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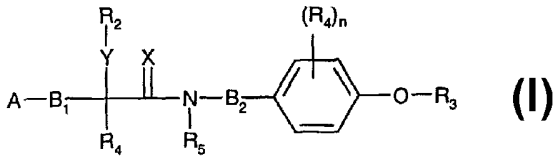
(54) **Title:** NOVEL α-OXYGENATED OR α-THIOLATED CARBOXYLIC ACID PENETHYLAMIDE DERIVATIVES



(I)

(57) **Abstract:** The invention relates to α-oxygenated or α-thiolated carboxylic acid phenethylamide derivatives of the general formula I including the optical isomers thereof and mixtures of such isomers, wherein A stands for optionally substituted aryl or optionally substituted heteroaryl; X is oxygen or sulfur; Y is oxygen or sulfur; $R_1$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl or halocycloalkyl; $R_2$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups me be optionally substituted by halogen; or optionally substituted arylalkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl or optionally substituted aryloxy-alkyl; $R_3$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups me be optionally substituted by halogen; or is optionally substituted aryl-alkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl, optionally substituted aryloxy-alkyl, optionally substituted heteroaryl-alkyl, optionally substituted heteroaryl-alkenyl or optionally substituted heteroaryl-alkynyl; $R_4$ is alkyl, alkenyl, alkynyl, alkoxy-alkyl, alkoxy, alkenyloxy, alkynyloxy, alkylthio, alkanoyl, alkylamino, dialkylamino, alkoxycarbonyl, whereof all alkyl- alkenyl or alkynyl-groups me be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl; $R_5$ is hydrogen, alkyl, alkenyl or alkynyl; n is an integer 0, 1, 2, 3, or 4; $B_1$ represents a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$, wherein q is an integer 2, 3 or 4; r is an integer 0, 1, 2, 3; s is an integer 1, 2 or 3, provided that (r + s) is either 1, 2 or 3; Z is -0-, -S-, -SO- -S02-, $NR_6$-, -CO-, -OOC-, -COO-, $-NR_6$-CO- or -CO-$NR_6$- ; $R_6$ is hydrogen or alkyl; $R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or alkyl ; and $B_2$ is an alkylene bridge. These compounds possess useful plant protecting properties and may advantageously be employed in agricultural practice for controlling or preventing the infestation of plants by phytopathogenic microorganisms, especially fungi.

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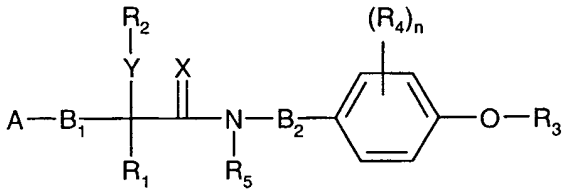
Novel α-Oxygenated or α-Thiolated Carboxylic Acid Phenethylamide Derivatives

The present invention relates to novel α-oxygenated or α-thiolated carboxylic acid phenethylamide derivatives of formula I. It relates to the preparation of the novel active compounds, and to agrochemical compositions comprising at least one of these compounds as active ingredient. The invention further relates to the preparation of the said compositions and to the use of the compounds or of the compositions for controlling or preventing the infestation of plants by phytopathogenic microorganisms, especially fungi.

The invention relates to α-oxygenated or α-thiolated carboxylic acid phenethylamide derivatives of the general formula I



(I)

including the optical isomers thereof and mixtures of such isomers, wherein

A stands for optionally substituted aryl or optionally substituted heteroaryl;

X is oxygen or sulfur;

Y is oxygen or sulfur;

$R_1$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl or halocycloalkyl;

$R_2$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or optionally substituted aryl-alkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl or optionally substituted aryloxy-alkyl;

$R_3$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or is optionally substituted aryl-alkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl, optionally substituted aryloxy-alkyl, optionally substituted heteroaryl-alkyl, optionally substituted heteroaryl-alkenyl or optionally substituted heteroaryl-alkynyl,

$R_4$ is alkyl, alkenyl, alkynyl, alkoxy-alkyl, alkoxy, alkenyloxy, alkynyloxy, alkylthio, alkanoyl, alkylamino, dialkylamino, alkoxycarbonyl, whereof all alkyl- alkenyl or alkynyl-groups may be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl;
$R_5$ is hydrogen, alkyl, alkenyl or alkynyl;
n is an integer 0,1, 2, 3, or 4;
$B_1$ represents a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$ , wherein
q is an integer 2, 3 or 4;
r is an integer 0, 1, 2, 3; s is an integer 1, 2 or 3, provided that (r + s) is either 1, 2 or 3;
Z is –O-, -S-, -SO-, $-SO_2-$, $NR_6-$, -CO-, -OOC-, -COO-, $-NR_6-CO-$ or $-CO-NR_6-$ ;
$R_6$ is hydrogen or alkyl ;
$R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or alkyl ; and
$B_2$ is an alkylene bridge.

