

Supplementary information

SI 1: List of EOs (n = 175) used in this study, indicating the different EO subsets used for the robustness check. The EO-subsets are (A) EOs of conventional cultivation (n=101), (B) EOs of certified-organic cultivation (n=74), and (C) all EOs of conventional cultivation, complemented with those EOs of certified-organic cultivation that originated from other plant species, the same plant species but from other plant parts, or the same plant species but a different chemotype (n=141). AP = aerial parts; AP-S = aerial parts - seeds; B = bark; BB = berry branches; F = fruits; FB = flower buds; FL = flowers; FT = flowering tops; H = herbs; L = leaves; LT = leafy twigs; N = needles; O = oleoresin; P = peels; R = roots; RH = rhizome; T = twigs; T + B = twigs + bark; TF = twig flowers; W = wood. # = organic EO; ct = chemotype; ssp = subspecies; cv = cultivar; var = variety.

Plant species	Part of plant	Origin	Lot number	EO in subset(s)
<i>Abies alba</i>	N	Balkans	OF11341	A and C
<i>Abies balsamea</i> [#]	N	Canada	OF11276	B and C
<i>Abies sibirica</i>	N	Siberia	OF10586	A and C
<i>Achillea millefolium</i>	FT	Balkans	OF10749	A and C
<i>Ammi visnaga</i> [#]	S	Morocco	OF8569	B and C
<i>Anethum graveolens</i>	F	Ukraine	OF8420	A and C
<i>Angelica archangelica</i>	R	Slovenia	OF1127	A and C
<i>Apium graveolens</i>	F	India	OF10289	A and C
<i>Artemisia dracunculus</i>	FT	France	OF10105	A and C
<i>Artemisia herba alba</i>	FT	Morocco	OF11480	A and C
<i>Cananga odorata extra</i>	FL	Comoros	OF10390	A and C
<i>Cananga odorata totum</i> [#]	FL	Madagascar	OF9867	B
<i>Canarium luzonicum</i>	O	Philippines	OF9870	A and C
<i>Carum carvi</i>	F	Hungary	000027	A and C
<i>Cedrelopsis grevei</i> [#]	W	Madagascar	OF9859	B and C
<i>Cedrus atlantica</i>	W	Morocco	OF10992	A and C
<i>Cedrus atlantica</i> [#]	W	Morocco	OF10799	B
<i>Cedrus deodara</i>	W	India	OF10214	A and C
<i>Chamaemelum nobile</i>	FL	France	OF10863	A and C
<i>Chamaemelum nobile</i> [#]	FL	Hungary	OF11255	B
<i>Cinnamomum camphora</i> ct cineole [#]	L	Madagascar	OF11065	B and C
<i>Cinnamomum camphora</i> ct linalool	W	China	OF10369	A and C
<i>Cinnamomum cassia</i>	T	China	OF10584	A and C
<i>Cinnamomum cassia</i> [#]	T	Vietnam	OF10588	B
<i>Cinnamomum zeylanicum</i>	B	Madagascar	OF10850	A and C
<i>Cinnamomum zeylanicum</i>	L	Madagascar	OF9780	A and C
<i>Cinnamosma fragrans</i> [#]	L	Madagascar	OF10651	B and C
<i>Cistus ladaniferus</i> ct pinene [#]	T	Morocco	OF10502	B and C
<i>Citrus aurantifolia</i>	F	Mexico	OF10400	A and C
<i>Citrus aurantium</i> ssp <i>amara</i>	L	Paraguay	OF10467	A and C
<i>Citrus aurantium</i> ssp <i>amara</i>	P	Tunisia	OF10404	A and C
<i>Citrus aurantium</i> ssp <i>amara</i> [#]	FL	Morocco	OF10993	B and C
<i>Citrus aurantium</i> ssp <i>amara</i> [#]	L	Paraguay	OF11484	B
<i>Citrus aurantium</i> ssp <i>bergamia</i>	P	Italy	OF10862	A and C
<i>Citrus aurantium</i> ssp <i>bergamia</i> [#]	P	Italy	OF11052	B
<i>Citrus limon</i>	L	Spain	OF3114	A and C
<i>Citrus limon</i>	P	Spain	OF11188	A and C

Plant species	Part of plant	Origin	Lot number	EO in subset(s)
<i>Citrus limon</i> [#]	P	Italy	OF11178	B
<i>Citrus paradisi</i>	P	Argentina	OF9436	A and C
<i>Citrus paradisi</i> [#]	P	South Africa	OF9722	B
<i>Citrus reticulata</i>	L	Egypt	OF9239	A and C
<i>Citrus reticulata</i>	P	Argentina	OF3457	A and C
<i>Citrus reticulata</i> [#]	P	Brazil	OF10644	B
<i>Citrus sinensis</i>	P	Brazil	OF9238	A and C
<i>Citrus sinensis</i> [#]	P	Mexico	OF11321	B
<i>Copaifera officinalis</i>	O	Brazil	OF10996	A and C
<i>Coriandrum sativum</i>	F	Rusia	OF11183	A and C
<i>Corydothymus capitatus</i>	FT	Spain	OF11481	A and C
<i>Crithmum maritimum</i> [#]	FT	France	OF9373	B and C
<i>Cuminum cyminum</i>	F	India	OF9607	A and C
<i>Cupressus sempervirens var stricta</i>	T	France	OF10218	A and C
<i>Cupressus sempervirens var stricta</i> [#]	T	France	OF10846	B
<i>Curcuma longa</i> [#]	R	Madagascar	OF10876	B and C
<i>Cymbopogon citratus</i>	AP	Guatemala	OF10881	A and C
<i>Cymbopogon flexuosus</i>	H	India	OF9994	A and C
<i>Cymbopogon giganteus</i> [#]	L	Madagascar	OF9770	B and C
<i>Cymbopogon martinii var motia</i>	AP	India	OF10011	A and C
<i>Cymbopogon martinii var motia</i> [#]	AP	India	OF9950	B
<i>Cymbopogon nardus</i>	AP	Sri Lanka	OF2106	A and C
<i>Cymbopogon winterianus</i>	AP	Indonesia	OF10851	A and C
<i>Daucus carota var sativus</i>	F	France	OF11585	A and C
<i>Daucus carota var sativus</i> [#]	AP	France	OF4113	B and C
<i>Elettaria cardamomum</i>	F	Guatemala	OF12267	A and C
<i>Eucalyptus citriodora ct citronella</i> [#]	L	Madagascar	OF10647	B and C
<i>Eucalyptus dives ct piperitone</i> [#]	L	South Africa	OF10872	B and C
<i>Eucalyptus globulus</i>	L	China	OF10646	A and C
<i>Eucalyptus globulus</i> [#]	L	Portugal	OF11274	B
<i>Eucalyptus polybractea ct cryptone</i> [#]	L	France	OF11142	B and C
<i>Eucalyptus radiata ssp radiata</i>	L	Australia	OF10865	A and C
<i>Eucalyptus radiata ssp radiata</i> [#]	L	Madagascar	OF10720	B
<i>Eucalyptus smithii</i> [#]	L	Australia	OF9370	B and C
<i>Eugenia caryophyllus</i>	FB	Madagascar	OF9948	A and C
<i>Eugenia caryophyllus</i> [#]	FB	Madagascar	OF10583	B
<i>Ferula gummosa</i>	O	Iran	OF12273	A and C
<i>Foeniculum vulgare</i> [#]	AP- S	Egypt	OF10796	B and C
<i>Fokienia hodginsii</i>	BB	Vietnam	OF11589	A and C
<i>Gaultheria fragrantissima</i> [#]	L	Nepal	OF11051	B and C
<i>Gaultheria procumbens</i>	L	China	OF11068	A and C
<i>Helichrysum italicum ssp serotinum</i>	FT	Italy	OF9441	A and C
<i>Helichrysum italicum ssp serotinum</i> [#]	FT	Italy	OF10622	B

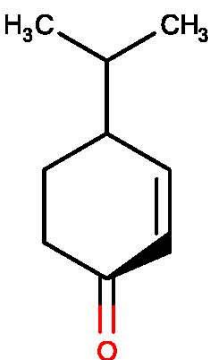
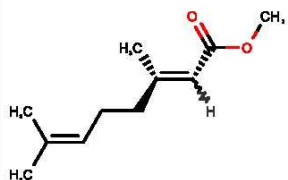
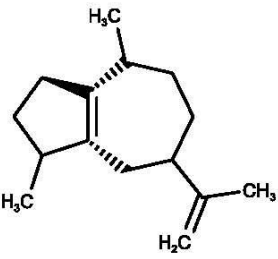
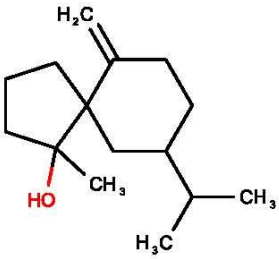
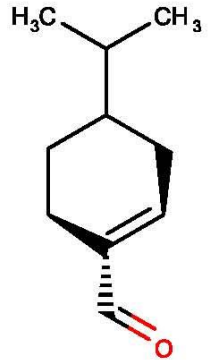
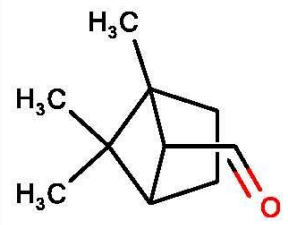
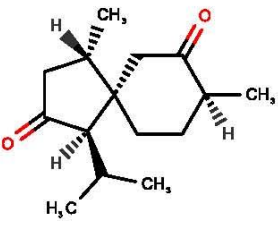
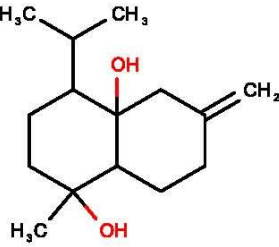
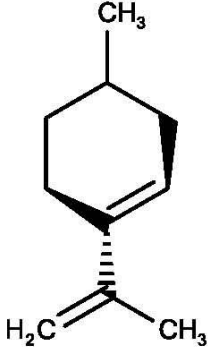
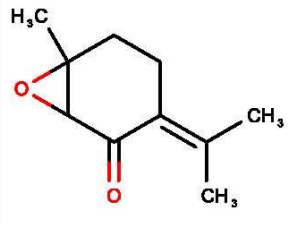
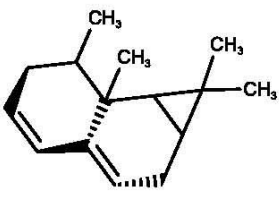
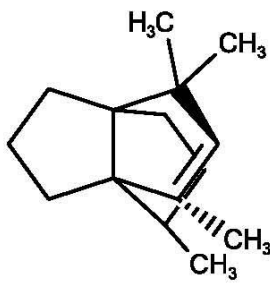
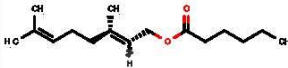
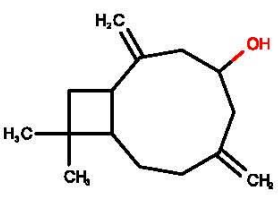
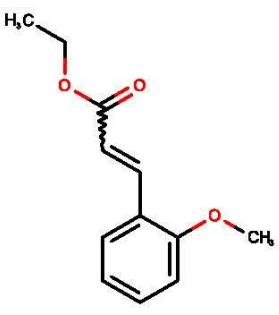
Plant species	Part of plant	Origin	Lot number	EO in subset(s)
<i>Hyssopus officinalis</i> var <i>officinalis</i>	FT	France	OF11287	A and C
<i>Illicium verum</i> [#]	F	Vietnam	OF10399	B and C
<i>Inula graveolens</i> [#]	FT	France	OF11143	B and C
<i>Juniperus communis</i> ssp <i>communis</i> [#]	T + B	Bulgaria	OF10654	B and C
<i>Juniperus communis</i> var <i>alpina</i> [#]	T	France	OF4120	B and C
<i>Juniperus oxycedrus</i>	T	France	OF9732	A and C
<i>Juniperus virginiana</i>	W	USA	OF9364	A and C
<i>Laurus nobilis</i>	L	Slovenia	OF11039	A and C
<i>Lavandula angustifolia</i> spp <i>angustifolia</i>	FT	France	OF10864	A and C
<i>Lavandula angustifolia</i> spp <i>angustifolia</i> [#]	FT	France	OF10951	B
<i>Lavandula latifolia</i>	FT	Spain	OF10007	A and C
<i>Lavandula latifolia</i> [#]	FT	Spain	OF9693	B
<i>Lavandula stoechas</i> [#]	FT	France	OF11591	B and C
<i>Lavandula x burnatii</i> clone <i>abrialis</i> [#]	FT	France	OF10059	B and C
<i>Lavandula x burnatii</i> clone <i>grosso</i>	FT	France	OF1743	A and C
<i>Lavandula x burnatii</i> clone <i>grosso</i> [#]	FT	France	OF6689	B
<i>Lavandula x burnatii</i> clone <i>reydovan</i>	FT	France	OF9108	A and C
<i>Lavandula x burnatii</i> clone <i>super</i>	FT	France	OF10869	A and C
<i>Lavandula x burnatii</i> clone <i>super</i> [#]	FT	France	OF10745	B
<i>Ledum groenlandicum</i> [#]	TF	Canada	OF9694	B and C
<i>Leptospermum petersonii</i>	L	Australia	OF10212	A and C
<i>Levisticum officinale</i>	R	France	OF9237	A and C
<i>Lippia citriodora</i>	L	Morocco	OF9771	A and C
<i>Litsea citrata</i>	F	China	OF10225	A and C
<i>Litsea citrata</i> [#]	F	Vietnam	OF11261	B
<i>Matricaria recutita</i>	FL	Slovenia	OF10999	A and C
<i>Melaleuca alternifolia</i>	L	Australia	OF11248	A and C
<i>Melaleuca alternifolia</i> [#]	L	Australia	OF10388	B
<i>Melaleuca cajeputi</i>	L	Vietnam	OF10662	A and C
<i>Melaleuca cajeputi</i> [#]	L	Vietnam	OF11405	B
<i>Melaleuca quinquenervia</i> ct <i>cineol</i>	L	Madagascar	OF10731	A and C
<i>Melaleuca quinquenervia</i> ct <i>cineol</i> [#]	L	Madagascar	OF10956	B
<i>Melissa officinalis</i>	AP	Bulgaria	OF10300	A and C
<i>Mentha arvensis</i>	AP	India	OF10883	A and C
<i>Mentha arvensis</i> [#]	AP	India	OF9728	B
<i>Mentha citrata</i>	AP	India	OF9449	A and C
<i>Mentha pulegium</i>	AP	Morocco	OF9582	A and C
<i>Mentha spicata</i> [#]	AP	Morocco	OF12639	B and C
<i>Mentha x piperita</i>	AP	India	OF10867	A and C
<i>Mentha x piperita</i> [#]	AP	India	OF11594	B
<i>Myristica fragrans</i>	F	Indonesia	OF10590	A and C
<i>Myrtus communis</i> ct <i>cineole</i> [#]	L	France	OF9864	B and C
<i>Myrtus communis</i> ct <i>myrtenyl acetate</i>	L	Morocco	OF9391	A and C

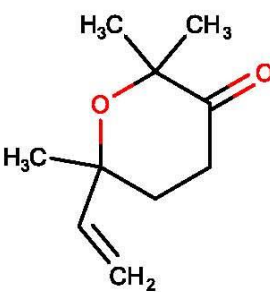
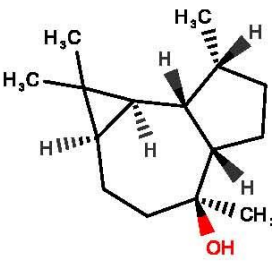
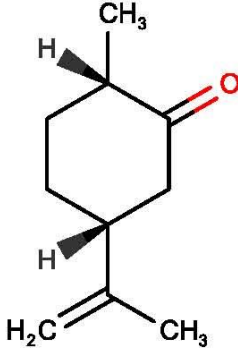
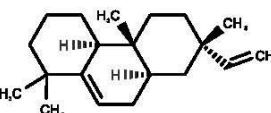
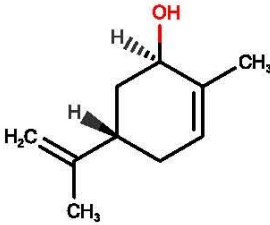
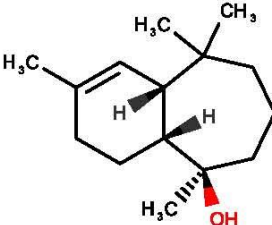
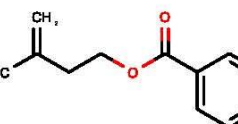
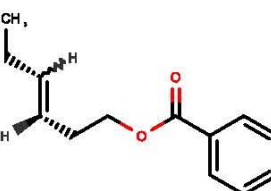
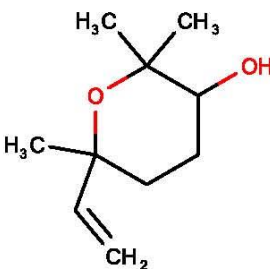
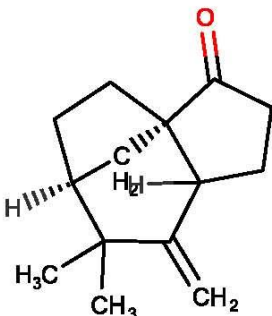
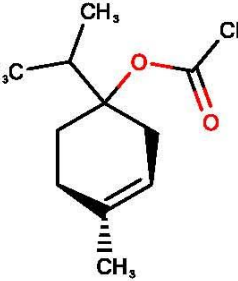
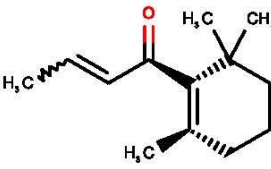
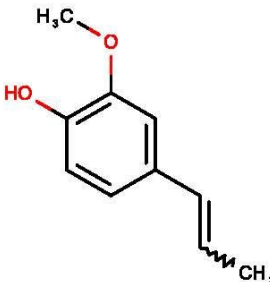
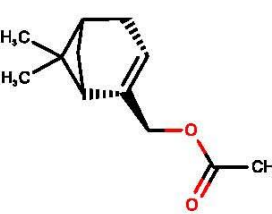
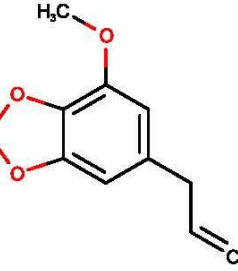
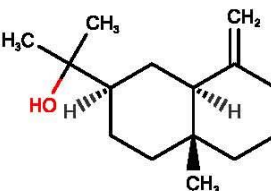
Plant species	Part of plant	Origin	Lot number	EO in subset(s)
<i>Myrtus communis</i> ct myrtenyl acetate [#]	L	Morocco	OF10882	B
<i>Nardostachys jatamansi</i> [#]	R	Nepal	OF11047	B and C
<i>Ocimum basilicum</i> ssp <i>basilicum</i> [#]	FT	India	OF10861	B and C
<i>Ocimum sanctum</i>	L	India	OF11260	A and C
<i>Origanum compactum</i>	FT	Morocco	OF10299	A and C
<i>Origanum compactum</i> [#]	FT	Morocco	OF11283	B
<i>Origanum heracleoticum</i>	FT	France	OF11288	A and C
<i>Origanum majorana</i>	FT	Egypt	OF10217	A and C
<i>Origanum majorana</i> ct thujanol	FT	Egypt	OF10871	A and C
<i>Origanum majorana</i> [#]	FT	Egypt	OF9776	B
<i>Pelargonium x asperum</i>	L	Egypt	OF9858	A and C
<i>Pelargonium x asperum</i> cv <i>Bourbon</i> [#]	L	Congo	OF12053	B and C
<i>Petroselinum crispum</i>	L	Serbia	OF11587	A and C
<i>Picea mariana</i> [#]	N	Canada	OF10298	B and C
<i>Pimenta racemosa</i>	F	U.S. Virgin Islands	OF9871	A and C
<i>Pinus pinaster</i>	O	France	OF11277	A and C
<i>Pinus ponderosa</i>	N	Patagonia	OF11050	A and C
<i>Pinus sylvestris</i>	N	Austria	OF11339	A and C
<i>Pinus sylvestris</i> [#]	N	Bulgaria	OF2115	B
<i>Piper nigrum</i>	F	Madagascar	OF9540	A and C
<i>Pistacia lentiscus</i> [#]	LT	Morocco	OF9359	B and C
<i>Pogostemon cablin</i>	FT	Indonesia	OF10211	A and C
<i>Pogostemon cablin</i> [#]	FT	Indonesia	OF9954	B
<i>Ravensara aromatica</i>	B	Madagascar	OF9044	A and C
<i>Ravensara aromatica</i> [#]	L	Madagascar	OF11431	B and C
<i>Rosmarinus officinalis</i> ct camphor [#]	FT	Spain	OF11044	B and C
<i>Rosmarinus officinalis</i> ct cineole	FT	Morocco	OF10655	A and C
<i>Rosmarinus officinalis</i> ct cineole [#]	FT	Morocco	OF10408	B
<i>Rosmarinus officinalis</i> ct verbenone [#]	FT	France	OF10075	B and C
<i>Salvia lavandulifolia</i>	FT	Spain	OF11046	A and C
<i>Salvia officinalis</i>	FT	France	OF10880	A and C
<i>Salvia officinalis</i> [#]	FT	Albania	OF9241	B
<i>Salvia sclarea</i> [#]	FT	France	OF9454	B and C
<i>Santalum austrocaledonicum</i> var <i>austrocaledonicum</i>	W	New Caledonia	OF11042	A and C
<i>Satureja hortensis</i>	FT	France	OF3340	A and C
<i>Satureja montana</i>	FT	France	OF11247	A and C
<i>Solidago canadensis</i> [#]	AP	Canada	OF10723	B and C
<i>Tanacetum annuum</i>	L	Morocco	OF10287	A and C
<i>Thuya occidentalis</i>	T	France	OF9451	A and C
<i>Thymus mastichina</i>	FT	Spain	OF9049	A and C
<i>Thymus satureioides</i>	FT	Morocco	OF10106	A and C
<i>Thymus satureioides</i> [#]	FT	Morocco	OF10589	B
<i>Thymus serpyllum</i>	FT	Balkans	OF10659	A and C

Plant species	Part of plant	Origin	Lot number	EO in subset(s)
<i>Thymus vulgaris</i> ct geraniol	FT	France	OF9453	A and C
<i>Thymus vulgaris</i> ct linalool [#]	FT	Spain	OF12998	B and C
<i>Thymus vulgaris</i> ct thymol [#]	FT	Spain	OF10842	B and C
<i>Thymus zygis</i>	FT	Spain	OF9050	A and C
<i>Trachyspermum ammi</i>	F	India	OF9576	A and C
<i>Tsuga canadensis</i> [#]	N	Canada	OF10884	B and C
<i>Valeriana officinalis</i>	R	Korea	OF9234	A and C
<i>Vetiveria zizanoïdes</i>	R	Indonesia	OF10233	A and C
<i>Zingiber officinalis</i> [#]	RH	Madagascar	OF11621	B and C

The chemical composition, including metadata, of the EOs used in this study was reported previously; see www.nature.com/articles/s41598-018-22395-6 under the heading electronic supplementary material ⁵⁴.

