil		5500.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	TERPINYL-ACETATE	Plant	54.0	216.0	0.5492918772884068	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	THIAMIN	Plant	3.0	4.0	-0.3059929673424499	USDA's Ag Handbook 8 and sequela)
71	THYMOL	Plant	2.0	5000.0	0.04270754963070453	--
71	THYMOL	Plant		0.0	-0.5754212594013255	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
71	THYMOL	Shoot				--
71	THYMOL	Flower Essent. Oil				--
71	THYMOL	Shoot Essent. Oil	11100.0	24500.0	-0.1340249267792265	--
71	THYMOL	Essential Oil	121200.0	500000.0	0.8605172376756699	--
0	THYMOL-METHYL-ETHER	Shoot Essent. Oil		14400.0		--
0	THYMYL-METHYL-ETHER	Plant	12.0	60.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	TORREYOL	Plant		6.0	-0.4877131100041325	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	TRANS,TRANS-ALPHA-FARNESENE	Plant	48.0	240.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-2-HEXANAL	Plant	132.0	660.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	TRANS-ANETHOLE	Plant				Stitt, Paul. Why George should eat broccoli.
0	TRANS-BETA-OCIMENE	Shoot Essent. Oil		50400.0		--
0	TRANS-BETA-OCIMENE	Essential Oil		200000.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	TRANS-CARVEOL	Shoot Essent. Oil		1000.0		--
0	TRANS-DIHYDROCARVONE	Shoot Essent. Oil		300.0		--
0	TRANS-DIHYDROCARVONE	Plant		0.0	-0.75	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	TRANS-LINALOOL-OXIDE	Plant				--
0	TRANS-OCIMENE	Plant	76.0	824.0	1.8134384458721373	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE	Shoot Essent. Oil		1500.0	-1.0	--
0	TRANS-SABINENE-HYDRATE	Plant				--
0	TRICHOSANE	Plant		2.5	1.0	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
0	UNDECANE	Plant		1.0	-0.36563621206356534	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four <i>Origanum vulgare</i> Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
89	URSOLIC-ACID	Plant		3100.0	-0.6475484428977467	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	VALENCENE	Shoot Essent. Oil		5800.0		--
24	VANILLIC-ACID	Plant				--
18	VITEXIN	Plant				Stitt, Paul. Why George should eat broccoli.
0	WATER	Plant	68380.0	74820.0	-2.980087483378207	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
77	ZINC	Plant	39.0	49.0	-0.031006570554655437	USDA's Ag Handbook 8 and sequelae)