In the above definition aryl includes aromatic hydrocarbon rings like phenyl, naphthyl, anthracenyl, phenanthrenyl and biphenyl like 1,3-biphenyl and 1,4-biphenyl, with phenyl being preferred. The same definition applies where aryl is part of aryloxy.
Heteroaryl stands for aromatic ring systems comprising mono-, bi- or tricyclic systems wherein at least one oxygen, nitrogen or sulfur atom is present as a ring member. Examples are furyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, tetrazinyl, indolyl, benzothienyl, benzofuranyl, benzimidazolyl, indazolyl, benzotriazolyl, benzothiazolyl, benzoxazolyl, quinolinyl, isoquinolinyl, phthalazinyl, quinoxalinyl, quinazolinyl, cinnolinyl and naphthyridinyl.
The above aryl and heteroaryl groups may be optionally substituted. This means that they may carry one or more identical or different substituents. Normally not more than three substituents are present at the same time. Examples of substituents of aryl or heteroaryl groups are: alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, phenyl and phenyl-alkyl, it being possible in turn for all of the preceding groups to carry one or more identical or different halogen atoms; alkoxy; alkenyloxy; alkynyloxy; alkoxyalkyl; haloalkoxy, alkylthio; haloalkylthio; alkylsulfonyl; formyl; alkanoyl; hydroxy; halogen; cyano; nitro; amino; alkylamino; dialkylamino; carboxyl; alkoxycarbonyl; alkenyloxycarbonyl; or alkynyloxycarbonyl.
Typical examples include 4-chlorophenyl, 4-bromophenyl, 3,4-dichlorophenyl, 4-chloro-3-fluorophenyl, 3-chloro-4-fluorophenyl, 4-methylphenyl, 4-ethylphenyl, 4-propargyloxyphenyl, 1-naphthyl, 2-naphthyl, 4-biphenylyl, 4'-chloro-4-biphenylyl, 5-chloro-thien-2-yl, 5-methyl-

thien-2-yl, 5-methyl-fur-2-yl, 5,6,7,8-tetrahydro-1-naphthyl, 5,6,7,8-tetrahydro-2-naphthyl, 3,4-dioxomethylenyl-phenyl, 3,4-dioxoethylenyl-phenyl, 6-benzothienyl, 7-benzothienyl, 3-methylphenyl, 4-fluorophenyl, 4-ethenylphenyl, 4-ethynylphenyl, 4-propylphenyl, 4-isopropylphenyl, 4-tert.butylphenyl, 4-ethoxyphenyl, 4-ethynyloxyphenyl, 4-phenoxyphenyl, 4-methylthienyl, 4-methylsulfonylphenyl, 4-cyanophenyl, 4-nitrophenyl, 4-methoxycarbonyl-phenyl, 3-bromophenyl, 3-chlorophenyl, 2-chlorophenyl, 2,4-dichlorophenyl, 3,4,5-trichlorophenyl, 3,4-difluorophenyl, 3,4-dibromophenyl, 3,4-dimethoxyphenyl, 3,4-dimethylphenyl, 3-chloro-4-cyanophenyl, 4-chloro-3-cyanophenyl, 3-bromo-4-methylphenyl, 4-methoxy-3-methylphenyl, 3-fluoro-4-methoxyphenyl, 4-chloro-3-methylphenyl, 4-chloro-3-trifluoromethyl-phenyl, 4-bromo-3-chlorophenyl, 4-trifluoromethylphenyl, 4-trifluoromethoxyphenyl, 4-methoxyphenyl, 4'-methyl-4-biphenylyl, 4'-trifluoromethyl-4-biphenylyl, 4'-bromo-4-biphenylyl, 4'-cyano-4-biphenylyl, 3'4'-dichloro-4-biphenylyl, etc.

Again, the same optional substituents may be present where aryl is part of aryloxy or arylthio.

Optionally substituted alkyl, alkenyl or alkynyl groups may carry one or more substituents selected from halogen, alkyl, alkoxy, alkylthio, cycloalkyl, phenyl, nitro, cyano, hydroxy, mercapto, alkylcarbonyl or alkoxycarbonyl. This also applies where alkyl, alkenyl or alkynyl is part of another substituent like alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkenylyoxy, alkenylthio, alkenylsulfinyl, alkenylsufonyl, alkynyloxy, alkynylthio, alkynylsulfinyl and alkynylsulfonyl.

Preferably, the number of substituents is no more than three with the exception of halogen, where the alkyl groups may be perhalogenated.

In the above definitions "halo" or "halogen" includes fluorine, chlorine, bromine and iodine.

The alkyl, alkenyl and alkynyl radicals may be straight-chain or branched. This applies also to the alkyl, alkenyl or alkynyl parts of other alkyl-, alkenyl- or alkynyl-containing groups.

Depending upon the number of carbon atoms mentioned, alkyl on its own or as part of another substituent is to be understood as being, for example, methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl and the isomers thereof, for example isopropyl, isobutyl, tert-butyl or sec-butyl, isopentyl or tert-pentyl.

Cycloalkyl for example is, depending upon the number of carbon atoms mentioned, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, bicyclohexyl, cycloheptyl, bicycloheptyl, cyclooctyl or bicyclooctyl.