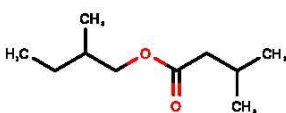
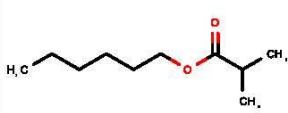
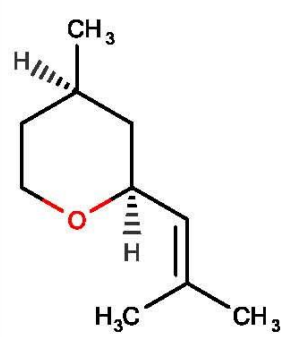
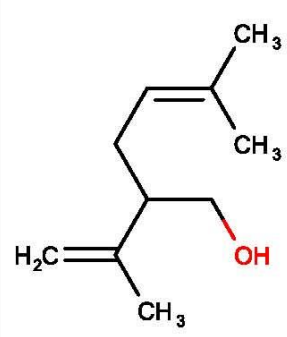
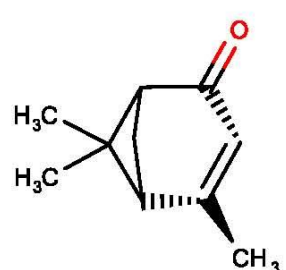
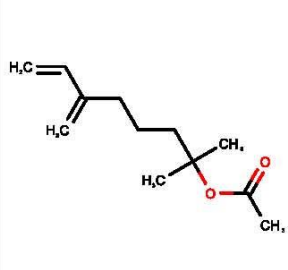
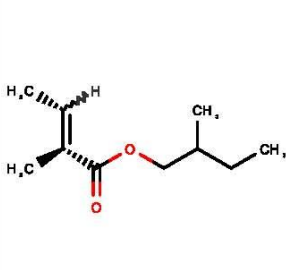
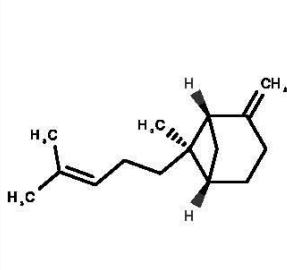
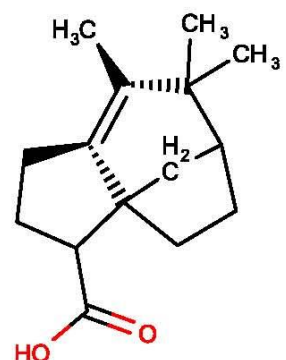
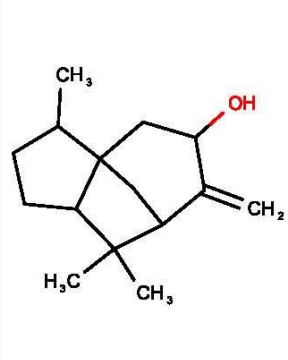
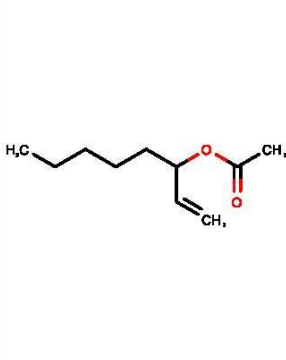
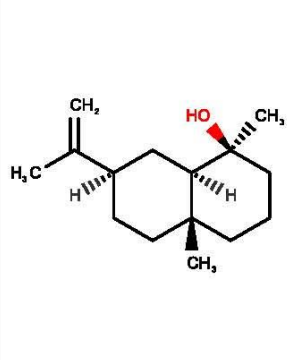
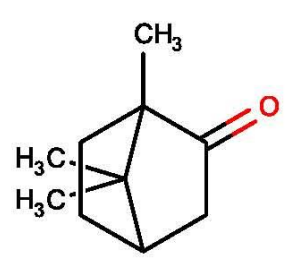
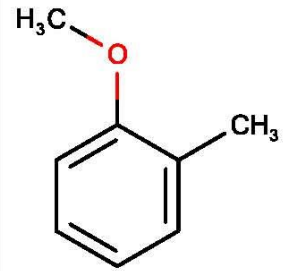
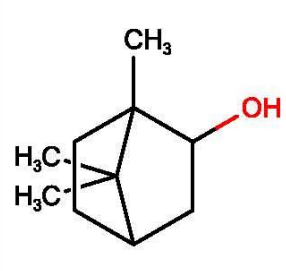
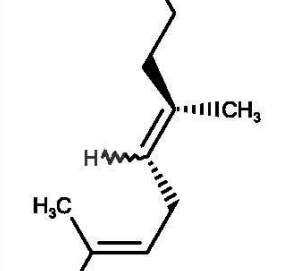
SI 2: Numbered (top) list with chemical structure (center) of the u-cmcEOCs (n=627; Box 2) and their respective InChIKeys-14 (bottom). The InChIKeys-14 (for a definition, see **Box 1**) can be complemented with an information-neutral second InChIKey block, i.e. UHFFFAOYSA, to re-establish a full InChIKey

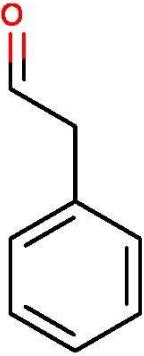
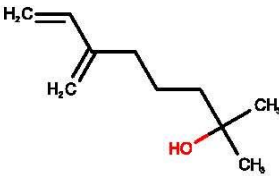
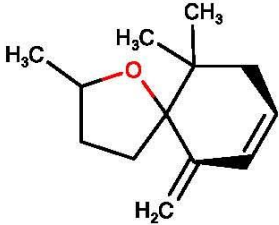
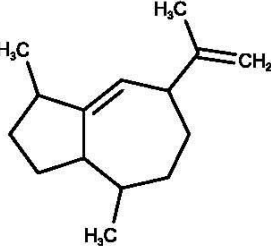
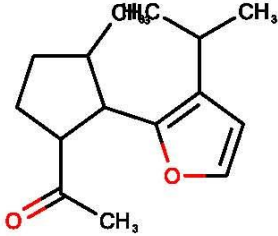
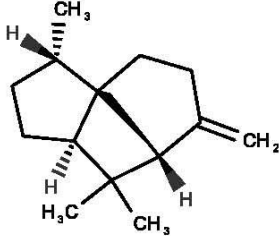
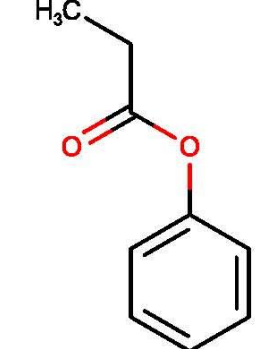
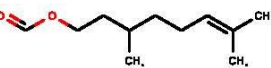
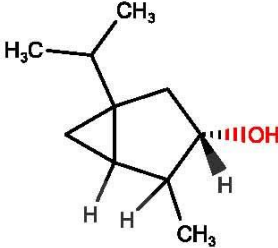
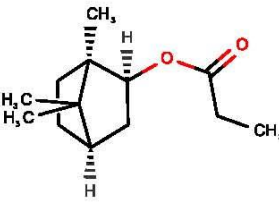
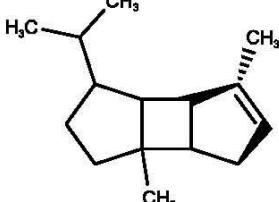
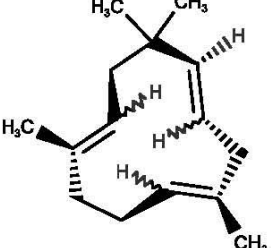
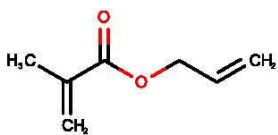
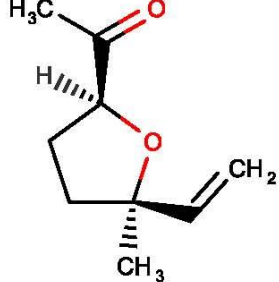
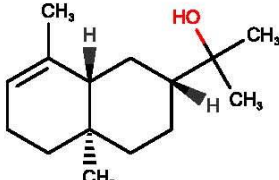
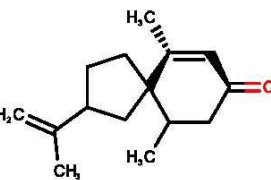
1  AANMVENRNJYEMK	2  ACOBFBVLNKYODD	3  ADIDQIZBYUABQK	4  AEUBOEQPIBOTGP
5  AEVLWICMAHGAMS	6  AGTSNXAZDKAPHU	7  AGUISGUERLMHFF	8  AHNGXHYRFGQWSL
9  AJSJXSBFZDIRIS	10  AKASWINDKIEEBO	11  AOGQPLXWSUTHQB	12  AOKPBDKGDLCBJ
13  APGXRXFCBZKIAN	14  ARVSCQUZFFSNKF	15  ASLIKDGYUZGYOV	16  ATAFSLBAINHGTN

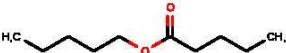
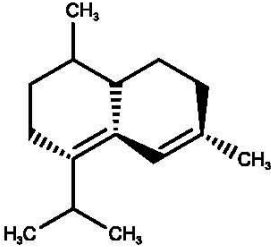
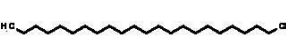
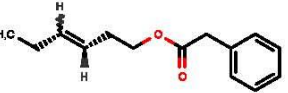
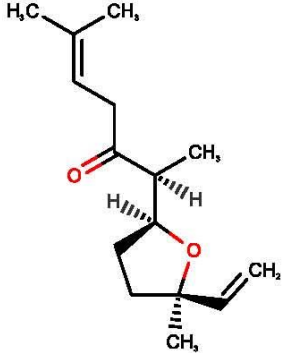
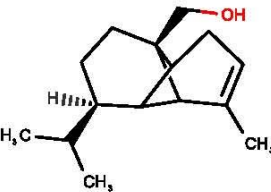
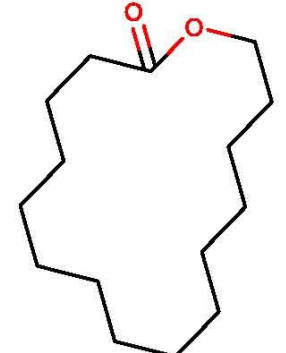
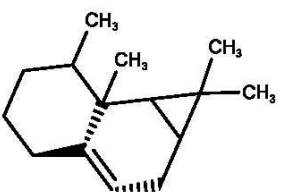
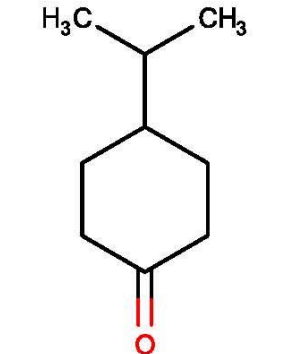
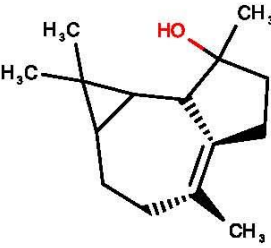
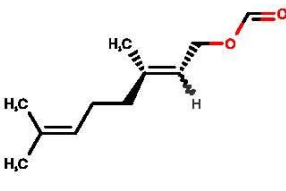
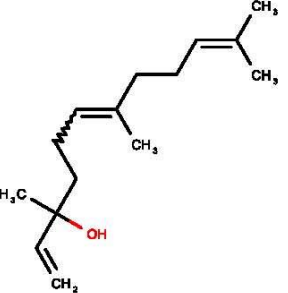
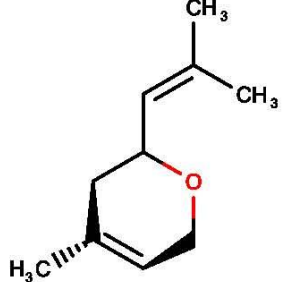
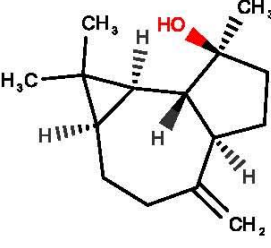
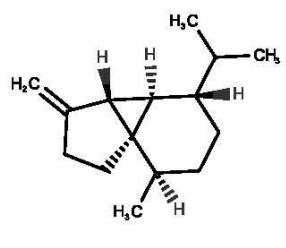
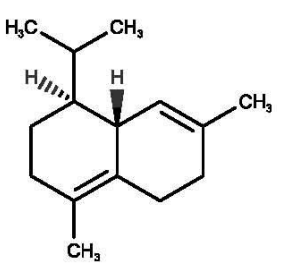
17  ATQPZCOAQSYTPR	18  AYXPYQQRXGNDJFU	19  AZOCCECLWFDTAP	20  BAIWMJSLFJWAQP
21  BAVONGHXFVOKBV	22  BBAMLNIPVMLTSQ	23  BBTRQSDRTFFNSW	24  BCOXBEHFBZOJJZ
25  BCTBAGTXFYWYMW	26  BDHSOIIDXCBNPA	27  BFCBRSFYYLSTAA	28  BGTBFNDXYDYBEY
29  BJIOGJUNALELMI	30  BKATZVAUANSCKN	31  BNWJOHGLIBDOB	32  BOPIMTNSYWYZOC

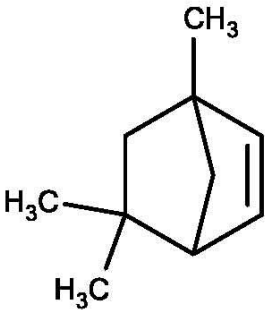
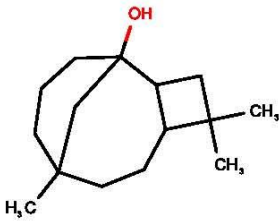
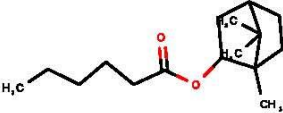
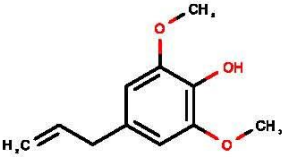
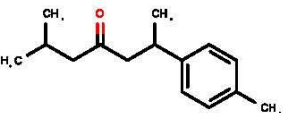
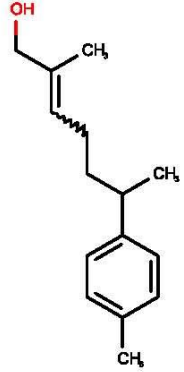
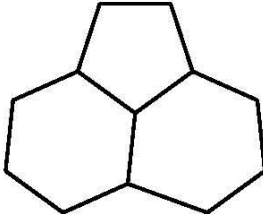
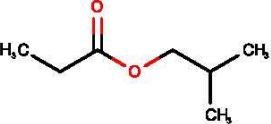
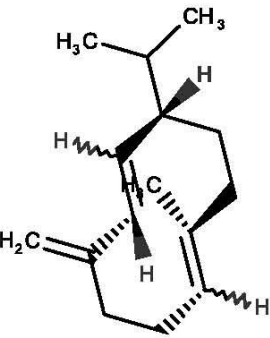
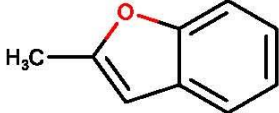
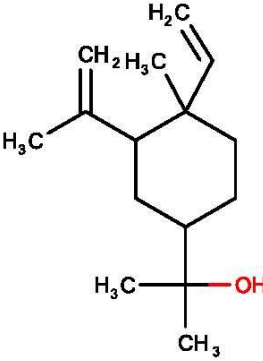
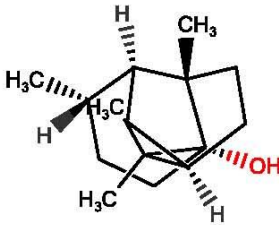
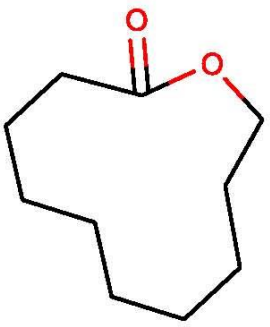
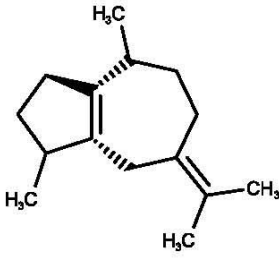
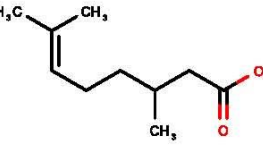
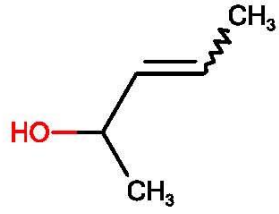
33	34	35	36
BOTWFXYSFPMFNR	BPLQKQKXWHCZSS	BQOFWKZOCNGFEC	BRHDDEIRQPDPMG
37	38	39	40
BWAXOYJGXIEEOE	BXGVVQADPFXGHD	BYCHQEILESTMQU	BYLJEQIU XOYKOB
41	42	43	44
BZBFBQMTXDLSPW	CAULGCQHVOVVRN	CCEFMUBVSUDRLG	CCRCUPLGCSFEDV
45	46	47	48
CDOSHBSFJOMGT	CECREIRZLPLYDM	CFJYNSNXFXLKNS	CFNJLPHOBVMVMS

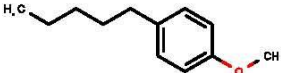
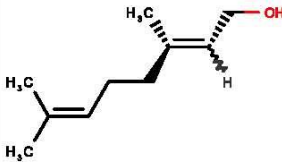
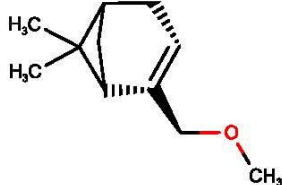
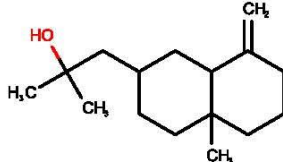
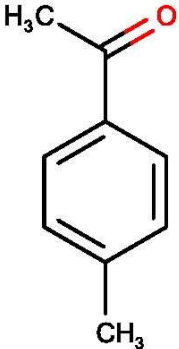
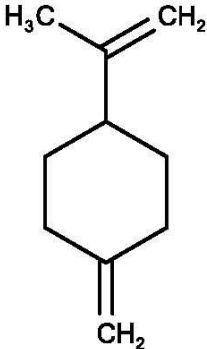
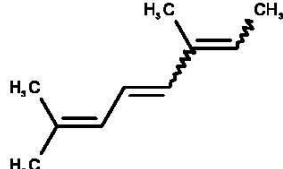
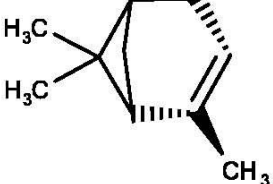
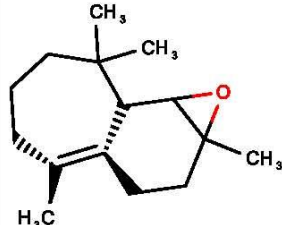
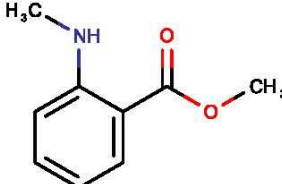
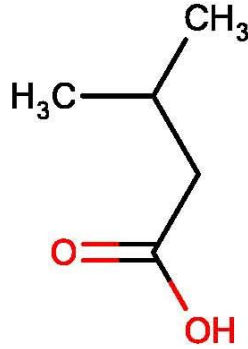
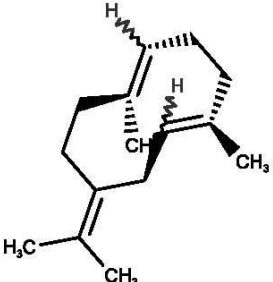
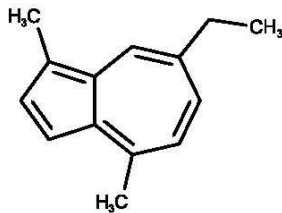
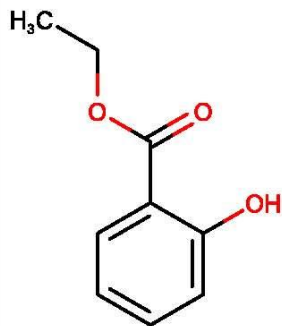
49 CHLICZRVGGXEOD	50 CIIYOYPOMGIECX	51 CIPXOBMYVWRNLL	52 CKUQXDZAWSPOV
53 CMKQOKAXUWQAHG	54 COGPRPSWSKLKTF	55 CPDNGRVWRPXTGS	56 CRDAMVZIKSXXKFV
57 CRPUJAZIXJMDBK	58 CSCPPACGZOO CGX	59 CSKINCSXMLCMAR	60 CSMMFGCGBLZIJE
61 CSRZVTLTICSDRH	62 CUUMXRBKJIDIAY	63 CVSWGLSBJFKWMW	64 CXENHBSYCFFKJS

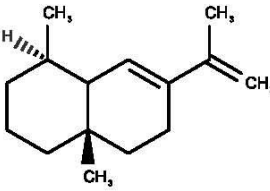
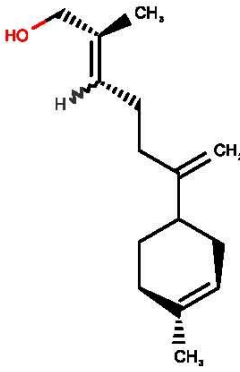
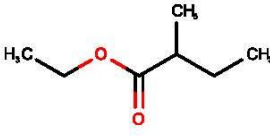
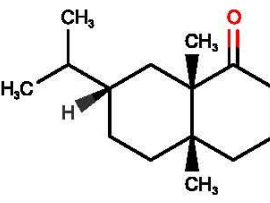
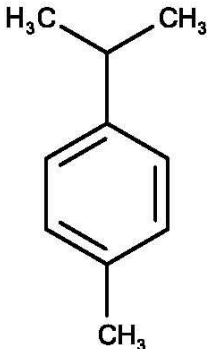
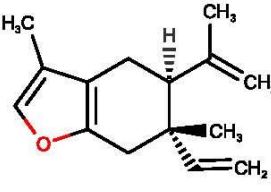
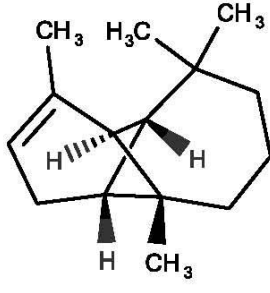
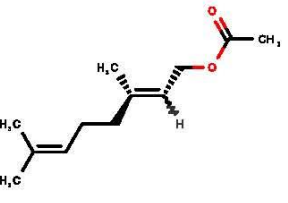
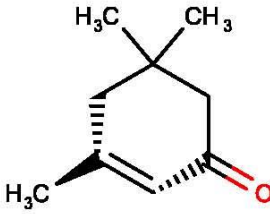
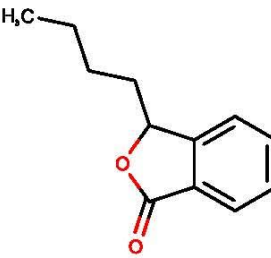
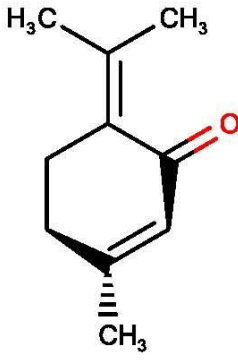
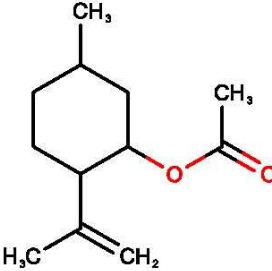
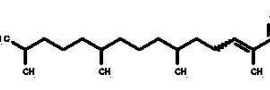
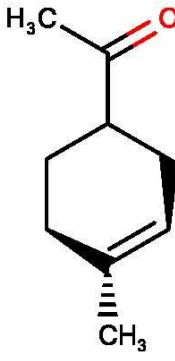
65  CYGPWPVXOWCHJB	66  CYHBDKTZDLRMY	67  CZCBTSFUTPZVKJ	68  CZVXB FUKBZRMKR
69  DCSCXTJ OXB UFG B	70  DCXXKSXLK WAZNO	71  DEJJNOHKWLT TKE	72  DGZBGCM PRYFWFF
73  DHPMFKAJSXGYDJ	74  DJYWGTBEZVORGE	75  DOJDQRFOTHOBEK	76  DPQYOKVMVCQHMY
77  DSSYKIVIOFKYAU	78  DTFKRVXLBCAIOZ	79  DTGKSKDOIYIVQL	80  DTHIOPUFUOMHAY

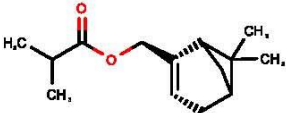
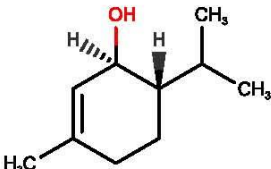
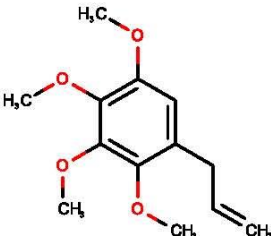
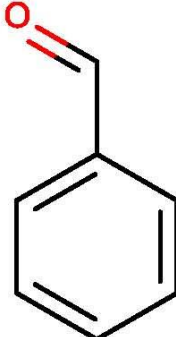
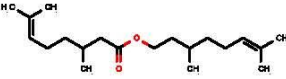
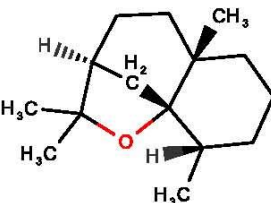
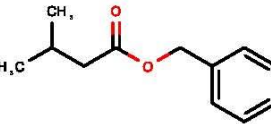
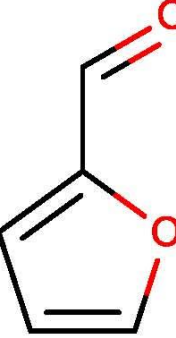
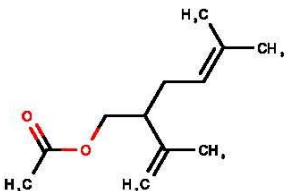
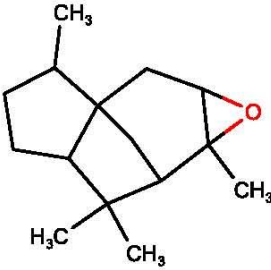
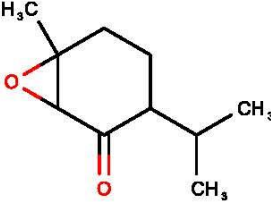
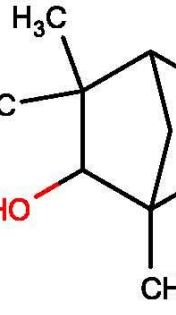
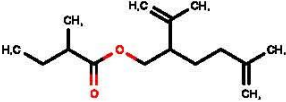
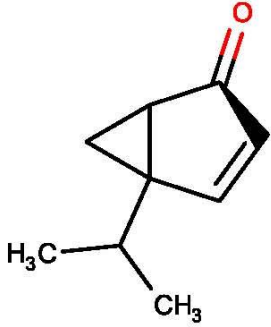
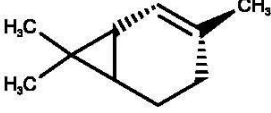
81  DTUQWGWMIHBKE	82  DUNCVNHORHNONW	83  DUPDJVDPPBFBPL	84  DUYRYUZIBGFLDD
85  DVIZGXBTTFXQQC	86  DYLPEFGBWGEFBB	87  DYUMLJSJISTVPV	88  DZNVIZQPWLDQHI
89  DZVXRFMREAADPP	90  FAFMZORPAAGQFV	91  FAIMMSRDTUMTQR	92  FAMPSKZZVDUYOS
93  FBCQUCJYYPMKRO	94  FBFSXARBCWGXJL	95  FCSRUSQUAVXUKK	96  FGCUSSRGQNHZRW

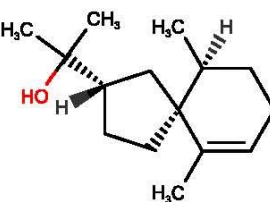
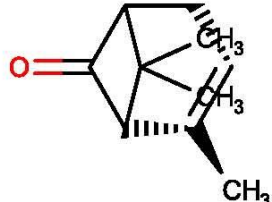
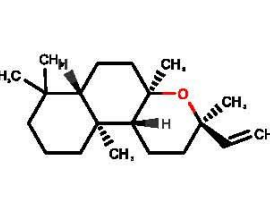
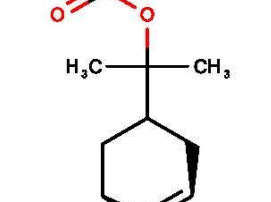
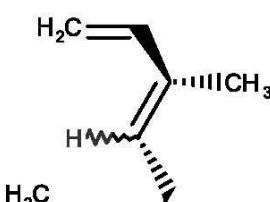
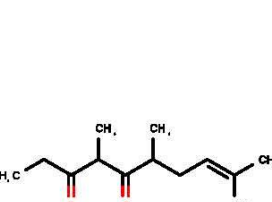
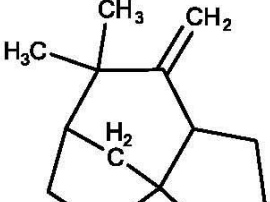
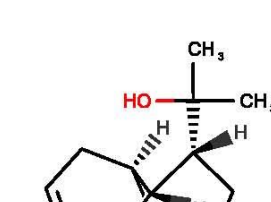
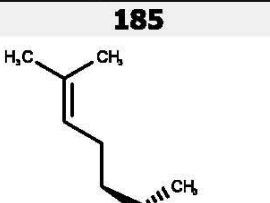
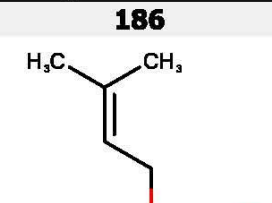
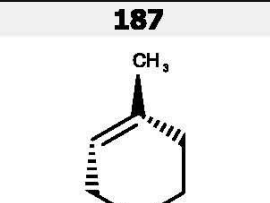
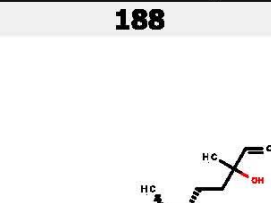
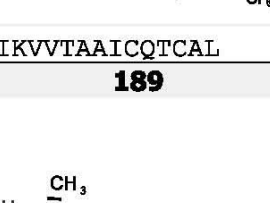
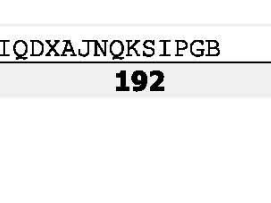
97  FGPPDYNPZTUNIU	98  FIAKMTRUEKZMNO	99  FIGVVZUWCLSUEI	100  FJKFIIYSBXHRCT
101  FJKKZNIYYVEYOL	102  FJQZXWCSOKYVLO	103  FKUPPRZPSYCDRS	104  FOBZOZMHEKILEY
105  FPKISACHVIIMRA	106  FPRYGNIXOFHMLF	107  FQMZVFJYMPNUCT	108  FQTLCLSUCSAZDY
109  FRISMOQHTLZZRP	110  FRMCCTDTYSRUBE	111  FSRZGYRCMPZNJF	112  FUCYIEXQVQJBKY

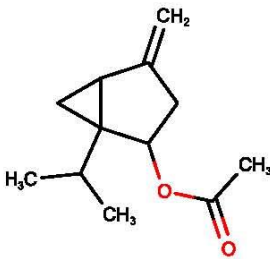
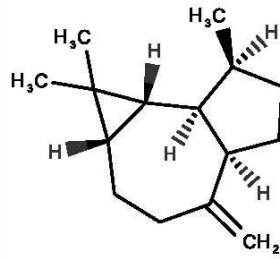
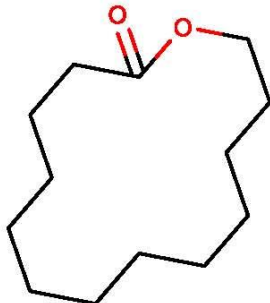
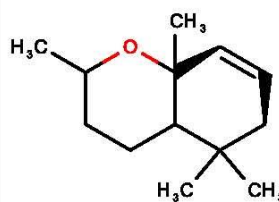
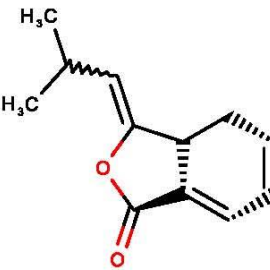
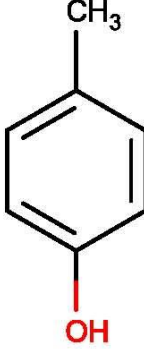
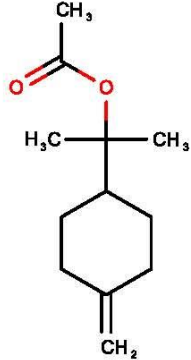
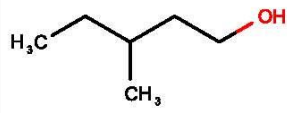
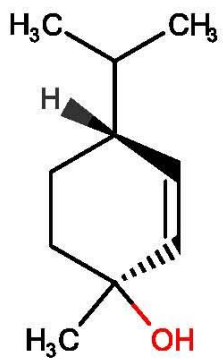
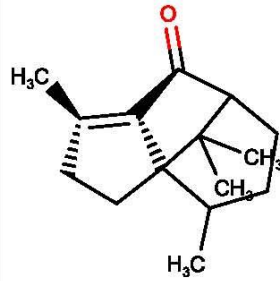
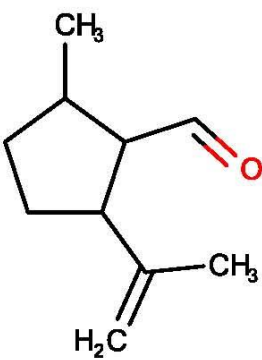
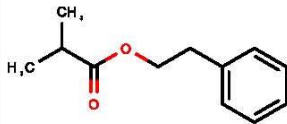
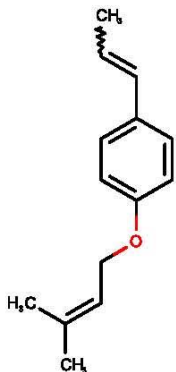
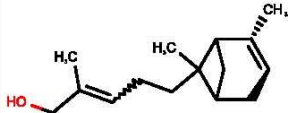
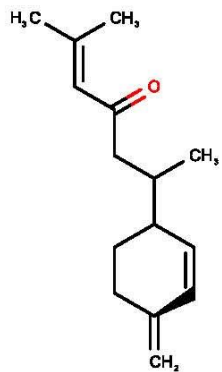
113  FUIDRYCKEXJNOK	114  FUQAYSQLAQJBBC	115  FVTTUTDGUCSLMA	116  FWMPKHKMIJDEMJ
117  FWSUEHMQCROMJ	118  FXCIQPDJVYFUQG	119  FZDZWLDRELLWNN	120  FZXRXKLUIMKDEL
121  GAIBLDCXCZKKJE	122  GBGPVUAOTCNZPT	123  GFJIQNADMLPFOW	124  GGHMUJBZYLPWFD
125  GHZRKQCHJFHJPX	126  GIBQERSGRNPMEH	127  GJWSUKYXUMVMGX	128  GJYMQFMQRRNLGY

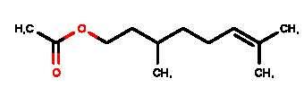
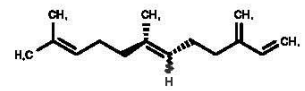
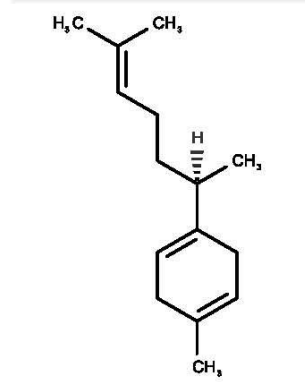
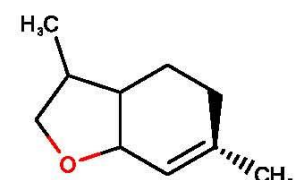
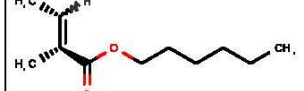
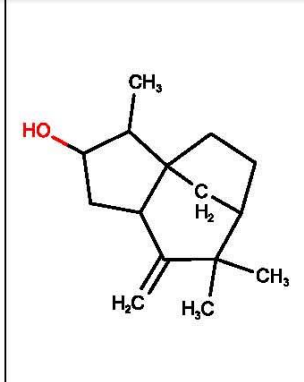
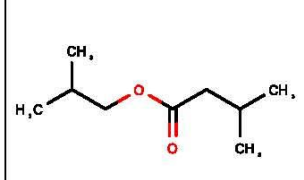
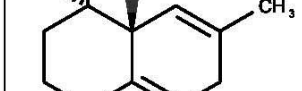
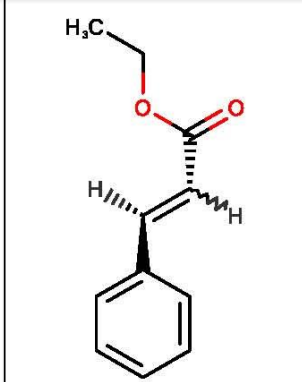
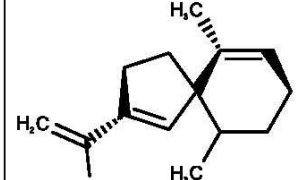
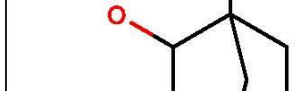
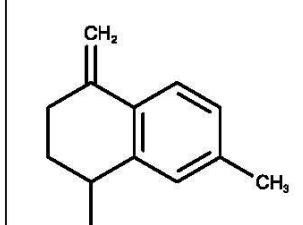
129  GLWHNBIQKCPVTP	130  GLZPCOQZEFWAFX	131  GMYAZJHVKQKHSD	132  GMZKBWZWDAAWPI
133  GNKZMNRKLCTJAY	134  GOKKOFHHJFGZHW	135  GOQRXDTWKVYHJH	136  GQVMHMFVBWSSPF
137  GRWFGVWFFZKLTI	138  GUMYGCGJGNRHGS	139  GVOWHGSUZUUUDR	140  GWYFCOCPABKNJV
141  GXEGJTGWYVZSNR	142  GXGJIOMUZAGVEH	143  GYCKQBWUSACYIF	144  GYHFUZHODSMOHU

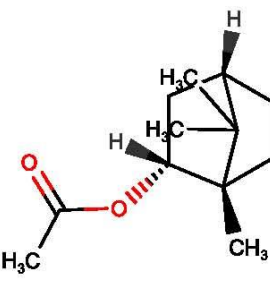
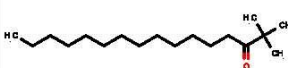
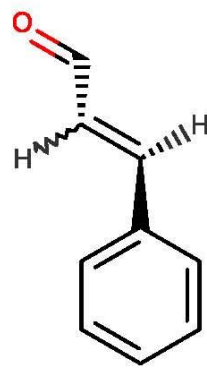
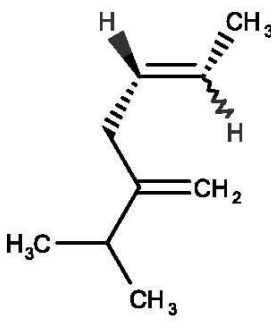
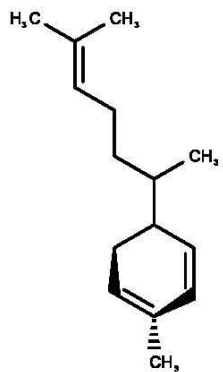
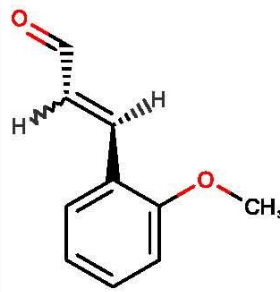
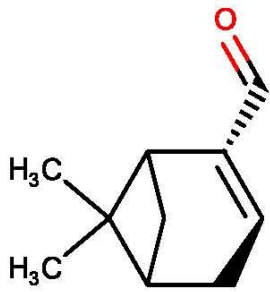
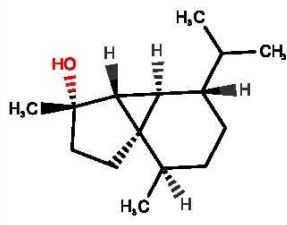
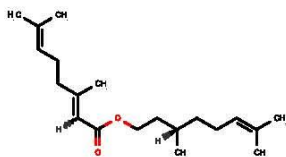
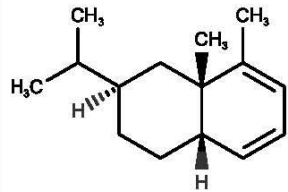
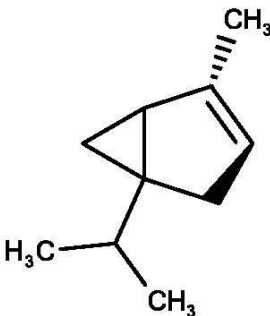
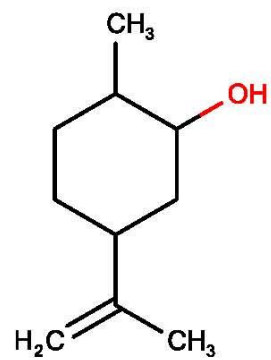
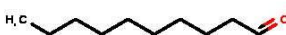
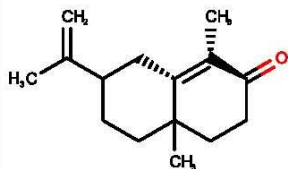
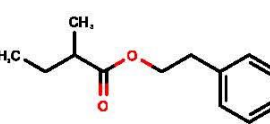
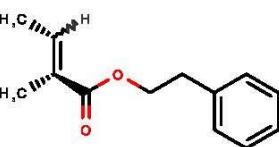
145  GZTVOICLUQHMR	146  HBVOEGGRCJCMLG	147  HCRBXQFHJMCTLF	148  HDKLIZDXVUCLHQ
149  HDVXJTYHXDVWQO	150  HFJRKMMYBMWEAD	151  HFPZCAJZSCWRBC	152  HICAMHOOTMOHPA
153  HICYDYJTCDBHMZ	154  HIGQPQRQIQDZMP	155  HJOVHMDZYOCNQW	156  HJXMNVQARNZTEE
157  HKZQJZIFODOLFR	158  HLHIVJRLDSUCI	159  HNTNJYMWJHGCBD	160  HOBBEYSRFFJETF