Depending upon the number of carbon atoms mentioned, alkenyl as a group or as a structural element of other groups is to be understood as being, for example
$-CH=CH_2$, $-CH_2-CH=CH_2$, $-CH=CH-CH_3$, $-CH_2-CH=CH-CH_3$, $-CH_2-CH_2-CH=CH_2$, $-CH_2-CH(CH_3)-CH=CH_2$, $-CH_2-C(CH_3)=CH_2$, $-CH=CH-(CH_2)_2-CH_3$, $-CH_2-CH_2-CH=CH-CH_3$, $-CH_2-CH_2-C(CH_3)=CH-CH_3$, $-CH(CH_3)-CH_2-CH=CH-CH_3$, $-CH_2-CH_2-CH=CH-CH_2-CH_3$, $-CH=CH-(CH_2)_3-CH_3$, $-CH_2-CH_2-CH=C(CH_3)-CH_3$, $-CH_2-CH_2-CH=C(CH_3)-CH_2-CH_3$, $-C(CH_3)=CH_2$, $-CH(CH_3)-CH=CH_2$, $-CH(CH_3)-CH=CH-CH_3$, $-CH(CH_3)-CH_2-CH=CH_2$, $-CH_2-CH(CH_3)-C(CH_3)=CH_2$, $-CH_2-C(CH_3)=CH-CH_3$, $-C(CH_3)=CH-(CH_2)_2-CH_3$, $-CH(CH_3)-CH_2-C(CH_3)=CH-CH_3$, $-CH(CH_3)-(CH_2)_2-CH=CH_2$, $-C(CH_3)=CH-(CH_2)_3-CH_3$, $-CH(CH_3)-CH_2-CH=CH-CH_2-CH_3$, $-(CH_2)_3-CH=CH_2$, $-C(CH_3)=CH-CH_3$, $-CH(CH_3)-CH_2-C(CH_3)=CH-CH_3$, or $-CH(CH_3)-CH_2-CH=CH-CH_2-CH_3$.
Alkynyl as a group or as a structural element of other groups is, for example
$-C\equiv CH$, $-CH_2-C\equiv CH$, $-C\equiv C-CH_3$, $-CH_2-C\equiv C-CH_3$, $-CH_2-CH_2-C\equiv CH$, $-C\equiv C-CH_2-CH_3$, $-CH_2-CH(CH_3)-C\equiv CH$, $-C\equiv C-(CH_2)_2-CH_3$, $-CH_2-CH_2-C\equiv C-CH_3$, $-CH(CH_3)-CH_2-C\equiv C-CH_3$, $-CH_2-CH_2-C\equiv C-CH_2-CH_3$, $-C\equiv C-(CH_2)_3-CH_3$, $-C\equiv C-(CH_2)_4-CH_3$, $-CH(CH_3)-C\equiv CH$, $-CH(CH_3)-C\equiv C-CH_3$, $-CH(C_2H_5)-C\equiv C-CH_3$, $-CH(CH_3)-CH_2-C\equiv CH$, $-CH(CH_3)-(CH_2)_2-C\equiv CH$, $-CH(CH_3)-CH_2-C\equiv C-CH_2-CH_3$, $-(CH_2)_3-C\equiv CH$, or $-CH(CH_3)-CH_2-C\equiv C-CH_2-CH_3$, depending on the number of carbon atoms present.
A haloalkyl, haloalkenyl, haloalkynyl or halocycloalkyl group may contain one or more (identical or different) halogen atoms, and for example may stand for $CHCl_2$, $CH_2F$, $CCl_3$, $CH_2Cl$, $CHF_2$, $CF_3$, $CH_2CH_2Br$, $C_2Cl_5$, $CH_2Br$, $CHClBr$, $CF_3CH_2$, $CH_2CH_2Cl$, $CH_2CH_2F$, $CH_2CHF_2$, $CH_2-C=CHCl$, $CH=CCl_2$, $CH=CF_2$, $CH_2-C\equiv CCl$, $CH_2-C\equiv C-CF_3$, etc.

$B_1$ and $B_2$ characterize bivalent portions of the molecular structure of formula I, which have the function of bridging members. Typically, these portions have a linear structure, but may also be branched and may carry further substituents. Examples include the bridge members of the formula $-CH(R_{20})-(CH_2)_p-$, wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0 or 1 for the bridge $B_2$. It may also stand for an $C_1$-$C_4$-alkylene bridge for example, but also extends to those bridge members which are interrupted or linked via a hetero atom, preferably oxygen or sulfur. Typical examples include $-CH_2-$, $-CH_2-CH_2-$, $-CH(CH_3)-CH_2-$, $-CH(CH_3)-$, $-O-CH_2-$, $-S-CH_2-$, $-CH_2-CH_2-CH_2-$, $CH(CH_3)-CH_2-$, $-SO_2-CH_2-$, $-CH_2-O-CH_2-$, or $CH(CH_3)-$. Examples for B1 include the linking members $-CH_2-CH_2-$, $-CH(CH_3)-CH_2-$, $-CH_2-CH_2-CH_2-$, $CH(CH_3)-CH_2-$, or $CH_2-CH(CH_3)-$

The presence of at least one asymmetric carbon atom in the compounds of formula I means that the compounds may occur in optically isomeric and enantiomeric forms. As a result of the presence of a possible aliphatic C=C double bond, geometric isomerism may also occur. Formula I is intended to include all those possible isomeric forms and mixtures thereof. Where no specific isomer is specified the mixtures of diastereomers or racemat is meant, as obtainable from the synthesis methods.