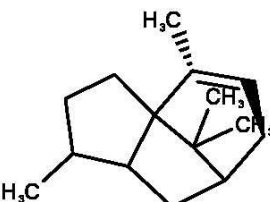
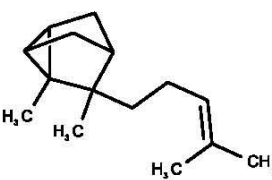
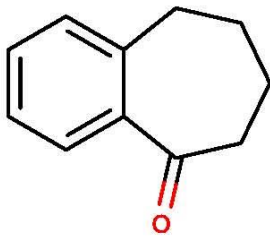
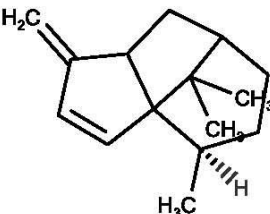
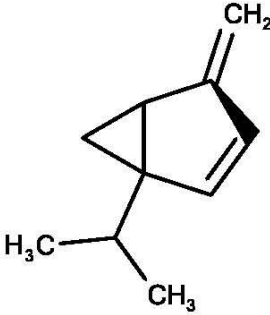
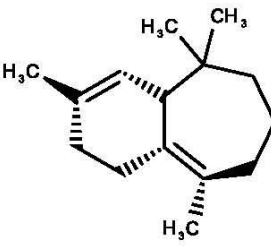
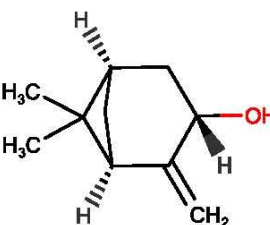
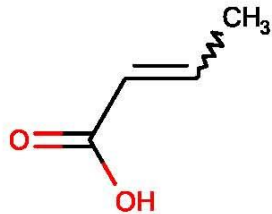
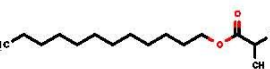
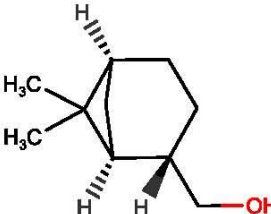
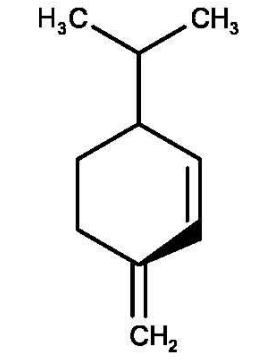
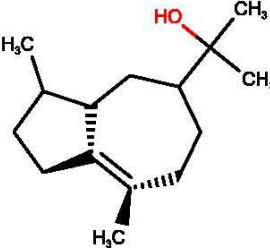
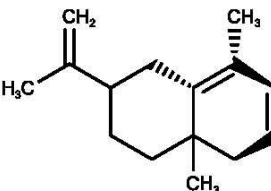
161  HPAQTXNDJUZELN	162  HPOHAUWDDPHRS	163  HRAXJWRHSUTMCS	164  HUMNYLRZRPPJDN
165  HUZXZYWMBWQTNX	166  HVAVUZLEYSAYGE	167  HVJKZICIMIWFCP	168  HYBBIBNJHNGZAN
169  HYNGAVZPWWXQIU	170  HZRFVTRTTXBHSE	171  IAFONZHDZMCORS	172  IAIHUHQCLTYTSF
173  IBKFLDWCDVSDC	174  IBMZINAPWMATGM	175  IBVJWOMJGCHRRW	176  ICBJCVRQDSQPGI

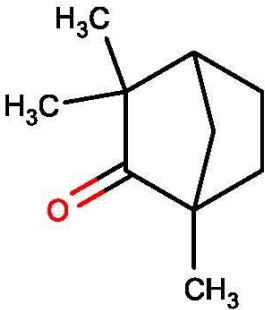
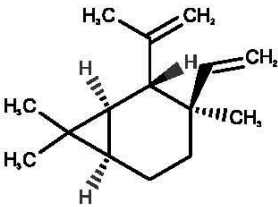
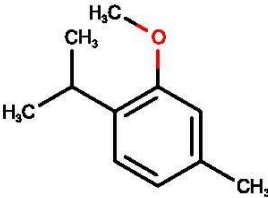
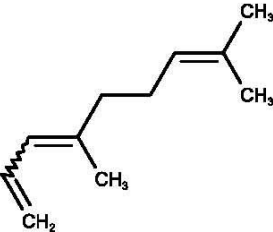
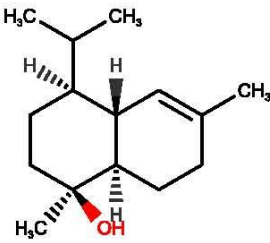
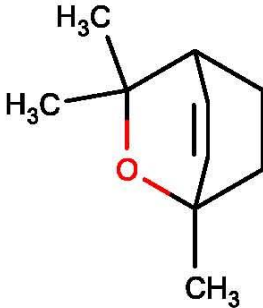
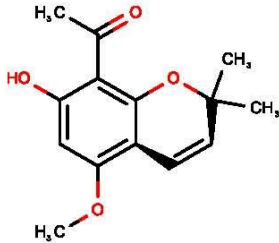
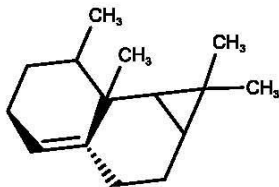
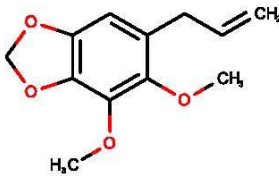
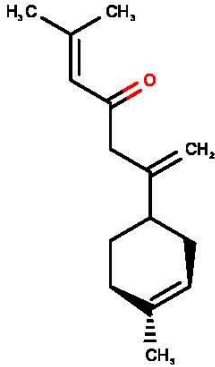
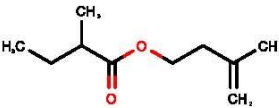
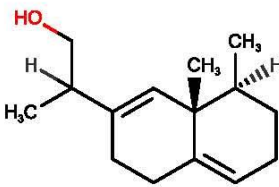
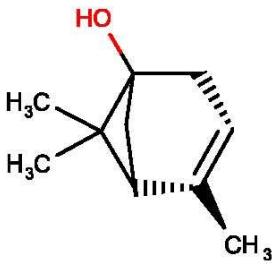
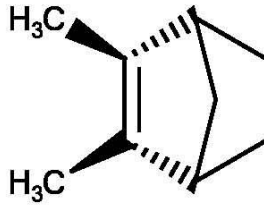
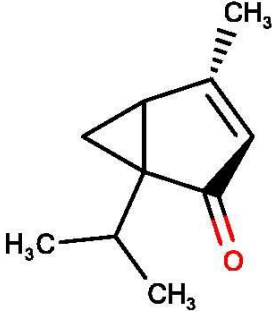
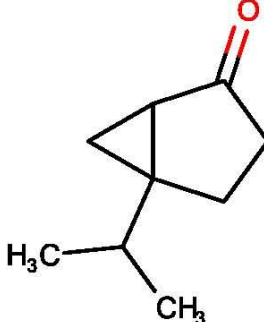
177  ICWHTQRTTHCUHW	178  IECBDTGWSQNQID	179  IGGWKHQYMAJOHK	180  IGODOXYLBBXFDW
181  IHPKGUQCSIINRJ	182  IJGCQHHZHDMDOD	183  IJGMVUXEZUEDJR	184  IKIHFZGGZEWTHEQ
185  IKVVTAAICQTCAL	186  INVWRXWYYVMFQC	187  IPYLQIQMGUZFK	188  IQDXAJNQKSIPGB
189  IRAQCXYXUMOF CW	190  IRDFGGRWKUKANK	191  IRZWAJHUW GZMMT	192  ISLOGSAEQNKPGG

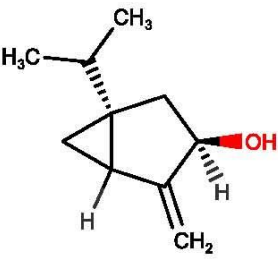
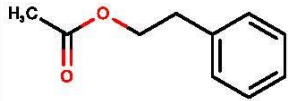
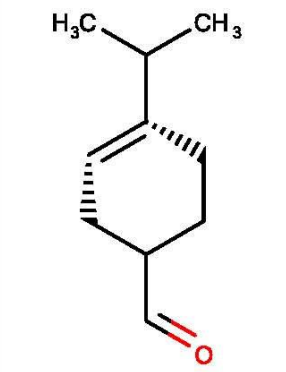
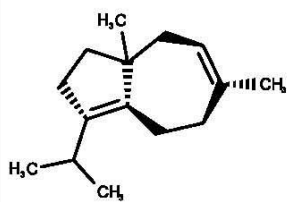
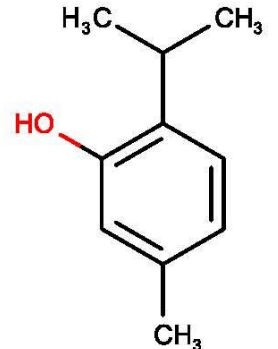
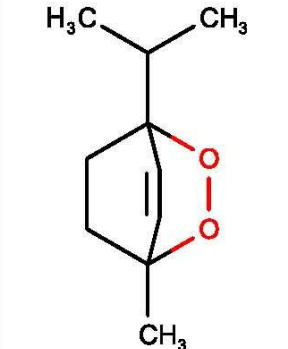
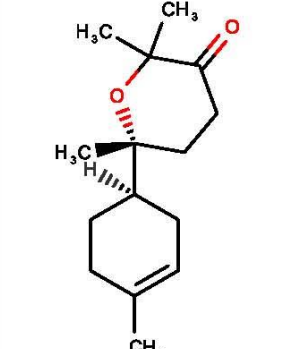
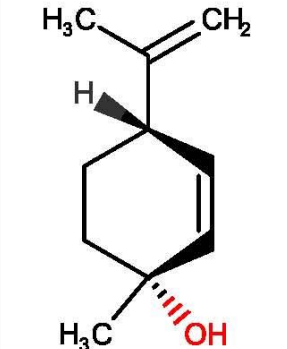
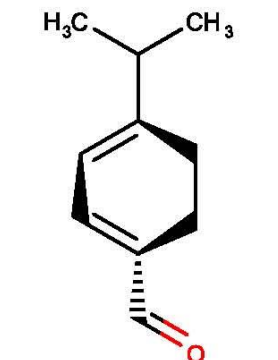
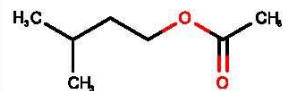
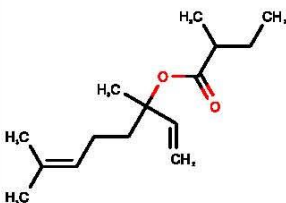
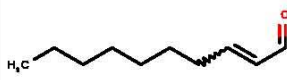
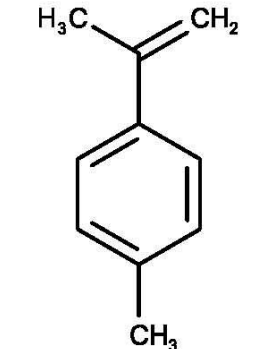
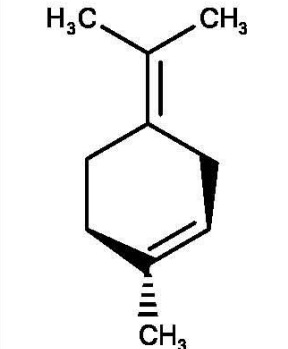
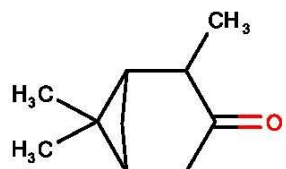
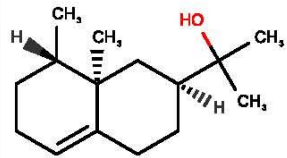
193  ITQLVLWNPZVVM	194  ITYNGVSTWVVPIC	195  IUDIJIIVSWGWNV	196  IVTQSEFLDHBCDZ
197  IVZVUDRUEPCTTL	198  IWDCLRJOBJJRNH	199  IWKXKWUCSZHJEK	200  IWTBVKIGCDZRPL
201  IZXYHAXVIZHGJV	202  JAWSHISYWRROQQ	203  JCDLXWAYWSJVTP	204  JDQVBGQWADMTAM
205  JGELFJUQMIUNOO	206  JGINTSAQGRHGMG	207  JIJQKFPGBBEJNF	208  JKKGTSUICJWEKB

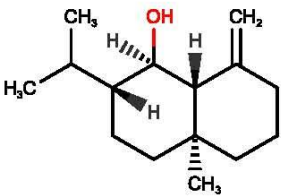
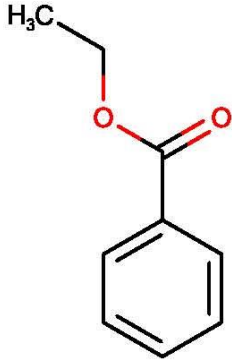
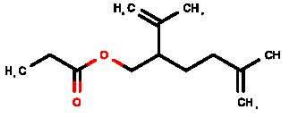
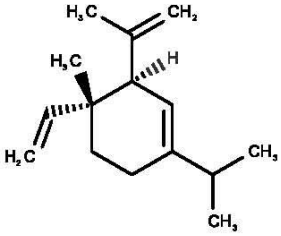
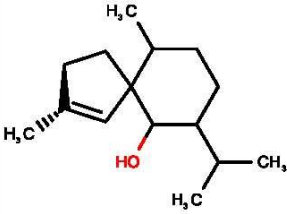
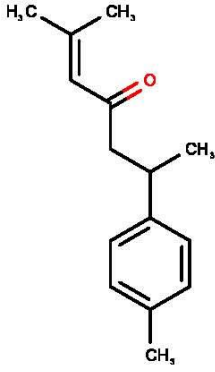
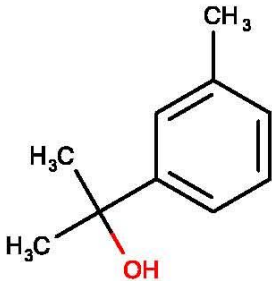
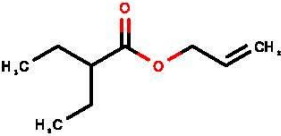
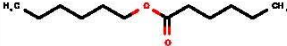
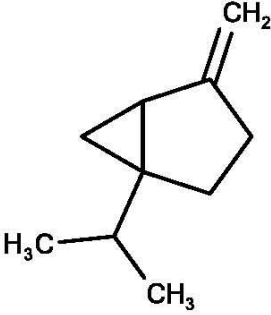
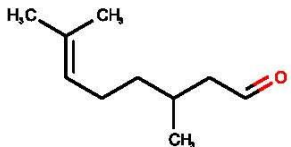
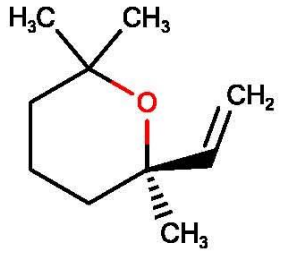
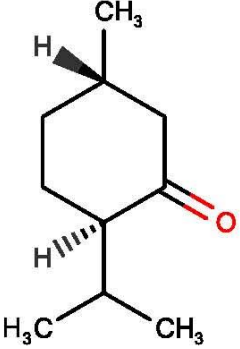
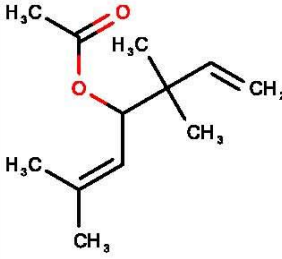
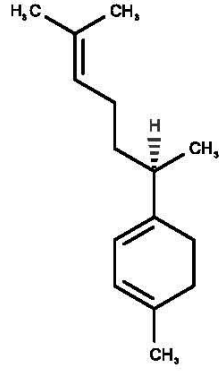
209  JOZKFWLRHCDGJA 213  JSNRRGGBADWTMC 217  JXZQZARENYGJMK 221  KBPPPZMFQKLN	210  JQQDKNVOSLONRS 214  JTCIUOKKVACNCK 218  JZLOTPMXLYBVOH 222  KEBDNKNVCHQIJU	211  JRJGKUTZNBZHNK 215  JUQGWBAOQUBVFP 219  KBEBGUQPQBELIU 223  KEVTZKPBXQTBSV	212  JRTBBCBDKSRRCY 216  JUWUWIGZUVEFQB 220  KBPLFHHGFOOTCA 224  KFYISTOZYAKAPV
---	---	---	---

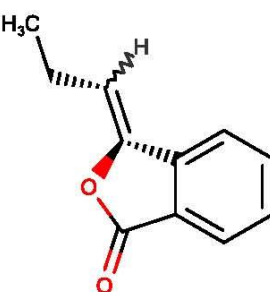
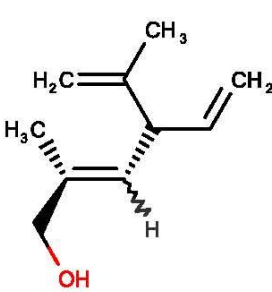
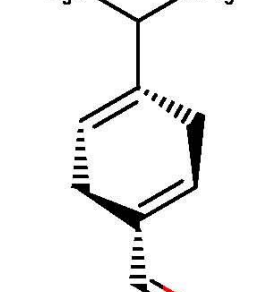
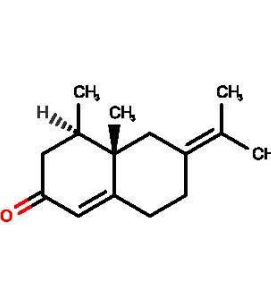
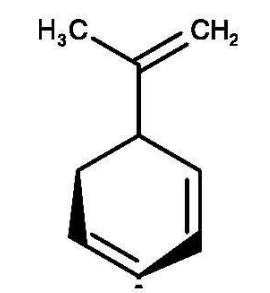
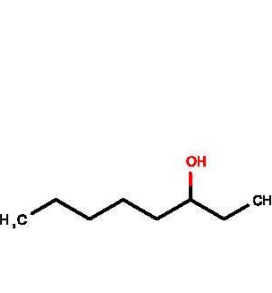
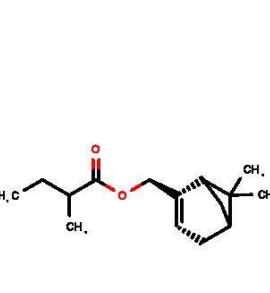
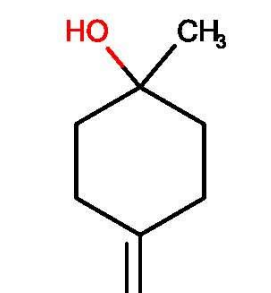
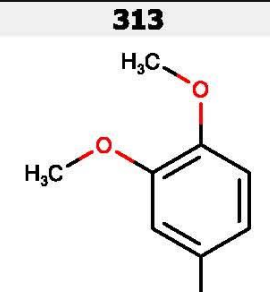
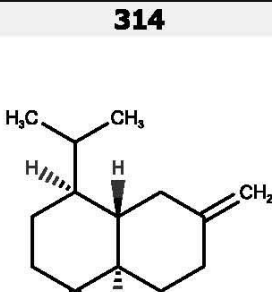
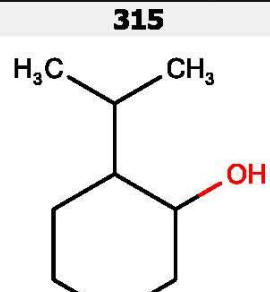
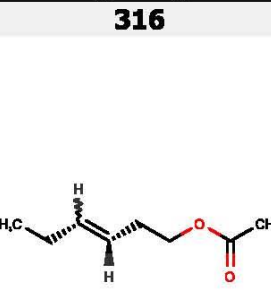
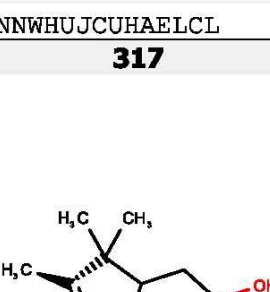
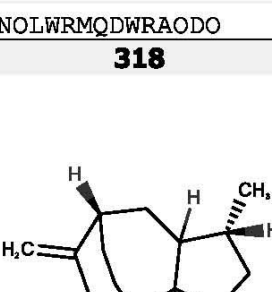
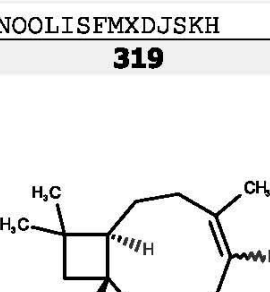
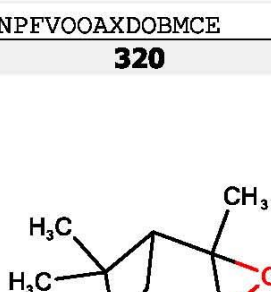
225  KGEKLUUHTZCSIP	226  KHQOKXNPFOPAFV	227  KJPRLNWUNMBNBZ	228  KKKHJDOOIQCWIL
229  KKOXXKGSUHTUBV	230  KKVZAVRSVHUSPL	231  KMRMUZKLFIEVAO	232  KONGRWVLXLWGDV
233  KOTJSBCCZGEHBD	234  KOTQBSLPXLZGON	235  KQAZVFVOEIRWHN	236  KRCZYMFWVJCLI
237  KSMVZQYAVGTKIV	238  KUFXJZXMWHNCEH	239  KVKKTLBBYFABAZ	240  KVMWYGAYARXPOL

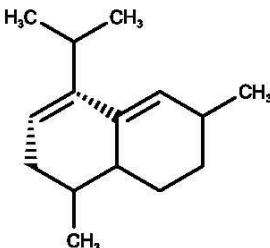
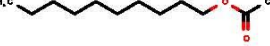
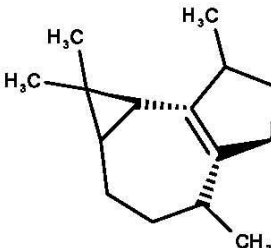
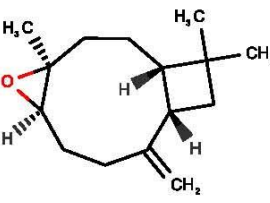
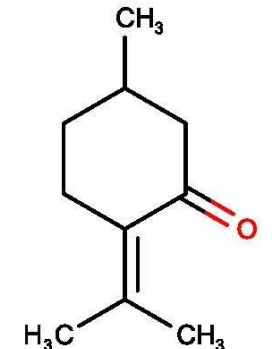
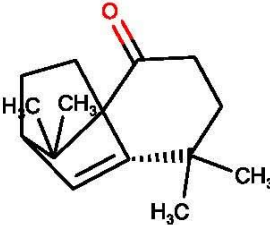
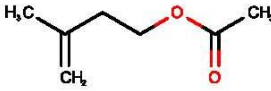
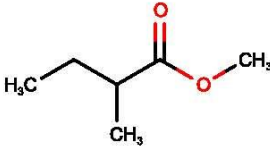
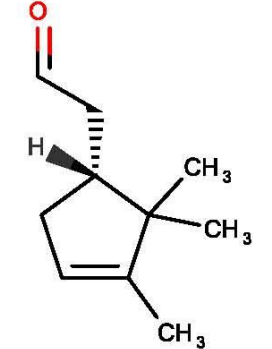
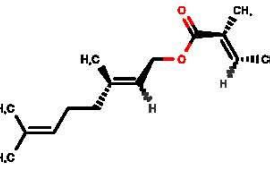
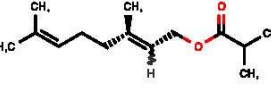
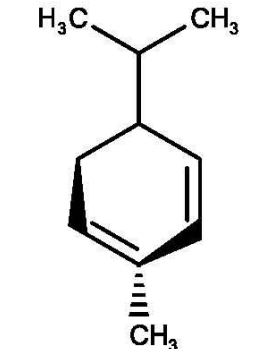
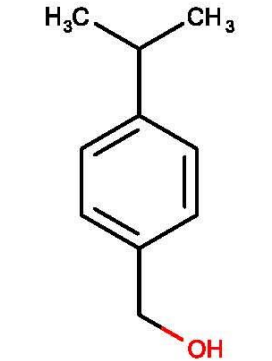
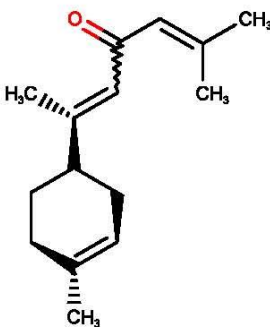
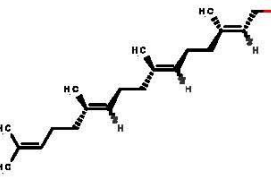
241  KVQOADNSNSUAJT	242  KWFJIXPIFLVMPM	243  KWHUHTFXMNQHAA	244  KYWIYKKSMDLRDC
245  KZABVHBACHSSNR	246  LBAVIXQTLKRIGP	247  LBVRQJWOZIMWNY	248  LCOSCMLXPAQCLQ
249  LCYXQUJDODZYIJ	250  LDHQ CZJRKDOVOX	251  LDPLLPONRGVDGK	252  LDWAIHWGMRVEFR
253  LFJQCDVYDGGFCH	254  LFQSCWFLJHTTHZ	255  LGOFSGDSFQNIAT	256  LGRISOGTKBAJPA

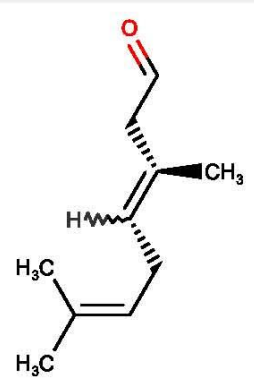
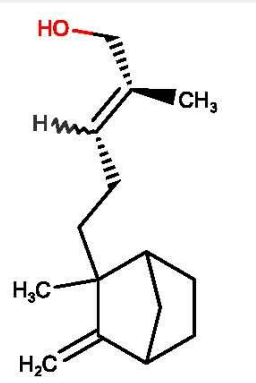
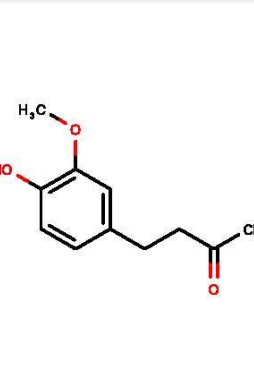
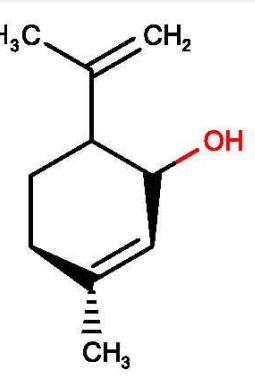
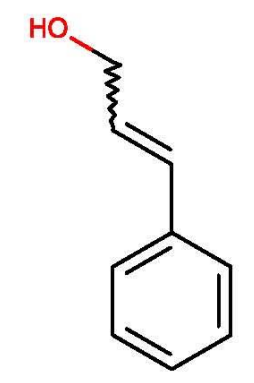
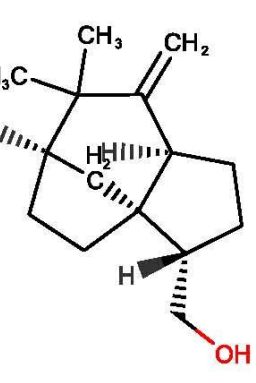
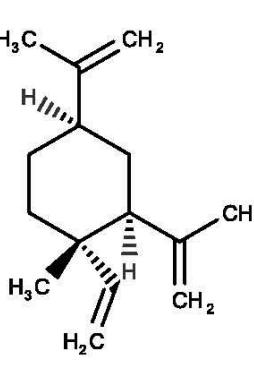
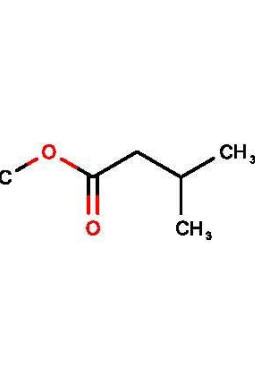
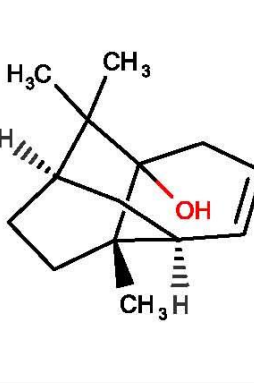
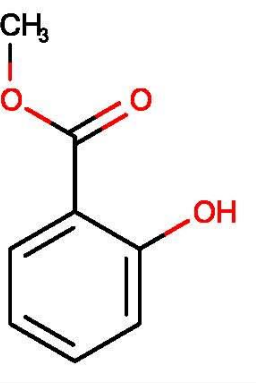
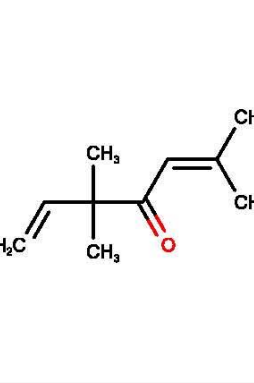
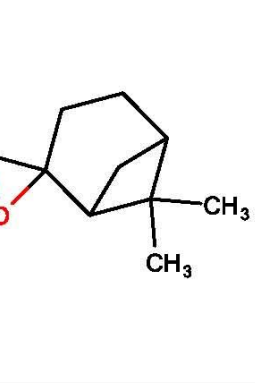
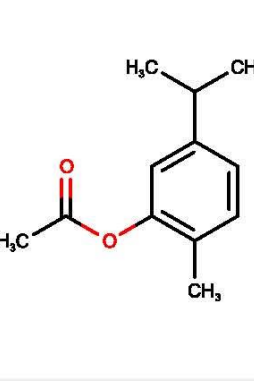
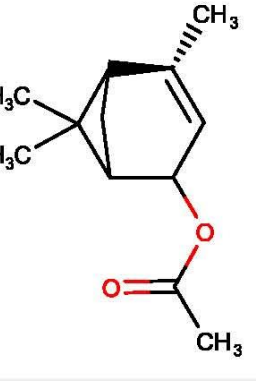
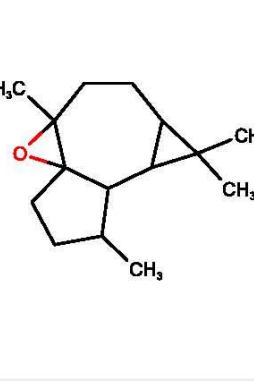
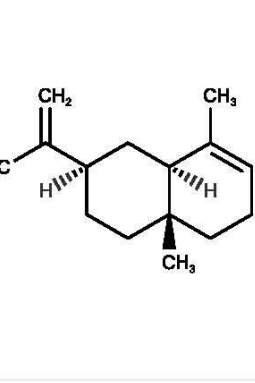
257  LHXDLQBQYFFVNW 261  LKQMMFFQYMYQOJ 265  LSQXNMXDFRRDSJ 269  LUKZREJLWEWQM	258  LHYHMMRYTDARSZ 262  LOOYOTLEOHYYOV 266  LTDSNAYFLFUPPT 270  MBIPADCEHSKJDQ	259  LIKYNOPXHGPMIH 263  LRDZCBICVMXPBB 267  LTOLHPXUSLBUHD 271  MCDRFHDZJOGPFL	260  LKGUYHHEOJFHPV 264  LSIXBBPOJBQJHN 268  LTTVJAQLCIHAFV 272  MDDYCNAAAZKNAJ
--	---	---	---

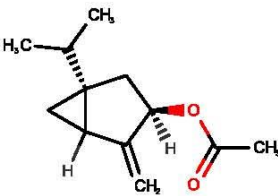
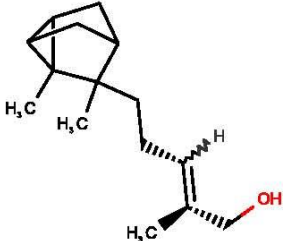
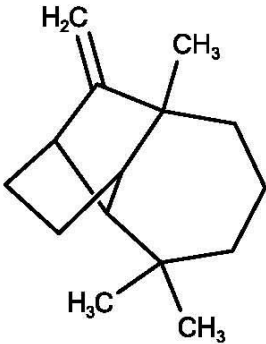
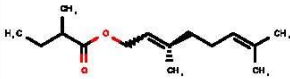
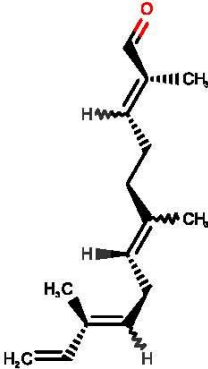
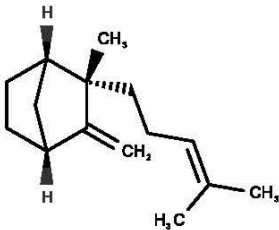
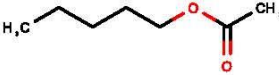
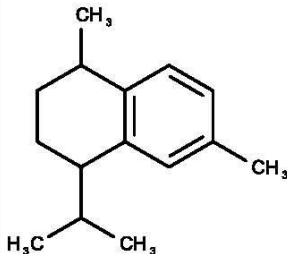
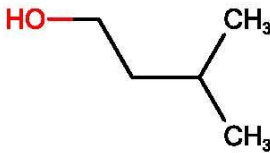
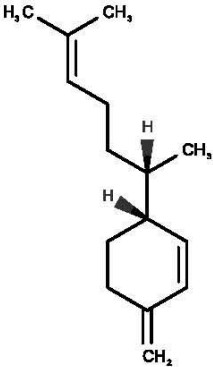
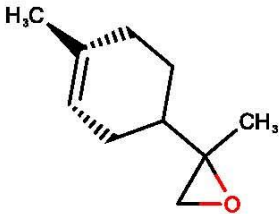
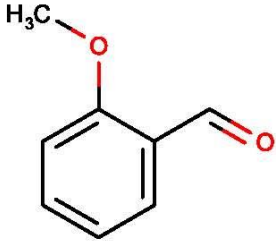
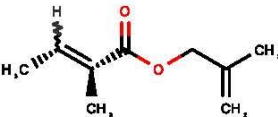
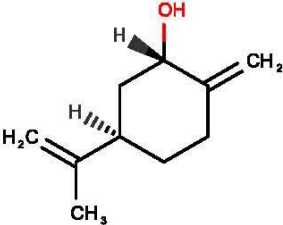
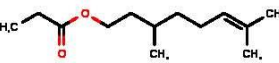
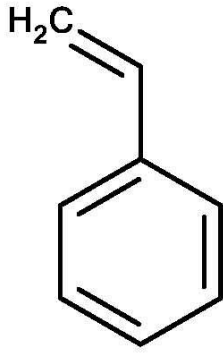
273 	274 	275 	276 
MDFQXBNVOAKNAY	MDHYEMXUFSJLGV	MGJVBPPPEWVKZTN	MGMBZNCFUFRSSP
277 	278 	279 	280 
MGSRCZKZVOBKFT	MGYMHQJELJYRQS	MJWZYBQLHJQQJJ	MKPMHJQMNA CGDI
281 	282 	283 	284 
MKVBITWQDIUMF	MLFHJEHSLIIPHL	MLJNGBG MEMFTPV	MMFCJPPRCYDLLZ
285 	286 	287 	288 
MMSLOZQEMPDGPI	MOYAFQVGZZPNRA	MQPHVIPKLRXGDJ	MQWIFDHBNGIVPO

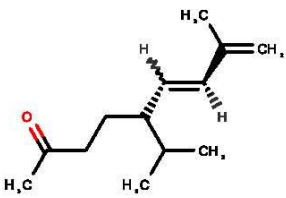
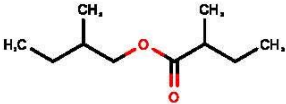
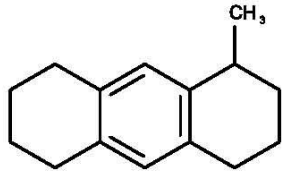
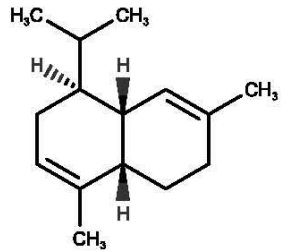
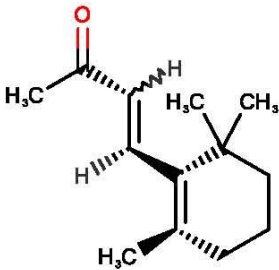
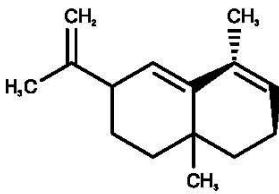
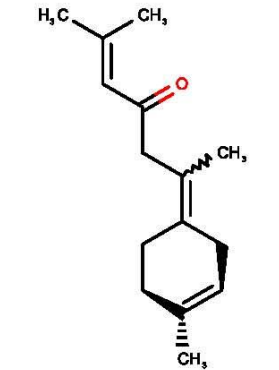
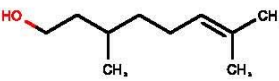
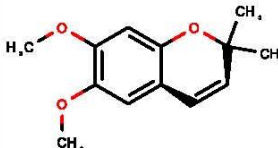
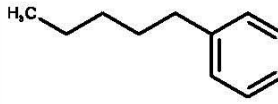
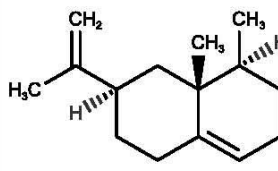
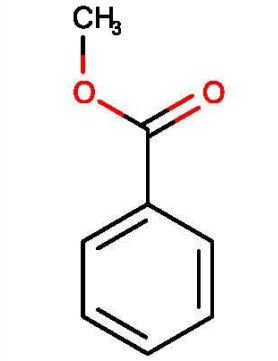
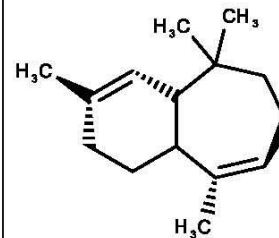
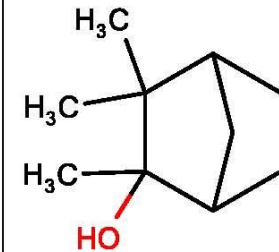
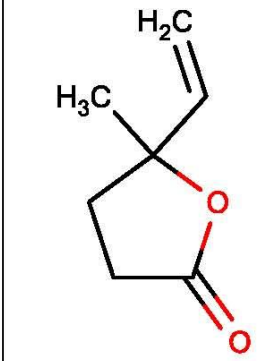
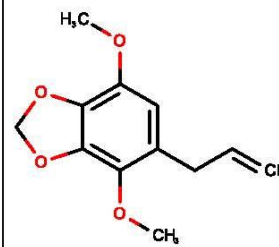
289  MSJJKJCIFIGTJY	290  MTZQAGJQAFMTAQ	291  MUZPKOFBDLINTJ	292  MWKFXSUHUHTGQN
293  MXDMETWAEIGIFOE	294  MYLXGCVCCZCOHU	295  NAAJVHHFAXWBOK	296  NARIBLVZTLPQJB
297  NBKXNUWCFMZFM	298  NCDCLPBOMHPFCV	299  NDVASEGYNIMXJL	300  NEHNMFOYXAPHSD
301  NETOHYFTCONDT	302  NFLGAXVYCFJBMK	303  NGIKFWJEQGLTBM	304  NGIVKZGKEPRIGG

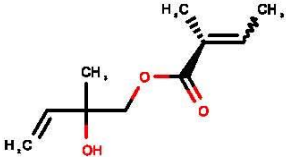
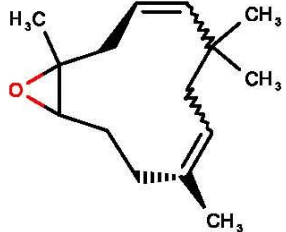
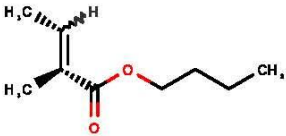
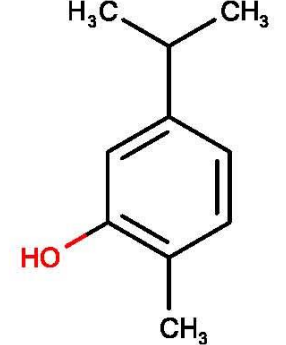
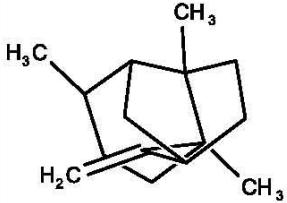
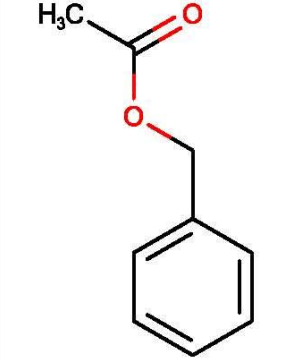
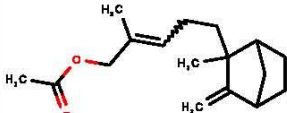
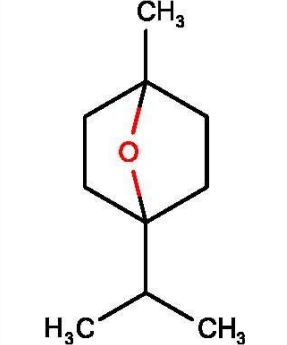
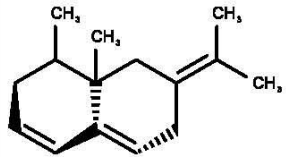
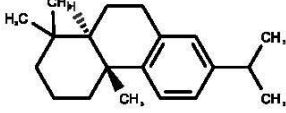
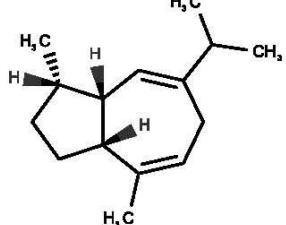
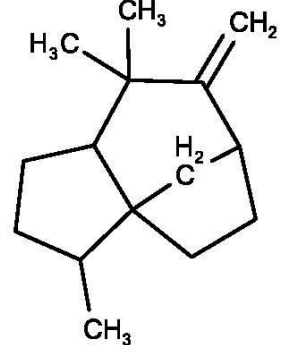
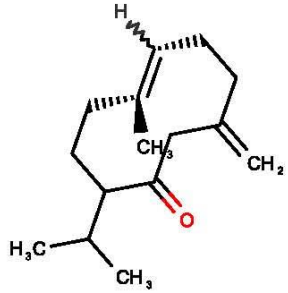
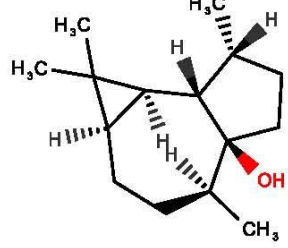
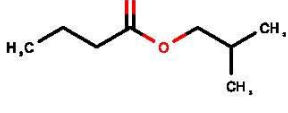
305  NGSZDVVHIGAMOJ	306  NHJXCMQPMLBAMK	307  NIBUJHLMVJZODW	308  NIIPDXITZPFFTE
309  NJLNIOKPKKKALD	310  NMRPBPVERJPACX	311  NMVOOLZURJHGKQ	312  NNRLDGOZIVUQTE
313  NNWHUJCUHAELCL	314  NOLWRMQDWRAODO	315  NOOLISFMXDJSKH	316  NPFVVOOAXDOBMCE
317  NPGPPCSBEMHHCR	318  NPHFULIVCUBDDN	319  NPNUFJAVOONJE	320  NQFUSWIGRKFAHK

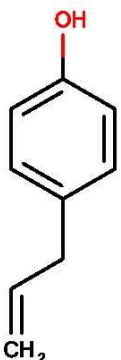
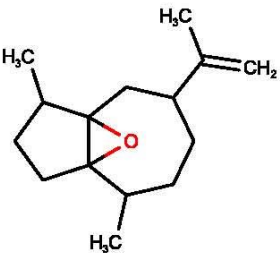
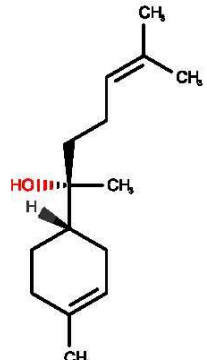
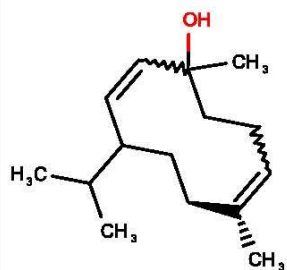
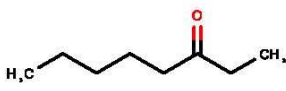
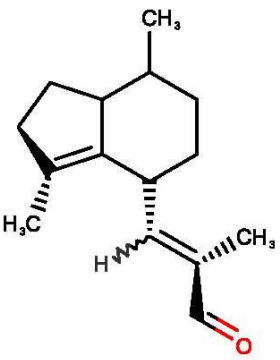
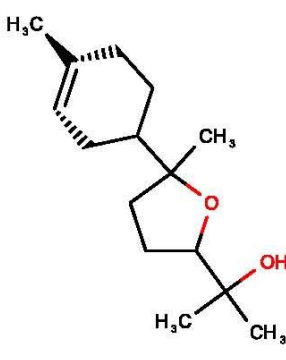
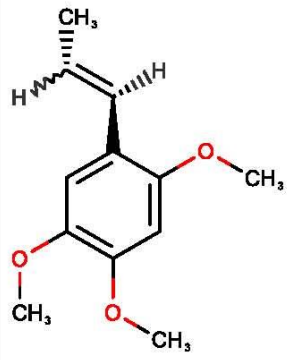
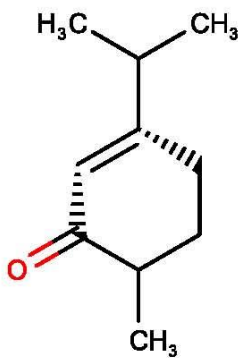
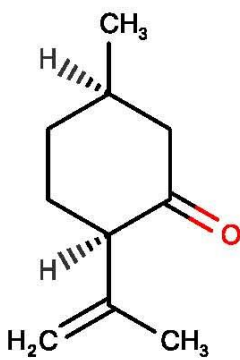
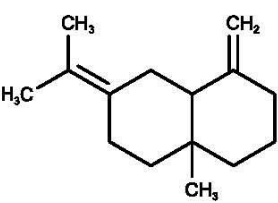
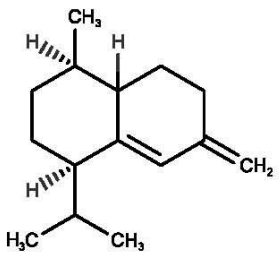
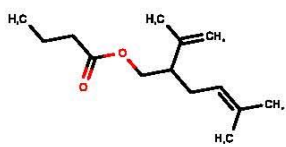
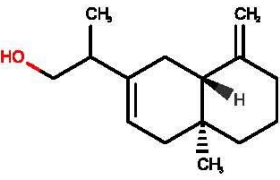
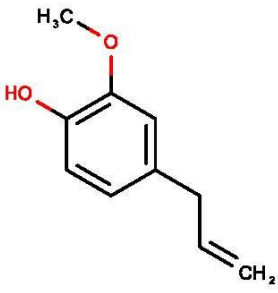
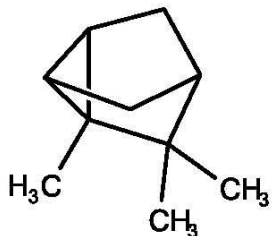
321  NTWBICNIZKFDJV	322  NUJGJRNETVAIRJ	323  NUPSHWCALHZGOV	324  NUQDPKOFUKFKFD
325  NVEQFIOZRFFVFW	326  NZGWDASTMWDZIW	327  OAUCHXPHYIWEW	328  OCUAPVNNQFAQSM
329  OCWLYWIFNDCWRZ	330  OGCGGWYLHSJR FY	331  OGHBUHJLMHQMHS	332  OGJYXQFXLSCKTP
333  OGLDWXZKYODSOB	334  OIGWAXDAPKFNCQ	335  OJEFBZMKKJTKKK	336  OJISWRZIEWCUBN