Preferred subgroups of compounds of formula I are those wherein

A is phenyl, naphthyl, 1,3-biphenyl, 1,4-biphenyl, fluorenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, tetrazinyl, indolyl, indazolyl, benzofuranyl, benzothienyl, benzothiazolyl, benzoxazolyl, quinolinyl or isoquinolinyl, each optionally substituted by one or more substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, $C_1$-$C_8$-cycloalkyl, $C_1$-$C_8$-cycloalkyl-$C_1$-$C_{10}$-alkyl, phenyl, phenyl-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_{10}$-alkoxy-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, $C_3$-$C_{10}$-alkenyloxycarbonyl, $C_3$-$C_{10}$-alkynyloxycarbonyl, $C_1$-$C_{10}$-alkylamino, di-$C_1$-$C_{10}$-alkylamino, hydroxy, halogen, cyano, nitro, amino and formyl radicals, wherein in turn the alkyl- alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by one or more halogen atoms; or

A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl or pyridyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-haloalkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, hydroxy, halogen, cyano, nitro and formyl; or

A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, thienyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, halogen, cyano, nitro and formyl; or

A is phenyl or thienyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, $C_2$-$C_4$-alkenyl, $C_1$-$C_4$-alkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_4$-alkanoyl, halogen and cyano; or

A is phenyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, halogen and cyano; or

X is oxygen; or

Y is oxygen; or

$R_1$ stands for hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl or $C_3$-$C_8$-cycloalkyl, wherein all alkyl- alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by halogen; or

$R_1$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl or $C_3$-$C_{10}$-haloalkynyl; or

$R_1$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl or $C_3$-$C_8$-alkynyl; or

$R_1$ is hydrogen; or

$R_2$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or stands for optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl or optionally substituted aryloxy-$C_1$-$C_6$-alkyl; or

$R_2$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein phenyl may optionally be mono- or disubstituted by substituents selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; or

$R_2$ stands for hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; or

$R_2$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl; or

$R_2$ is hydrogen, $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; or

$R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or is optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl, optionally substituted aryloxy-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_3$-$C_{10}$-alkenyl or optionally substituted heteroaryl-$C_3$-$C_{10}$-alkynyl; or

$R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein the phenyl groups are optionally mono- or disubstituted by radicals selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; or

$R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; or

$R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl; or

$R_3$ is $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; or

$R_4$ is $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl, $C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkylamino, di-$C_1$-$C_6$-alkylamino or $C_1$-$C_6$-alkoxycarbonyl, wherein all alkyl- , alkenyl or alkynyl-groups may be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl; or

$R_4$ is $C_1$-$C_6$-alkyl, $C_1$-$C_6$-haloalkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$alkylthio, halogen, cyano or nitro; or

$R_4$ is $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy or halogen; or

$R_4$ is 3-$C_1$-$C_6$-alkoxy; or

$R_4$ is 3-methoxy or 3-ethoxy; or

$R_5$ is hydrogen, $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl or $C_3$-$C_6$-alkynyl; or

$R_5$ is hydrogen or $C_1$-$C_4$-alkyl; or

$R_5$ is hydrogen or methyl; or

$R_5$ is hydrogen; or

$B_1$ stands for a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$, wherein $R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or $C_1$-$C_4$-alkyl, q is an integer 2, 3 or 4, r is an integer 0, 1, 2, 3; s is an integer 1, 2 or 3, provided that (r + s) is either 1, 2 or 3, Z is –O-, -S-, $NR_6$-, -CO-, -OOC-, -COO-, $-NR_6$-CO- or –CO-$NR_6$- and $R_6$ is hydrogen or $C_1$-$C_4$-alkyl; or

$B_1$ stands for a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$, wherein $R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or $C_1$-$C_4$-alkyl, q is the integer 2, r is the integer 0; s is the integer 1 , and Z is –O-, -S- or –CO- ; or

$B_1$ is selected from $-CH_2-CH_2-$, $-O-CH_2-$ and $-S-CH_2-$ ; or

n is an integer from 0 to 2; or

n is the integer 0 or 1; or

n is the integer 1; or

$B_2$ is an $C_1$-$C_6$-alkylene-bridge; or

$B_2$ is an alkylene-bridge of the formula $-CH(R_{20})-(CH_2)_p-$ , wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0, 1 or 2; or

$B_2$ is $-CH_2-CH_2-$, $CH_2-$, $CH(CH_3)-CH_2-$ or $CH(CH_3)-$ ; or

$B_2$ is $-CH_2-CH_2-$ .

Further preferred subgroups are those wherein

A is phenyl, naphthyl, 1,3-biphenyl, 1,4-biphenyl, fluorenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, tetrazinyl, indolyl, indazolyl, benzofuranyl, benzothienyl, benzothiazolyl, benzoxazolyl, quinolinyl or isoquinolinyl, each optionally substituted by one or more substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, $C_1$-$C_8$-cycloalkyl, $C_1$-$C_8$-cycloalkyl-$C_1$-$C_{10}$-alkyl, phenyl, phenyl-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_{10}$-alkoxy-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, $C_3$-$C_{10}$-alkenyloxycarbonyl, $C_3$-$C_{10}$-alkynyloxycarbonyl, $C_1$-$C_{10}$-alkylamino, di-$C_1$-$C_{10}$-alkylamino, hydroxy, halogen, cyano, nitro, amino and formyl radicals, wherein in turn the alkyl- alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by one or more halogen atoms; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ stands for hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl or $C_3$-$C_8$-cycloalkyl, wherein all alkyl-alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by halogen; and $R_2$ is

hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or stands for optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl or optionally substituted aryloxy-$C_1$-$C_6$-alkyl; and $R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or is optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl, optionally substituted aryloxy-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_3$-$C_{10}$-alkenyl or optionally substituted heteroaryl-$C_3$-$C_{10}$-alkynyl; and $R_4$ is $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl, $C_3$-$C_6$-alkynyl, $C_1$-$C_6$—alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkylamino, di-$C_1$-$C_6$-alkylamino or $C_1$-$C_6$-alkoxycarbonyl, wherein all alkyl- alkenyl or alkynyl-groups may be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl; and $R_5$ is hydrogen, $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl or $C_3$-$C_6$-alkynyl; and and $B_2$ is an $C_1$-$C_6$-alkylene-bridge; and n is an integer from 0 to 2.