337  OJLMARCQPSGYNE	338  OJYKYCDSGQGTRJ	339  OJYLAHXXKWMRDGS	340  OLAKPNFIICOONC
341  OCCDEMITAIZTP	342  OYRHNIVDZZGQV	343  OPFTUNCRGUEPRZ	344  OQAGVSWESNCJJT
345  OSQSDJNIURJARY	346  OSWPMRLSEDHDFE	347  OTYVBQZXUNBRTK	348  OUXAABAEPHHZPC
349  OXZSUQJHKQOGOK	350  OZBFUQLOVFXDNK	351  OZNHATCGPKOFBH	352  OZQAPQSEYFAMCY

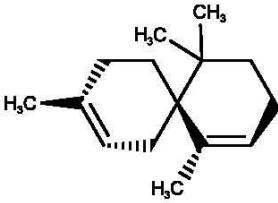
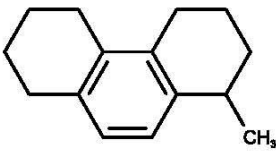
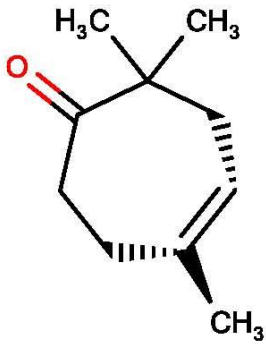
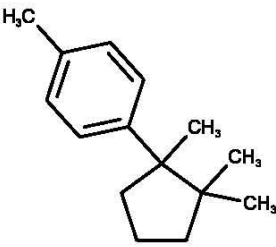
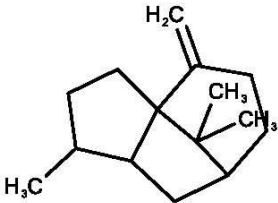
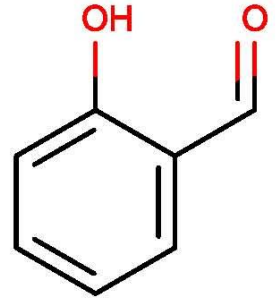
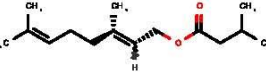
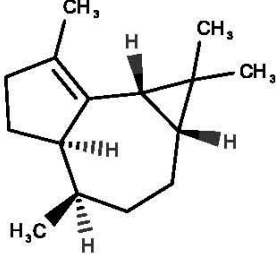
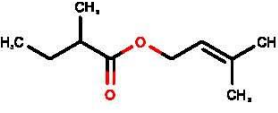
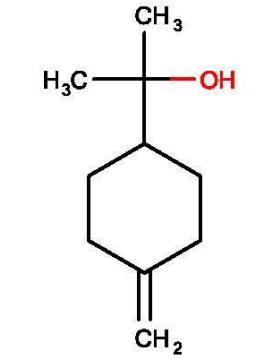
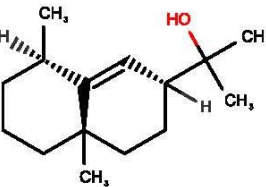
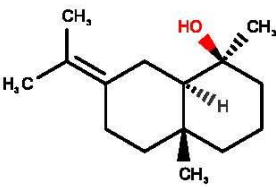
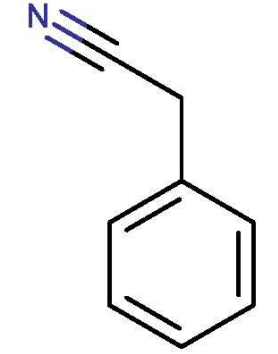
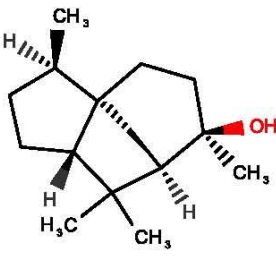
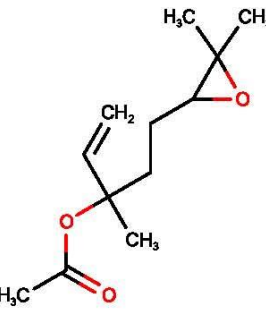
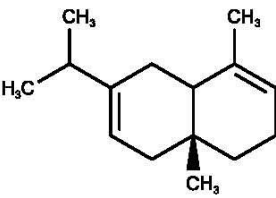
353  PBWRFXQNNGSAQG	354  PDEQKAVEYSOLJX	355  PDSNLYSELAIEBU	356  PEQMAZJTEUEQJP
357  PFSTYGCNVAVZBK	358  PGBNIHXXFQBCPU	359  PGMYKACGEOXYJE	360  PGTJIOWQJWHTJJ
361  PHTQWCKDNZKARW	362  PHWISBHSBNDZDX	363  PJGRMBOWSWHGDV	364  PKZJLOCLABXVMC
365  PNRCWIZNCBKLMH	366  PNVTXOFNJFHOK	367  POPNTVRHTZDEBW	368  PPBRXRYQALVLMV

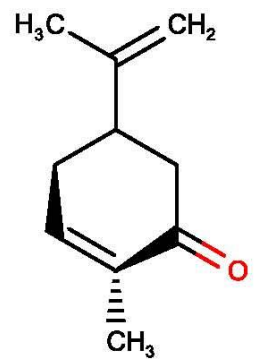
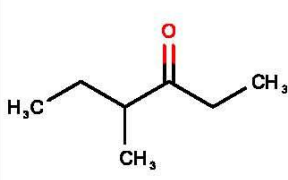
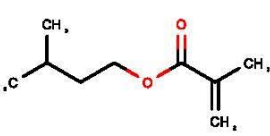
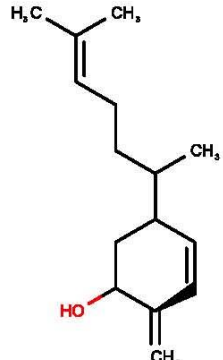
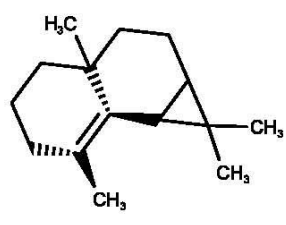
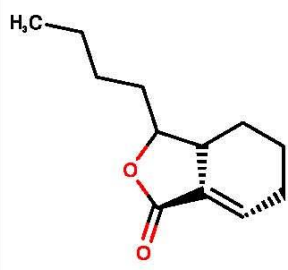
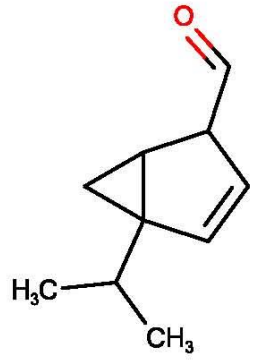
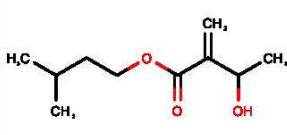
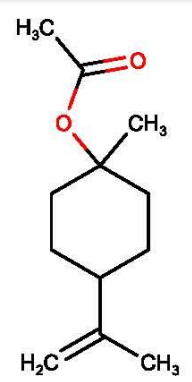
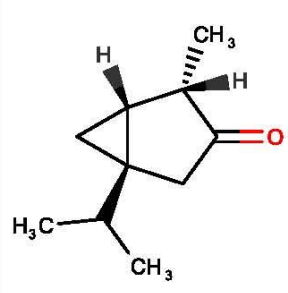
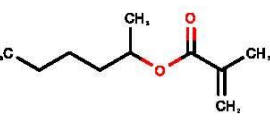
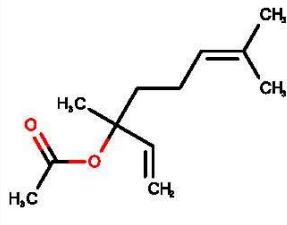
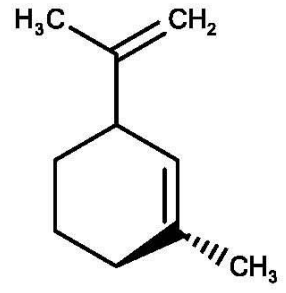
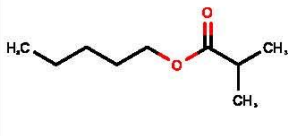
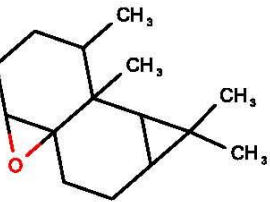
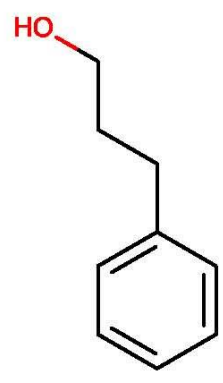
369  PQDRXUSSKFWCFA 373  PVYFCGRBIREQLL 377  PZMUIEZEAWSHNE 381  QMAYBMKBYCGXDH	370  PSQYTAPXSHCGMF 374  PWAPUSDWDZRECY 378  QEAHSEZXAQIWSW 382  QMVPMAAFGQKVCJ	371  PTIDGSWTMLSGAH 375  PWATWSYOIIXYMA 379  QEBNYNLSCGVZOH 383  QPJVMBTYPHYUOC	372  PUWNTRHCKNHSAT 376  PXRCIOIWVGZEP 380  QESPSAHXYXIGBG 384  QQRSPHJOOXUALR
---	---	---	--

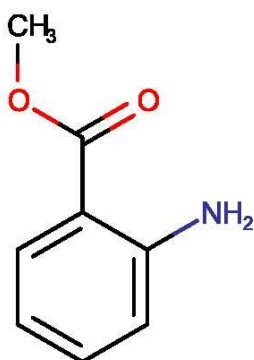
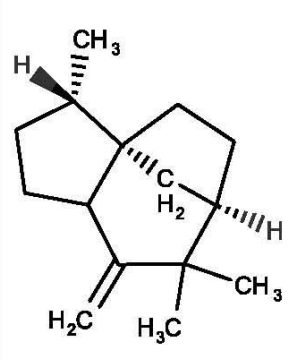
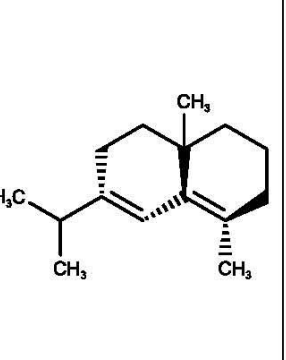
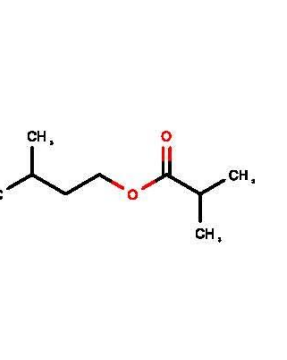
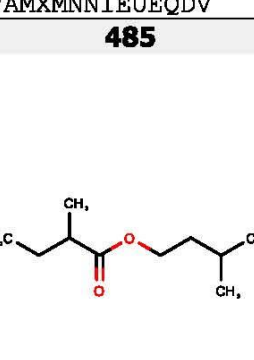
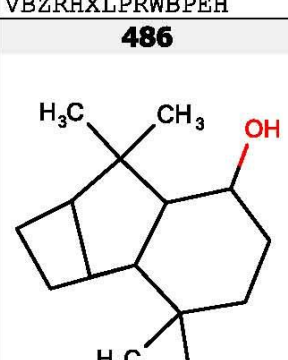
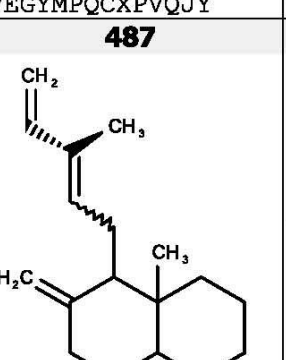
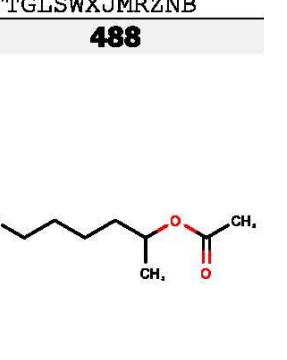
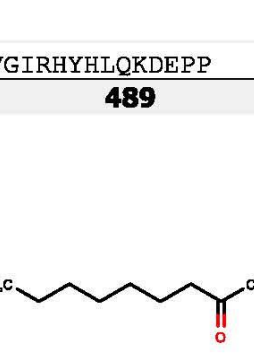
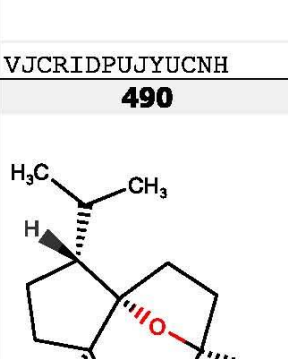
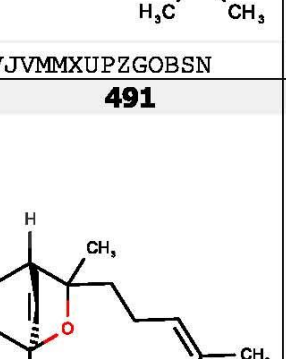
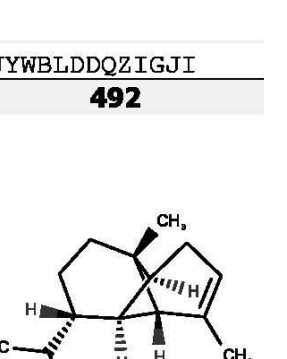
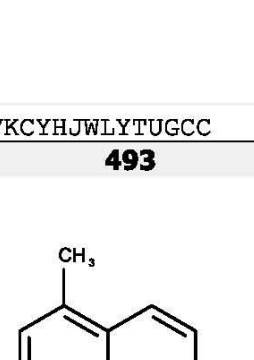
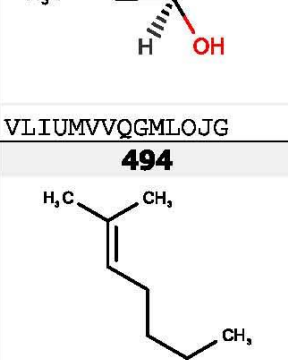
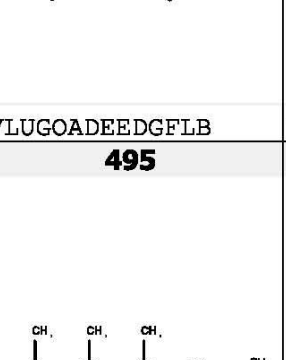
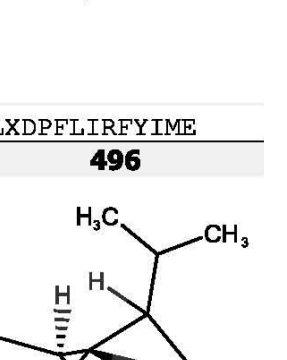
385  QOSQJPTALGCLH 389  QTGAEXCCAPTGLB 393  RBGFLIOXJWFKKX 397  RECUKUPTGUEGMW	386  QQWUXXGYAQM TAT 390  QUKGYK BILRGFE 394  RCFGRZLLBGMERD 398  RFFOTVCVTJUTAD	387  QSUQB XKPPUWLTH 391  QUUCYKKMFLJLFS 395  RCMUGHFHXFHKNW 399  RFSYBMDOYOB TCL	388  QTFJNWQFKJITEE 392  QWRTXOOFEHORQQ 396  RDWUNORUTVEHJF 400  RGFNRTWDWVHDD
--	--	---	--

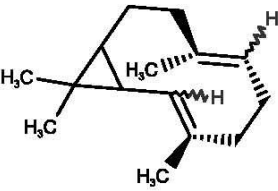
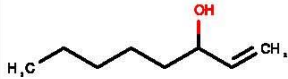
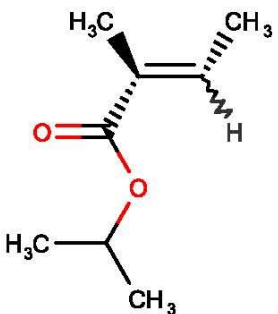
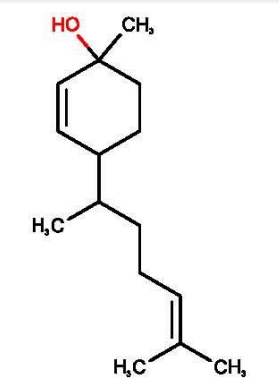
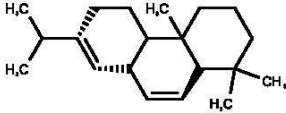
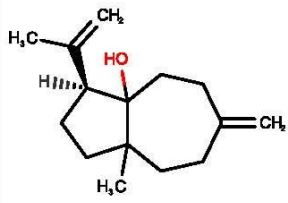
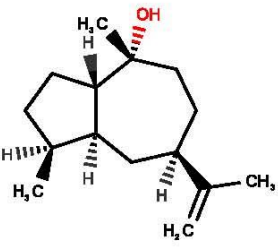
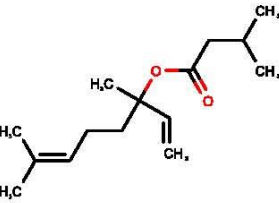
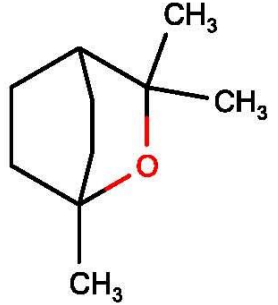
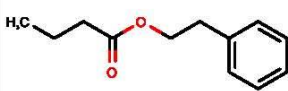
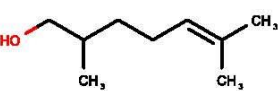
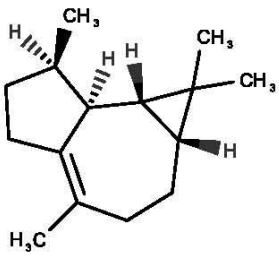
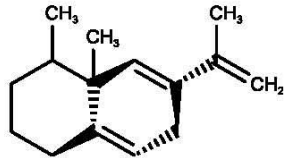
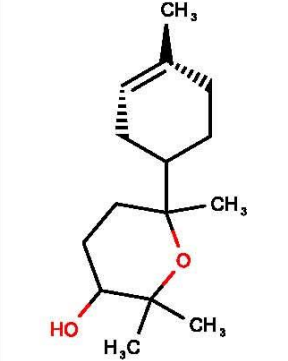
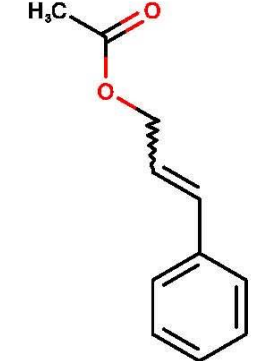
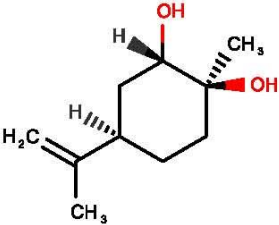
401  RGIBXDHONMXTLI	402  RGRYQUWGSJPMK	403  RGZSQWQPBWRIAQ	404  RHCTXHCNRLCYBN
405  RHLVCLIPMVJYKS	406  RJZWGDPBGWGJNU	407  RKBAYVATPNYHLW	408  RKFAZBXYICVSKP
409  RLYSXAZAJUMULG	410  RMIANEGNSBUGDJ	411  RMZHSBMIZBMVMN	412  RNDFUOKDULDZPR
413  ROJSUZRYGHOLJL	414  RQWRGJGCTMAFBS	415  RRAFCDWBNXTKKO	416  RRBYUSWBIVXTQN