Among these compounds those are preferred wherein A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl or pyridyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-haloalkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, hydroxy, halogen, cyano, nitro and formyl.

Further preferred subgroups are those wherein

A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl or pyridyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-haloalkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, hydroxy, halogen, cyano, nitro and formyl; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ is hydrogen,

$C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl or $C_3$-$C_{10}$-haloalkynyl; and $R_2$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein phenyl may optionally be mono- or disubstituted by substituents selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and $R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein the phenyl groups are optionally mono- or disubstituted by radicals selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and $R_4$ is $C_1$-$C_6$-alkyl, $C_1$-$C_6$-haloalkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$alkylthio, halogen, cyano or nitro; and $R_5$ is hydrogen, $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl or $C_3$-$C_6$-alkynyl; and n is an integer from 0 to 2; and $B_2$ is an alkylene-bridge of the formula $-CH(R_{20})-(CH_2)_p-$ , wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0, 1 or 2; or wherein

A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, thienyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl or $C_3$-$C_8$-alkynyl; and $R_2$ stands for hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; and $R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; and $R_4$ is $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy or halogen; and $R_5$ is hydrogen or $C_1$-$C_4$-alkyl; and $B_1$ stands for a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$ , wherein $R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or $C_1$-$C_4$-alkyl, q is the integer 2, r is the integer 0; s is the integer 1 , and Z is –O-, -S- or –CO- ; and n is the integer 0 or 1; and $B_2$ is an alkylene-bridge of the

formula -CH($R_{20}$)-($CH_2$)$_p$- , wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0, 1 or 2; or wherein

A is phenyl or thienyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, $C_2$-$C_4$-alkenyl, $C_1$-$C_4$-alkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_4$-alkanoyl, halogen and cyano; and X is oxygen ; and Y is oxygen; and $R_1$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl or $C_3$-$C_8$-alkynyl; and $R_2$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl; and $R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl; and $R_4$ is 3-$C_1$-$C_6$-alkoxy; and $R_5$ is hydrogen or methyl; and $B_1$ is selected from -$CH_2$-$CH_2$-, -O-$CH_2$- and –S-$CH_2$- ; and n is the integer 0 or 1; and $B_2$ is -$CH_2$-$CH_2$-, $CH_2$-, CH($CH_3$)-$CH_2$- or CH($CH_3$)- ; or wherein

A is phenyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, halogen and cyano; and X and Y are bot oxygen; and $R_1$ is hydrogen; and $R_2$ is hydrogen, $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; and $R_3$ is $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; and $R_4$ is 3-methoxy or 3-ethoxy; and $R_5$ is hydrogen; and $B_1$ is selected from -$CH_2$-$CH_2$-, -O-$CH_2$- and –S-$CH_2$- ; and n is the integer 1; and $B_2$ is -$CH_2$-$CH_2$- .

Preferred individual compounds are:
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,

4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,

3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide, and

3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide.

The optically pure enantiomers of these compounds are mostly obtained as mixtures of the R- and S- forms. It is however possible to obtain the pure enantiomers either by classical separation methods or by stereoselective synthesis methods. In practical preparation enantioenriched mixture of both forms may be obtained, while on laboratory scale analytically pure enatiomers may be obtained, such as:
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
(R)-4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(R)-4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,

(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
(R)-3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,

(R)-3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide, and
(R)-3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide, and
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,

(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
(S)-4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(S)-4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
(S)-3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,

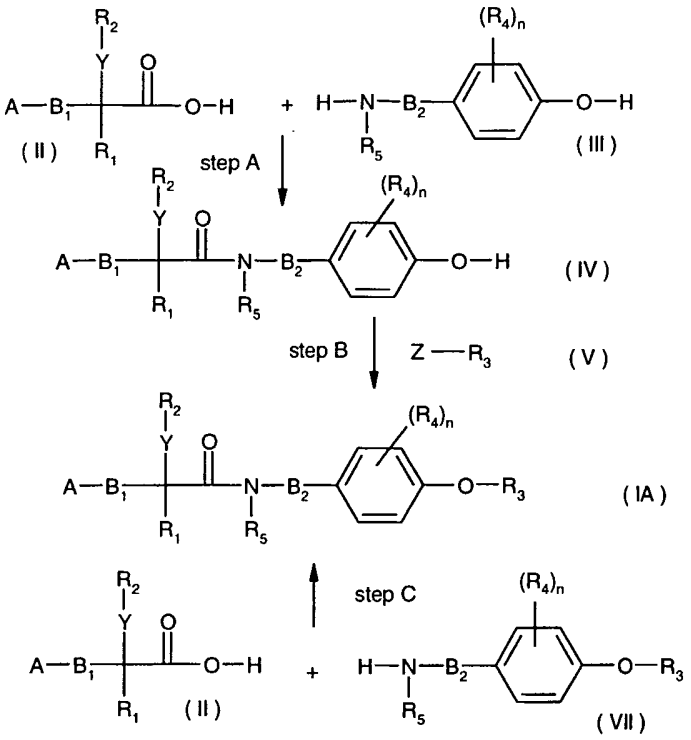
(S)-3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-

propionamide,
(S)-3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide, and
(S)-3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide.