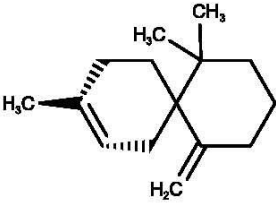
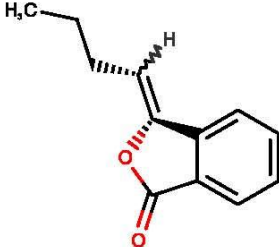
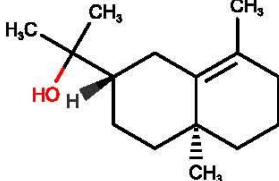
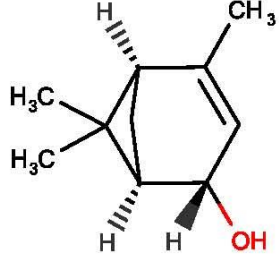
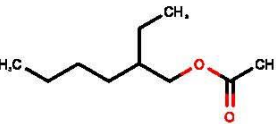
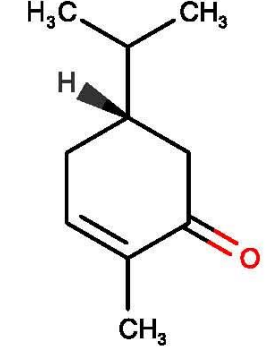
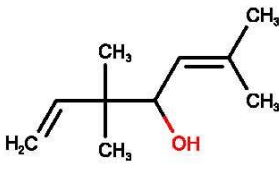
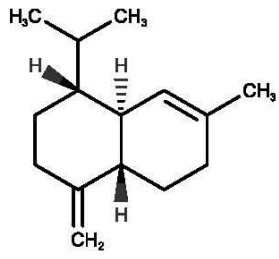
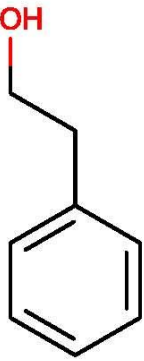
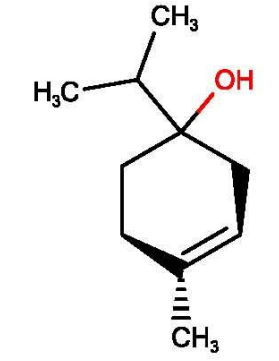
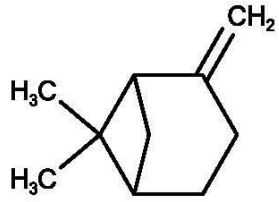
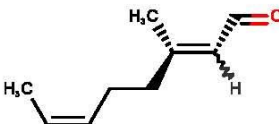
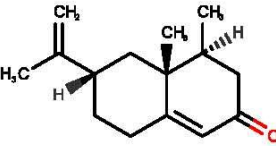
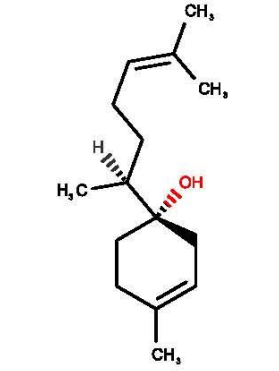
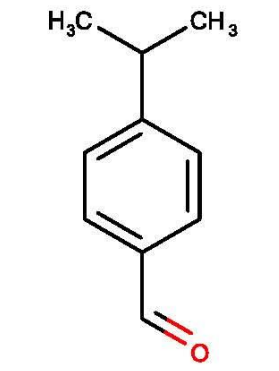
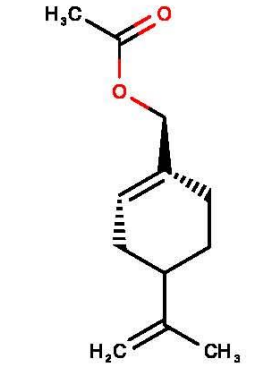
417 RRXOQHOFJOQLQR 421 RUMACXVDVNRZJZ 425 RYMWIDNPMDLHRP 429 SESQOVINGFJWQN	418 RSDDTPVXLMVLQE 422 RUVINXPYWBROJD 426 SAOJPWFHRMUCFN 430 SEZLYIWMVRUIKT	419 RTBLDXVIGWSICW 423 RXBQNMWIKOSCS 427 SCCDQYPEOIRVGX 431 SHEUEEZGXLROM	420 RUJPNZNNGCHGID 424 RYILSJIMFKKICJ 428 SESFYRSPDFLNCH 432 SHOJXDKTYKFBRD
---	---	---	---

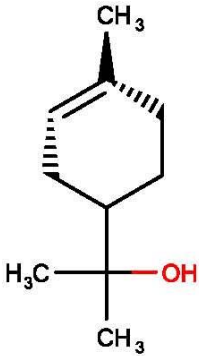
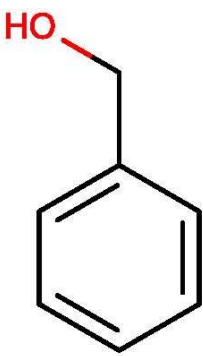
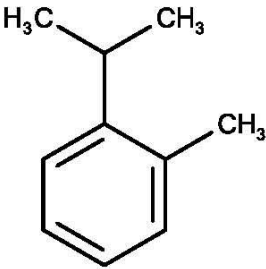
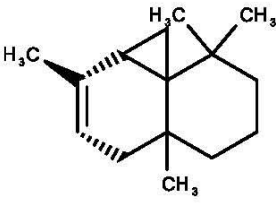
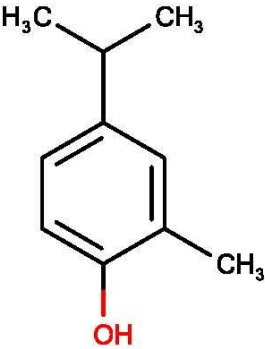
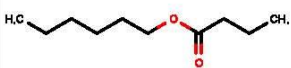
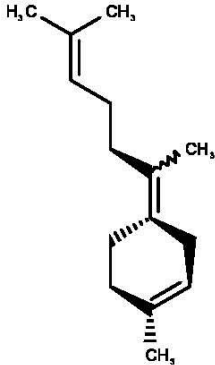
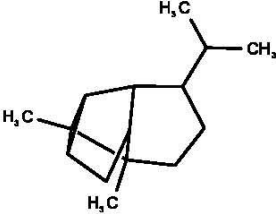
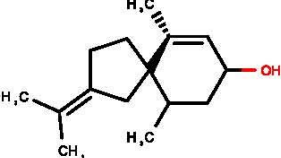
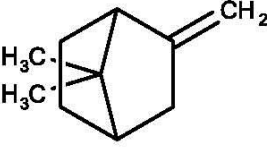
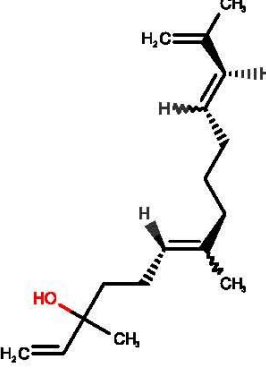
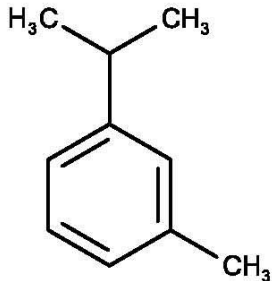
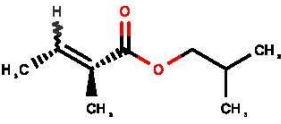
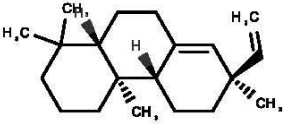
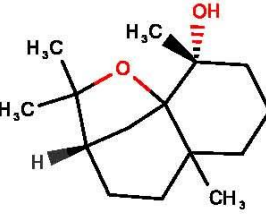
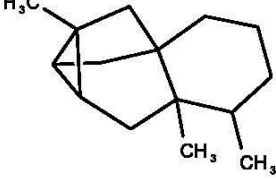
433 	434 	435 	436 
SIBCECUUMHIAAM	SKABIAPYJDXFMJ	SKKTZNHVYFHGDC	SLKPBCXNFNIJSV
437 	438 	439 	440 
SLTLKLCDOGWISZ	SMQUZDBALVYZAC	SOUKTGNMIRUIQN	SPCXZDDGSGTVAW
441 	442 	443 	444 
SPZJCVIOUQJWGX	SQIFACVGCWPWBQZ	SRHDLIDOZXPROB	STRABSCAWZINIF
445 	446 	447 	448 
SUSQOBVLVYHIEX	SVURIXNDRWRAFU	SVXOLLYBCSDBKK	SWCOCRTVQQHGKB

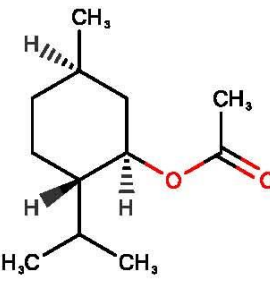
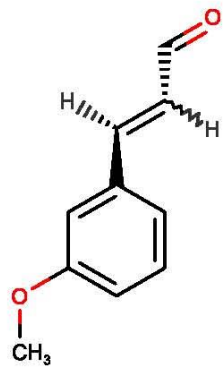
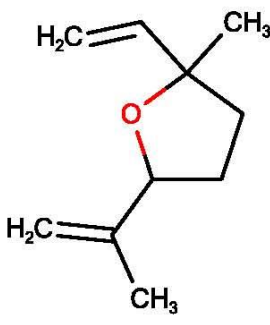
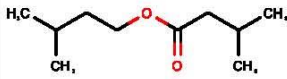
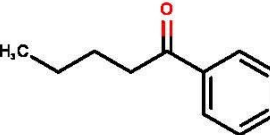
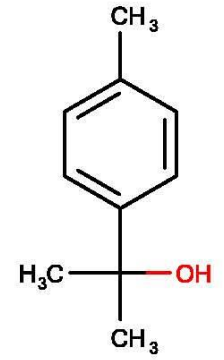
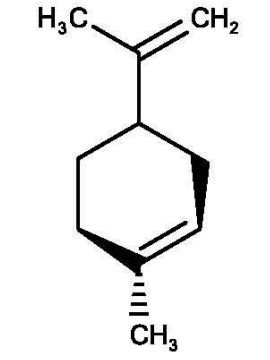
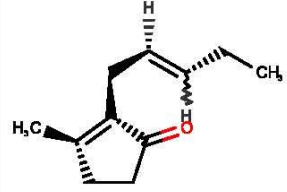
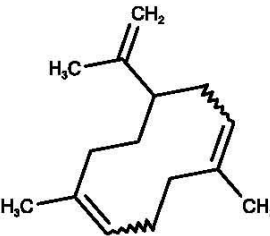
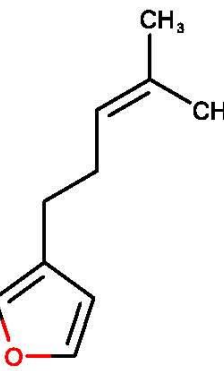
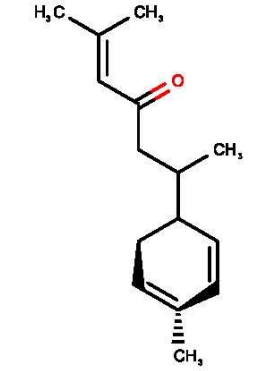
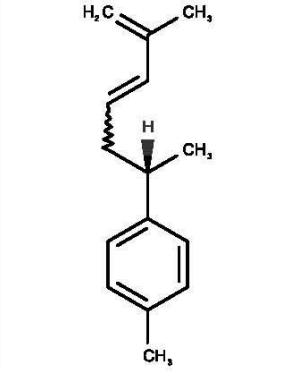
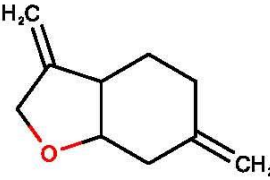
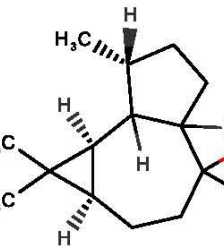
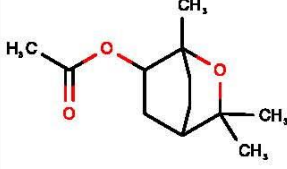
465 	466 	467 	468 
ULDHMXUKGWMISQ	ULPMRIXXHGUZFA	ULYIFEQRRINMJQ	UNSGLJWOHGSVLW
469 	470 	471 	472 
UPGLJTCDRBIZKP	UPJFTVFLSIQOAV	UQLNHDYBGCTZNJ	URBTVTZTLQVLCO
473 	474 	475 	476 
URVNHQCLMBMWIW	USMNOWBWPYOEAE	USPLKTKSLPLUJG	UWKAYLJWKGQEPM
477 	478 	479 	480 
UXZIDIYMFIBDKT	UYGGIIOLYXRSQY	UYPPHUAQDGVKN	VAJVDSVGBWFCILW

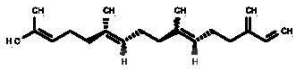
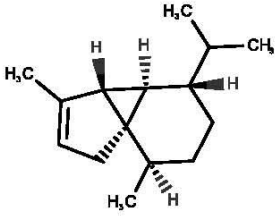
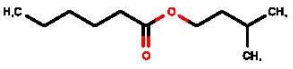
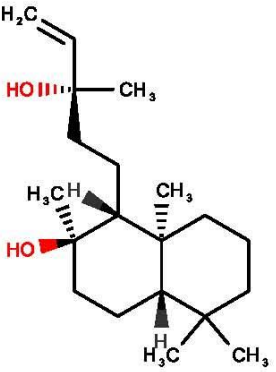
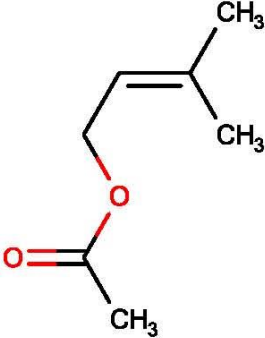
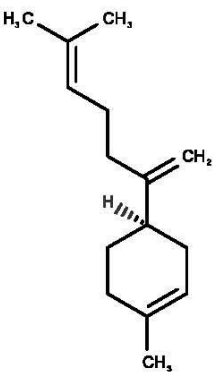
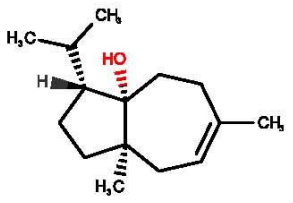
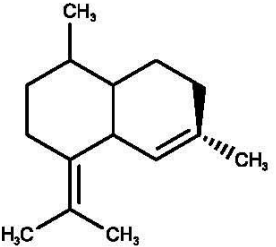
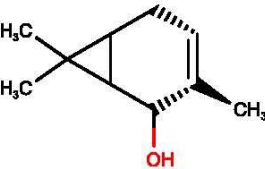
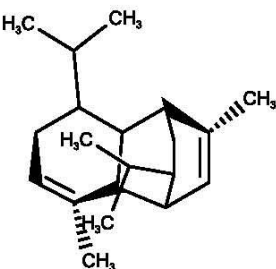
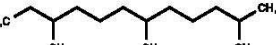
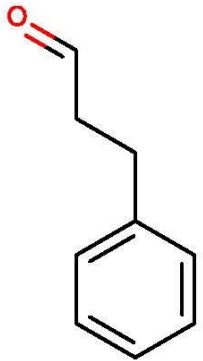
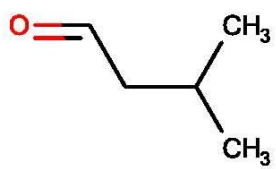
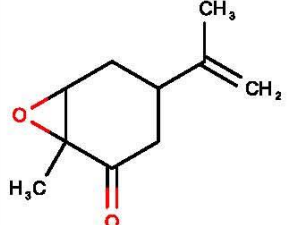
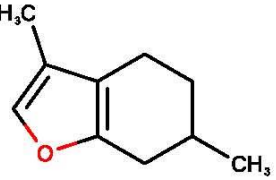
481  VAMXMNNIEUEQDV	482  VBZRHXLPRWBPEH	483  VEGYMPQCXPVQJY	484  VFTGLSWXJMRZNB
485  VGIRHYHLQKDEPP	486  VJCRIDPUJYUCNH	487  VJVMXMUPZGOBSN	488  VJYWBLDDQZIGJI
489  VKCYHJWLYTUGCC	490  VLIUMVVQGMLOJG	491  VLUGOADEEDGFLB	492  VLXDPFLIRFYIME
493  VMOJIHDTVZTGDO	494  VMYXUZSZMNBR CN	495  VNEFXHWAHYWLHU	496  VOBBUADSYROGAT

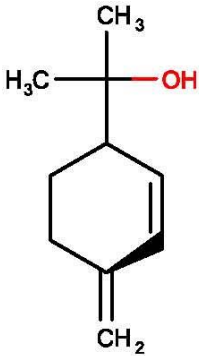
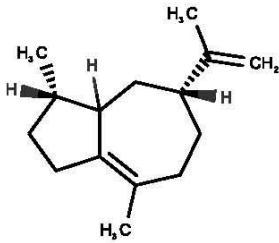
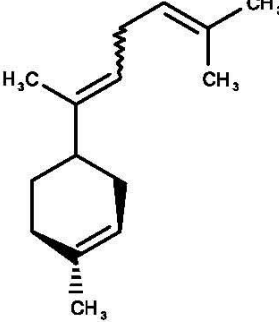
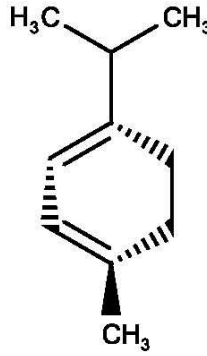
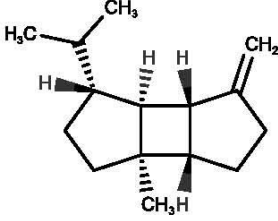
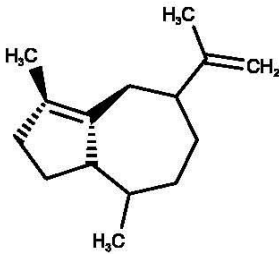
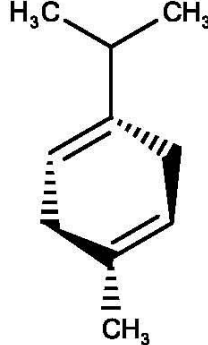
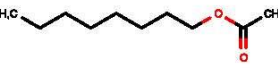
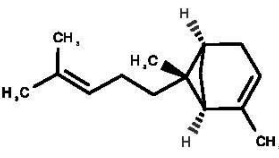
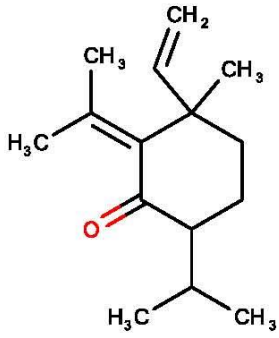
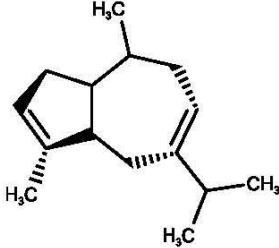
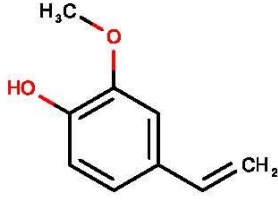
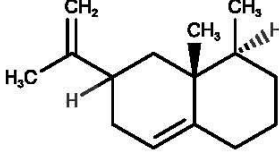
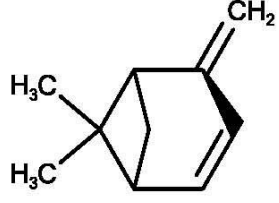
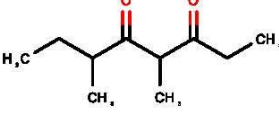
497  VPDZRSSKICPUEY 501	498  VSMOENVRRABVKN 502	499  VUPBIVVRPJDNWN 503	500  VVCHIOKYQRUBED 504
 VVFXXDIPJNSMPW 505	 VWRBCQWXFAGZPC 506	 VYOZKWKETGHHDW 507	 WCDGWAIZRYMVOW 508
 WEEGYLXZBRQIMU 509	 WFNDDSQUKATKNX 510	 WFZFXUZFKAO TRR 511	 WGTRJVCFDUCKCM 512
 WHNNPKNATREGBK	 WJHRAVIQWFQMKF	 WJSDHUCWMSHDCR	 WKZWITZTZWGE

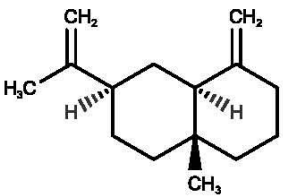
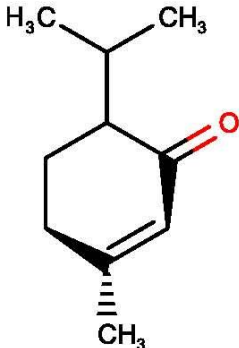
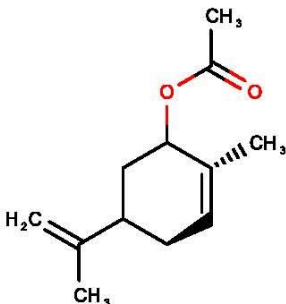
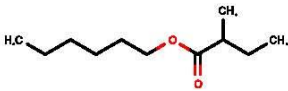
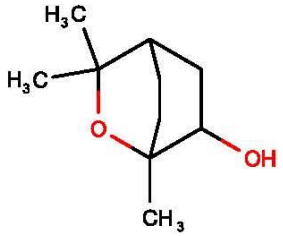
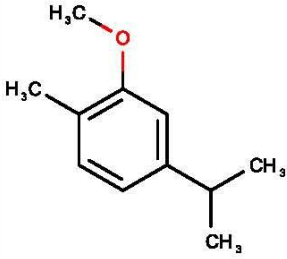
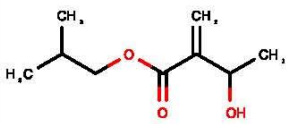
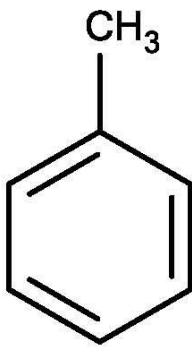
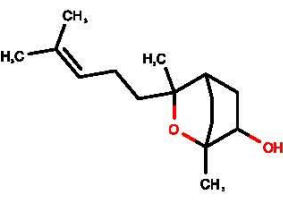
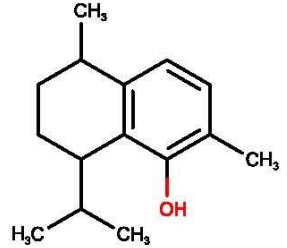
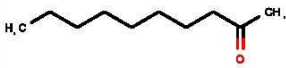
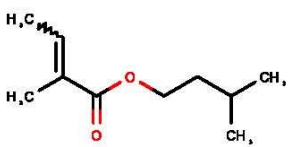
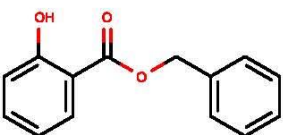
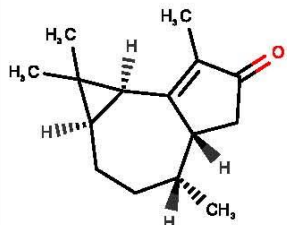
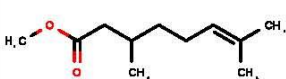
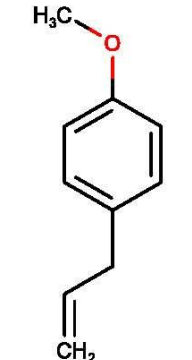
513 	514 	515 	516 
WLNGPDPILFYWK	WMBOCUXXNSOQHM	WMOPMQRJLLIEJV	WONIGEXYPVIKFS
517 	518 	519 	520 
WOYWLLHHWAMFCB	WPGPCDVQHOMQP	WPPVSYVQAKQJNK	WRHGORWNJGOVQY
521 	522 	523 	524 
WRMNZCZEMHIOP	WRYLYDPHFGVWKC	WTARULDDTDQWMU	WTEVQBCEXWBHNA
525 	526 	527 	528 
WTOYNNBCKUYIKC	WTVHAMTYZJGJLJ	WTWBUQJHJGUZCY	WTXBCFKGCNWPLS

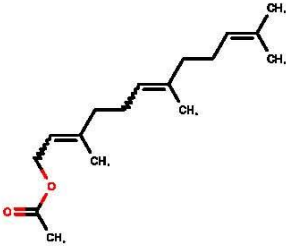
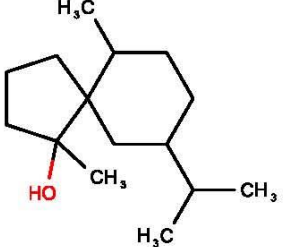
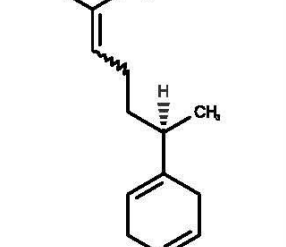
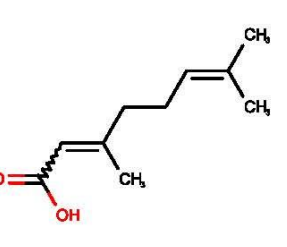
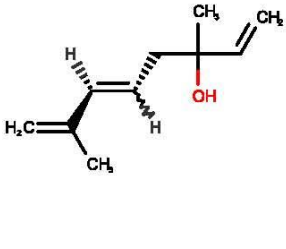
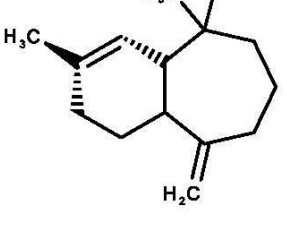
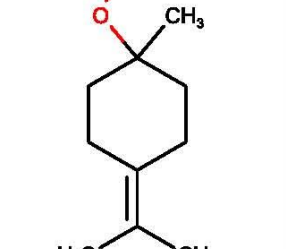
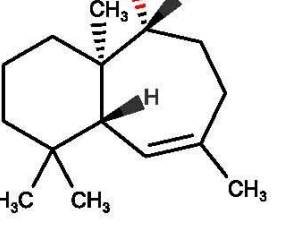
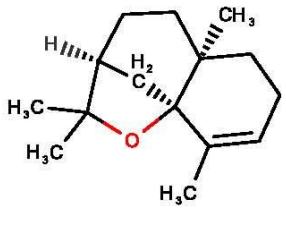
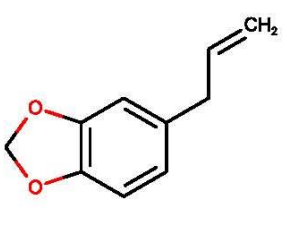
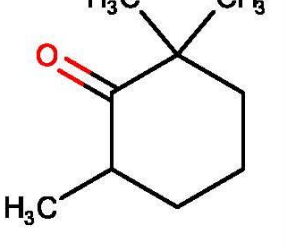
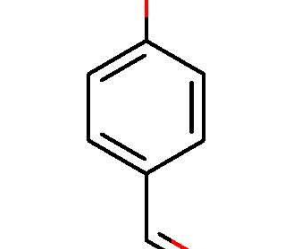
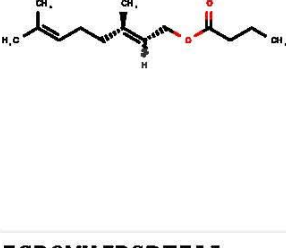
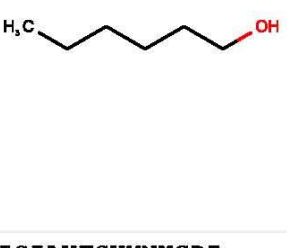
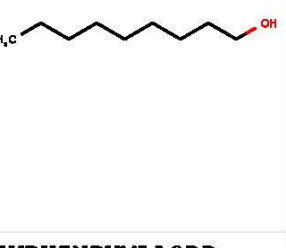
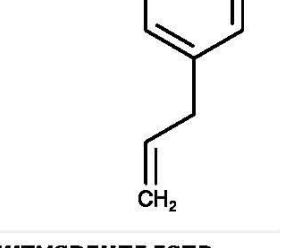
529 	530 	531 	532 
WUOACPNHFRMFNP	WVDDGKGOMKODPV	WWRCMNKATXZARA	WXQGPFFZDVCRBME
533 	534 	535 	536 
WYXXLXHHWYNKJF	XAPCMTMQBXLDBB	XBGUIVFBMBVUEG	XBWACJDEQIZTPR
537 	538 	539 	540 
XCEXBRKEGXBUJE	XCPQUQHBBVVMRQ	XCTSDLUOCRRDLZ	XCYPXQACVEIOS
541 	542 	543 	544 
XDEGQMOKHFPBEW	XDSYKASBVOZOAG	XEAXSPJWIVZRTF	XGEWXQPYPMTSBD

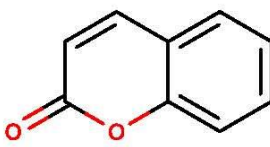
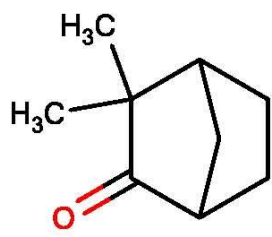
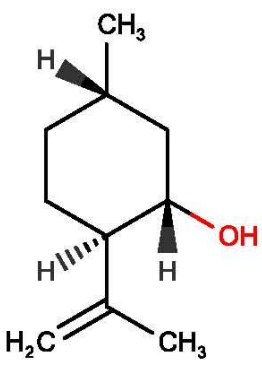
545 	546 	547 	548 
XHXUANMFYXWVNG	XHYAQFCRAQUBTD	XIGFNCYVSHOLIF	XINCECQTMHSORG
549 	550 	551 	552 
XKGLSKVNOSHTAD	XLPDVYGDNRIOFV	XMGQYMWWDQXJUM	XMLSXPIVAXONDL
553 	554 	555 	556 
XMRKUJJDDKYUHV	XNGKCOFXDHYSGR	XOCANRBEQZQNAQ	XPCMQNXXPZEHX
557 	558 	559 	560 
XPDXSIYURCKZBY	XPGWKKLDFXNBPJ	XQPZQXTWYZAXAK	XRKZFZWIIYZDOQO

561  XSIVJVJUIXOEPW	562  XUEHVOLRMXNRKQ	563  XVSZRAWFCDHCBP	564  XVULBTBTFGYVRC
565  XXIKYCPDXIMQM	566  XZRVRYFILCSYSP	567  XZYQCFABZDVOPN	568  YBEONGKDMARZSS
569  YCAQPZXDWPBYBD	570  YCGKKSPKOFEYNJ	571  YCOZIPAWZNQLMR	572  YFHFHLSMISYUAQ
573  YGCZTXZTJXYWCO	574  YGHRJJRRZDOVPD	575  YGMNGQDLUQECTO	576  YGWKXXYGDYYFJU

577 	578 	579 	580 
YGYSWSPXSCQPRC	YHAJBLWYOIUHHM	YHBUQBJHSRGZNF	YHQGMUYUVUMAZJR
581 	582 	583 	584 
YIRAHEODBQONHI	YIWKBKBHKZAWQV	YKFLAYDHMOASIY	YKNWIILGEFFOPE
585 	586 	587 	588 
YLYBTZIQSIBWLI	YMBFCQPIMLNIU	YMIHAYABXZORPU	YOIKPWLIIDGZLM
589 	590 	591 	592 
YOMSJEATGXXYPX	YONHOSLUBQJXPR	YOQFOABVDRBYCG	YOTJIUKJWGJMEV

593  YOVSPTNQHMDJAG	594  YSTPAHQEHQSRJD	595  YTHRBOFHfYZBRJ	596  YUECNVSODFDKOQ
597  YVCUGZBVCHODNB	598  YVLHTQPPMZOCOW	599  YWLLUDSCDSOEDO	600  YXFVVABEGXRONW
601  YXKYEDPZIRLAKN	602  YXYMGKMWKSMRAB	603  ZAJNGDIORYACQU	604  ZARFDQHJMNVLNLE
605  ZCTQGTTXIYCGGC	606  ZEEUIOBUKGZKPS	607  ZFLPOPCZMXGUOJ	608  ZFMSMUAANRJZFM

609  ZGIGZINMAOQWLX	610  ZGZJEDMRXISZCH	611  ZHWZEHFYKZGQFR	612  ZHYZQXUYZJNEHD
613  ZJIQIJIQBTVTDY	614  ZJSIKVDEOWWVEH	615  ZKKBZSOYCMSYRW	616  ZLJPQFLGGAYZAN
617  ZLQADKTVJQXDIG	618  ZMQAUBTXCXRIC	619  ZPVOLGVTNLDBFI	620  ZRSNZINYAWTAHE
621  ZSBOMYJPSRFZAL	622  ZSIAUFGUXNUGDI	623  ZWRUINPWMLAQRD	624  ZYEMGPIYFIJGTP

625	626	627
		
ZYGHJZDHTFUPRJ	ZYPYEBYNXWUCEA	ZYTMANIQRDEHIO

SI 3. Frequency rank order of u-cmcEOC in EO (sub)sets. Subset of (A) EOs from conventional cultivation ($n_{EO}=101$); (B) EOs from certified-organic cultivation ($n_{EO}=74$); (C) all EOs of conventional cultivation, complemented with those EOs of certified-organic cultivation that originated from other plant species, the same plant species but from other plant parts, or the same plant species but a different chemotype ($n_{EO}=141$). (D) complete EO sample ($n_{EO}=175$). See SI 1 for list with EOs

u-cmcEOC rank order in (sub)set X of the EO collection according to frequency of occurrence				
	A ($n_{u-cmcEOC}=518$)	B ($n_{u-cmcEOC}=447$)	C ($n_{u-cmcEOC}=616$)	D ($n_{u-cmcEOC}=627$)
limonene	1	1	1	1
alpha-pinene	2	2	2	2
beta-myrcene	3	3	3	3
beta-caryophyllene	4	4	4	4
beta-pinene	5	5	5	5

SI 4: Correlations between the Drug Discovery Parameters used in the Drug Discovery Filters. (a) Table with Spearman correlations and their corresponding (b) p-values. ns = not significant (p-value > 0.05)

a.

Spearman correlation	molecular mass (Da)	log P	H-donor atoms (#)	H-acceptor atoms (#)	log D (pH 7.4)	molecular rings (#)	rotatable bonds (#)	atoms (#)	molar refractivity (m ³ mol ⁻¹)	C atoms (#)	Muegge's atoms (#)	polar surface area (10 ⁻¹⁰ m)	fused aromatic rings (#)
molecular mass (Da)		0.68	0.10	0.01	0.67	0.34	0.10	0.94	0.94	0.92	0.03	0.07	-0.05
log P	0.68		-0.24	-0.53	0.99	0.16	0.09	0.75	0.80	0.81	-0.44	-0.44	0.01
H-donor atoms (#)	0.10	-0.24		0.37	-0.26	0.03	-0.08	0.11	0.04	-0.01	0.11	0.33	-0.05
H-acceptor atoms (#)	0.01	-0.53	0.37		-0.54	-0.26	0.30	-0.17	-0.19	-0.30	0.85	0.84	-0.08
log D (pH 7.4)	0.67	0.99	-0.26	-0.54		0.16	0.09	0.74	0.79	0.80	-0.45	-0.46	0.01
molecular rings (#)	0.34	0.16	0.03	-0.26	0.16		-0.74	0.32	0.27	0.48	-0.39	-0.37	0.06
rotatable bonds (#)	0.10	0.09	-0.08	0.30	0.09	-0.74		0.05	0.11	-0.07	0.49	0.46	-0.08
atoms (#)	0.94	0.75	0.11	-0.17	0.74	0.32	0.05		0.92	0.92	-0.17	-0.11	-0.07
molar refractivity (m ³ mol ⁻¹)	0.94	0.80	0.04	-0.19	0.79	0.27	0.11	0.92		0.96	-0.18	-0.13	-0.04
C atoms (#)	0.92	0.81	-0.01	-0.30	0.80	0.48	-0.07	0.92	0.96		-0.30	-0.26	-0.03
Muegge's atoms (#)	0.03	-0.44	0.11	0.85	-0.45	-0.39	0.49	-0.17	-0.18	-0.30		0.95	-0.03
polar surface area (10 ⁻¹⁰ m)	0.07	-0.44	0.33	0.84	-0.46	-0.37	0.46	-0.11	-0.13	-0.26	0.95		-0.05
fused aromatic rings (#)	-0.05	0.01	-0.05	-0.08	0.01	0.06	-0.08	-0.07	-0.04	-0.03	-0.03	-0.05	

b.

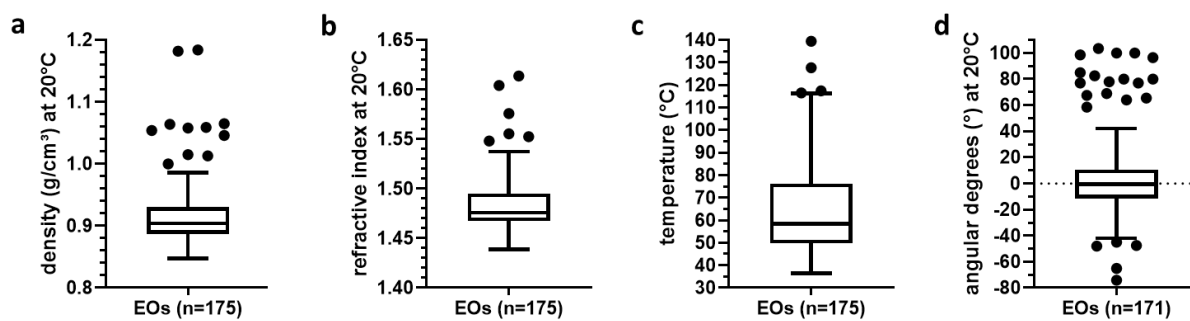
p-values	molecular mass (Da)	log P	H-donor atoms (#)	H-acceptor atoms (#)	log D (pH 7.4)	molecular rings (#)	rotatable bonds (#)	atoms (#)	molar refractivity (m ³ mol ⁻¹)	C atoms (#)	Muegge's atoms (#)	polar surface area (10 ⁻¹⁰ m)	fused aromatic rings (#)
molecular mass (Da)		0.0000	0.0118	n	0.0000	0.0000	0.0143	0.0000	0.0000	0.0000	ns	0.0902	ns
log P	0.0000		0.0000	0.0000	0.0000	0.0001	0.0185	0.0000	0.0000	0.0000	0.0000	0.0000	ns
H-donor atoms (#)	0.0118	0.0000		0.0000	0.0000	ns	ns	0.0076	ns	ns	0.0081	0.0000	ns
H-acceptor atoms (#)	ns	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0352
log D (pH 7.4)	0.0000	0.0000	0.0000	0.0000		0.0001	0.0292	0.0000	0.0000	0.0000	0.0000	0.0000	ns
molecular rings (#)	0.0000	0.0001	ns	0.0000	0.0001		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	ns
rotatable bonds (#)	0.0143	0.0185	ns	0.0000	0.0292	0.0000		ns	0.0074	ns	0.0000	0.0000	ns
atoms (#)	0.0000	0.0000	0.0076	0.0000	0.0000	0.0000	ns		0.0000	0.0000	0.0000	0.0085	ns
molar refractivity (m ³ mol ⁻¹)	0.0000	0.0000	ns	0.0000	0.0000	0.0000	0.0074	0.0000		0.0000	0.0000	0.0008	ns
C atoms (#)	0.0000	0.0000	ns	0.0000	0.0000	0.0000	ns	0.0000	0.0000		0.0000	0.0000	ns
Muegge's atoms (#)	ns	0.0000	0.0081	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	ns
polar surface area (10 ⁻¹⁰ m)	ns	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0085	0.0008	0.0000	0.0000		ns
fused aromatic rings (#)	ns	ns	ns	0.0352	ns	ns	ns	ns	ns	ns	ns	ns	

SI 5. Summary of u-cmcEOCs in EO set (n=175) that correspond with u-cmcADs in DrugBank (n=2,359) including their status ⁶⁴.

	InChIKey-14	u-cmcEOC code in SI 2	u-cmcAD code in DrugBase	status in DrugBase	
				approved [§]	withdrawn [£]
1	BJIOGJUNALELMI	29	DB14188	yes	no
2	DSSYKIVIOFKYAU	77	DB14156	yes	no
3	GLZPCOQZEFWAFX	130	DB14183	yes	no
4	KJPRLNWUNMBNBZ ^{&}	227	DB14184	yes	no
5	LFQSCWFLJHTTHZ	254	DB00898	yes	no
6	MGSRCZKZVOBKFT	277	DB02413	yes	no
7	NOOLISFMXDJSKH	315	DB00825	yes	no
8	OOCCEMITAIZTP	341	DB14186	yes	no
9	OSWPMRLSEDHDF	346	DB09543	yes	no
10	RGZSQWQPBWRIAQ	403	DB13153	yes	no
11	RRAFCDWBNXTKKO	415	DB09086	yes	no
12	SESFYSPDFLNCH	428	DB00676	yes	no
13	WVDDGKGOMKODPV	530	DB06770	yes	no

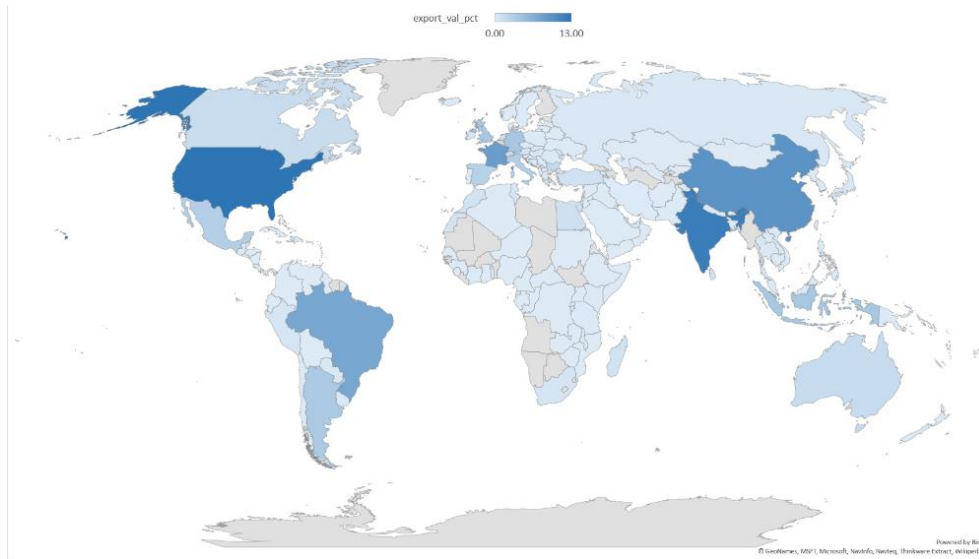
[&] This InChIKey-14 corresponds with ethanol; for more details, see the discussion section. [§] approved: "In DrugBank the status of approved is given to the drugs that have been officially accepted for commercialization in at least one jurisdiction at a given time. Due to the presence of different regulatory agencies around the world, once a drug is approved, this status will remain in the drug card even if the drug is later [withdrawn] from the market in a particular jurisdiction or under investigation for a different indication."

[£] Withdrawn: "In DrugBank this state is given to the drugs that have been discontinued. Although the reason as to why such drugs are withdrawn can range from patient safety and toxicity issues to limited commercial viability, the formal rationale behind such decisions lies typically with the regional or national public health administration that issued the withdrawal"
<https://dev.drugbankplus.com/guides/terms/approved-drug>

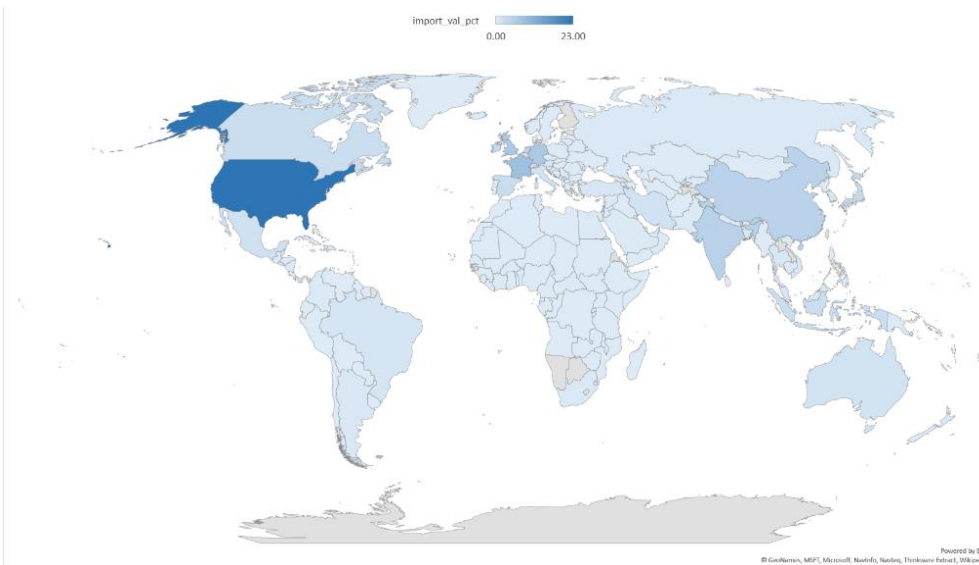


SI 6: Summary of selected characteristics related to quality control of the EOs we used. Tukey boxplot [minimum; 25th percentile; median; 75th percentile; maximum] (unit of measurement) of: **(a)** density [0.85; 0.89; 0.90; 0.93; 1.18] (g/cm^3), **(b)** refractive index [1.439; 1.467; 1.476; 1.495; 1.614], **(c)** flashpoint [36.4; 49.6; 58.4; 76.3; 139.4] ($^\circ\text{C}$), and **(d)** optical rotation [-74.0; -11.5; -0.5; 10.5; 103.5] ($^\circ$).

a.



b.



SI 7: World map visualizing percentage world (a) export and (b) import value of EOs per country (2017) ⁶⁹.