Certain mandelic acid derivatives have been proposed for controlling plant-destructive fungi (for example in WO 94/29267 in WO 96/17840 and in PCT/EP01/05530). The action of those preparations is not, however, satisfactory in all aspects and needs of the agricultural practices. Surprisingly, with the compound structure of formula I, new kinds of microbiocides having a high level of activity have been found.

The compounds of formula I may be obtained according to one of the processes of Schemes 1 to 5:

Scheme 1:




Step A: An acid of formula II or a carboxy-activated derivative of an acid of formula II wherein A, $B_1$, $R_1$, $R_2$ and Y are as defined for formula I is reacted with an amine of formula III wherein $B_2$, $R_4$ and $R_5$ are as defined for formula I, optionally in the presence of a base and optionally in the presence of a diluting agent.

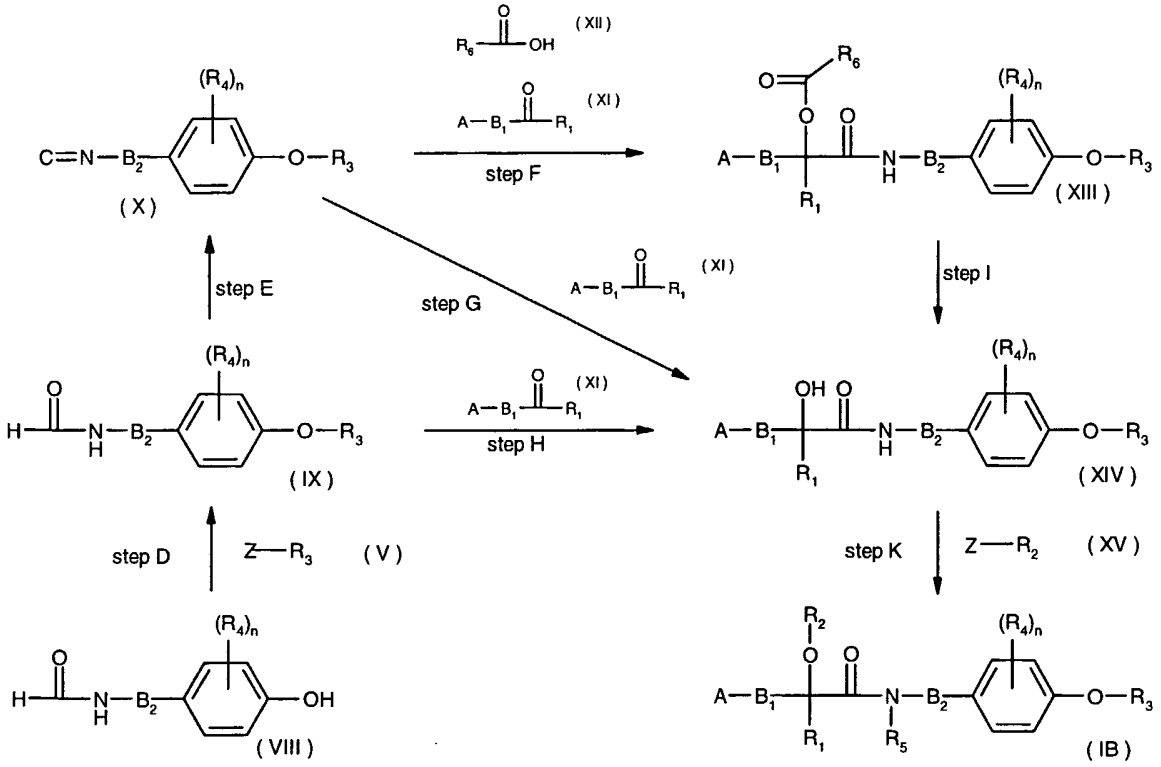
Carboxy-activated derivatives of the acid of formula II are all compounds having an activated carboxyl group like an acid halide, such as an acid chloride; like symmetrical or mixed anhydrides, such as mixed anhydrides with O-alkylcarbonates; like activated esters, such as p-nitrophenylesters or N-hydroxysuccinimidesters, or even normal esters, such as methylesters, ethylesters, n-propylesters, iso-propylesters, n-butylesters, tert-butylesters, neo-pentylesters or iso-amylesters; as well as in-situ-formed activated forms of the acid of formula II with condensating agents, such as dicyclohexylcarbodiimide, carbonyldiimidazole, benzotriazol-1-yloxy-tris(dimethylamino)phosphonium hexafluorophosphate, O-benzotriazol-1-yl-N,N,N',N'-bis(pentamethylene)uronium hexafluorophosphate, O-benzotriazol-1-yl-N,N,N',N'-bis(tetramethylene)uronium hexafluorophosphate, O-benzotriazol-1-yl-N,N,N',N'-tetramethyluronium hexafluorophosphate or benzotriazol-1-yloxy-tripyrrolidinophosphonium hexafluorophosphate. The mixed anhydrides of the acids of the formula II may be prepared by reaction of an acid of formula II with chloroformic acid esters like chloroformic acid alkylesters, such as ethyl chloroformate or isobutyl chloroformate, optionally in the presence

of an organic or inorganic base like a tertiary amine, such as triethylamine, N,N-diisopropyl-ethylamine, pyridine, N-methyl-piperidine or N-methyl-morpholine.
The present reaction is preferably performed in a solvent like aromatic, non-aromatic or halogenated hydrocarbons, such as chlorohydrocarbons e.g. dichloromethane or toluene; ketones e.g. acetone; esters e.g. ethyl acetate; amides e.g. N,N-dimethylformamide; nitriles e.g. acetonitrile; or ethers e.g. diethylether, tert-butyl-methylether, dioxane or tetrahydrofuran or water. It is also possible to use mixtures of these solvents. The reaction is performed optionally in the presence of an organic or inorganic base like a tertiary amine, e.g. triethylamine, N,N-diisopropyl-ethylamine, pyridine, N-methyl-piperidine or N-methyl-morpholine, like a metal hydroxide or a metal carbonate, preferentially an alkali hydroxide or an alkali carbonate, such as lithium hydroxide, sodium hydroxide or potassium hydroxide at temperatures ranging from -80°C to +150 °C, preferentially at temperatures ranging from -40°C to +40°C.

Step B: The compounds of formula IA may be prepared as final product by reacting a phenol of formula IV wherein A, $B_1$, $B_2$, $R_1$, $R_2$, $R_4$, $R_5$ and Y are as defined for formula I with a compound of formula V wherein $R_3$ is as defined for formula I and wherein Z is a leaving group like a halide such as chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate.
The reaction is advantageously performed in a solvent like aromatic, non-aromatic or halogenated hydrocarbons, such as chlorohydrocarbons e.g. dichloromethane or toluene; ketones e.g. acetone or 2-butanone; esters e.g. ethyl acetate, ethers e.g. diethylether, tert-butyl-methylether, dioxane or tetrahydrofuran; amides e.g. N,N-dimethylformamide; nitriles e.g. acetonitrile; alcohols e.g. methanol, ethanol, isopropanol, n-butanol or tert-butanol; sulfoxides e.g. dimethylsulfoxide or water. It is also possible to use mixtures of these solvents. The reaction is performed optionally in the presence of an organic or inorganic base like a tertiary amine, such as triethylamine, N,N-diisopropyl-ethylamine, pyridine, N-methyl-piperidine or N-methyl-morpholine, like a metal hydroxide, a metal carbonate or a metal alkoxide, preferentially an alkali hydroxide, an alkali carbonate or an alkali alkoxide, such as lithium hydroxide, sodium hydroxide, potassium hydroxide, sodium carbonate, potassium carbonate, sodium methoxide, potassium methoxide, sodium ethoxide, potassium ethoxide, sodium tert-butoxide or potassium tert-butoxide at temperatures ranging from -80°C to +200°C, preferentially at temperatures ranging from 0°C to +120°C.

Step C: Alternatively to step A and step B, an acid of formula II or a carboxy-activated derivative of an acid of formula II wherein A, $B_1$, $R_1$, $R_2$ and Y are as defined for formula I is reacted with an amine of formula VII wherein $B_2$, $R_3$, $R_4$ and $R_5$ are as defined for formula I under the same conditions as defined for step A, optionally in the presence of a base and optionally in the presence of a diluting agent.

Scheme 2:




Step D: A compound of formula VIII wherein $B_2$ and $R_4$ are as defined for formula I is alkylated with a compound of formula V (see Scheme 1) wherein $R_3$ and Z are as defined for Scheme 1 under the same conditions as defined for step B in Scheme 1.

Step E: A compound of formula IX wherein $B_2$, $R_3$ and $R_4$ are as defined for formula I is dehydrated to an isocyanide of formula X wherein $B_2$, $R_3$ and $R_4$ are as defined for formula I under conditions known *per se* (D. Seebach, G. Adam, T. Gees, M. Schiess, W. Weigang, *Chem. Ber.* **1988**, *121*, 507).

Step F: An isocyanide of formula X wherein $B_2$, $R_3$ and $R_4$ are as defined for formula I is reacted in a three-component Passerini reaction (J. March, *Advanced Organic Chemistry*,

5th ed., Wiley, **2001**, p. 1252) with an aldehyde or ketone of formula XI, wherein A, $B_1$ and $R_1$ are as defined for formula I in the presence of a carboxylic acid XII wherein $R_6$ is hydrogen or lower alkyl, typically acetic acid, to give a O-acyl-a-hydroxy amide of formula XIII, wherein A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ are as defined for formula I and $R_6$ is hydrogen or lower alkyl.

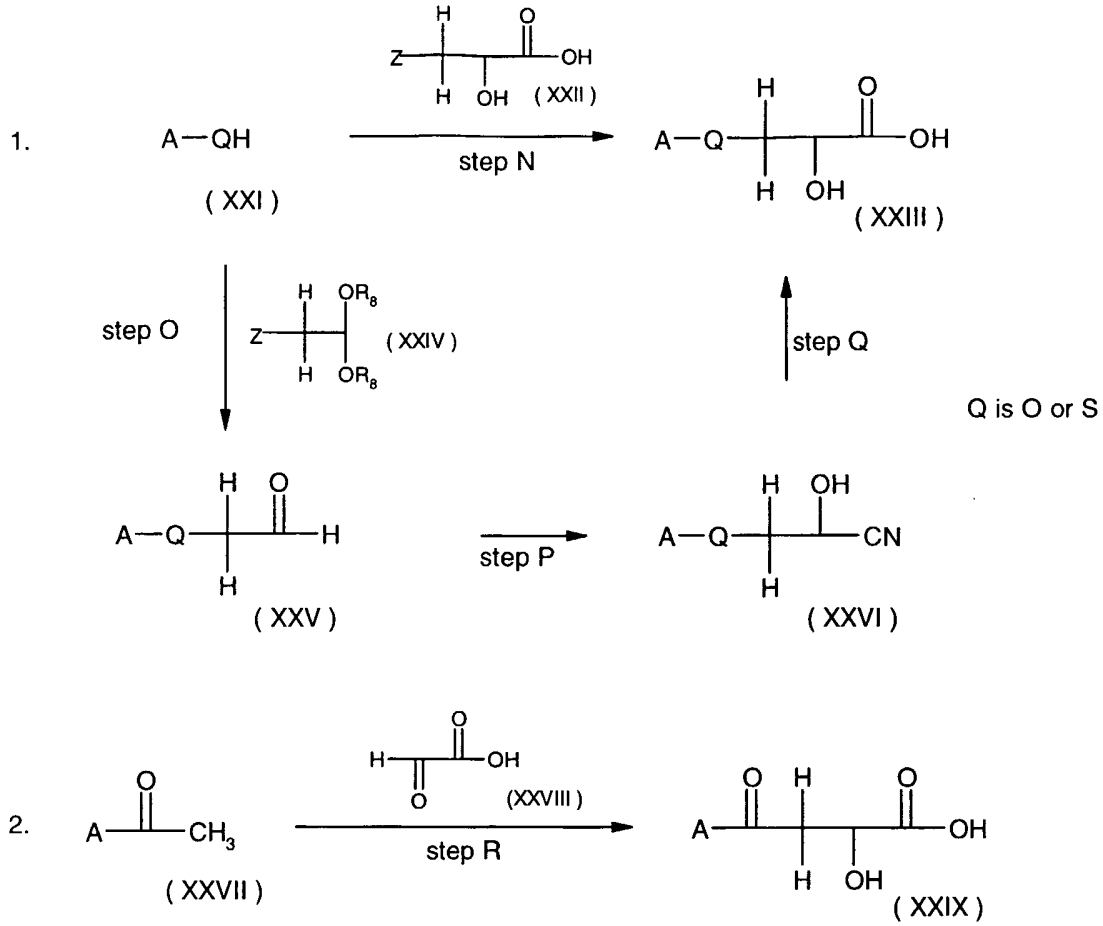
Step G: Alternatively to step F, an isocyanide of formula X wherein $B_2$, $R_3$ and $R_4$ are as defined for formula I is reacted with an aldehyde or ketone of formula XI wherein A, $B_1$ and $R_1$ are as defined for formula I in the presence of titanium tetrachloride to give an α-hydroxy amide of the formula XIV (where A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ have the same meaning as defined above) under conditions known *per se* (D. Seebach, G. Adam, T. Gees, M. Schiess, W. Weigang, *Chem. Ber.* **1988**, *121*, 507; O. Ort, U. Döller, W. Reissel, S. D. Lindell, T. L. Hough, D. J. Simpson, J. P. Chung, *Pesticide Sci.* **1997**, *50*, 331).

Step H: Alternatively to step E and step F, a compound of formula IX, wherein $B_2$, $R_3$ and $R_4$ are as defined for formula I is treated with one phosgene equivalent (e.g. triphosgene) and a base (e.g. triethylamine) and in a second step, without isolation of the isocyanide intermediate, is further treated with titanium tetrachloride and an aldehyde or ketone of formula XI, wherein A, $B_1$ and $R_1$ are as defined for formula I under conditions known *per se* (WO 96/17840) to give an α-hydroxy amide of the formula XIV, wherein A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ are as defined for formula I.

Step I: An O-acyl-α-hydroxy amide of formula XIII wherein A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ are as defined above and $R_6$ is hydrogen or lower alkyl is hydrolyzed to an α-hydroxy amide of formula XIV, wherein A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ are as defined for formula I under classical conditions (J. March, *Advanced Organic Chemistry*, 4th ed., Wiley, **1992**).

Step K: An α-hydroxy amide of formula XIV wherein A, $B_1$, $B_2$, $R_1$, $R_3$ and $R_4$ are as defined for formula I is reacted with a compound XV wherein $R_2$ is alkyl, alkenyl or alkynyl and Z is a leaving group like a halide such as a chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate to a compound of formula IB wherein A, $B_1$, $B_2$, $R_1$, $R_2$, $R_3$ and $R_4$ are as defined for formula I and under the same conditions as defined for step B in Scheme 1.

Scheme 3: Preparation of α-hydroxy-acids (examples of formula II):




Step N: A phenol or thiophenol of formula XXI wherein A is as defined for formula I and Q is oxygen or sulfur is reacted with a lactic acid derivative of formula XXII wherein Z is a leaving group like a halide such as a chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate to give an α-hydroxy-acid of formula XXIII wherein A is as defined for formula I in the presence of a base such as lithium hydroxide, sodium hydroxide, potassium hydroxide, sodium carbonate or potassium carbonate under conditions known *per se* (US 4,451,474).

Step O: Alternatively to step N, a phenol or thiophenol of formula XXI wherein A is as defined for formula I and Q is oxygen or sulfur is reacted with an acetaldehyde derivative of formula XXIV wherein Z is a leaving group like a halide such as a chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate and $R_8$ is hydrogen or lower alkyl to an aldehyde of formula XXV wherein A is as defined for formula I in the presence of a base such as sodium hydride, sodium methoxide, sodium ethoxide, sodium hydroxide or

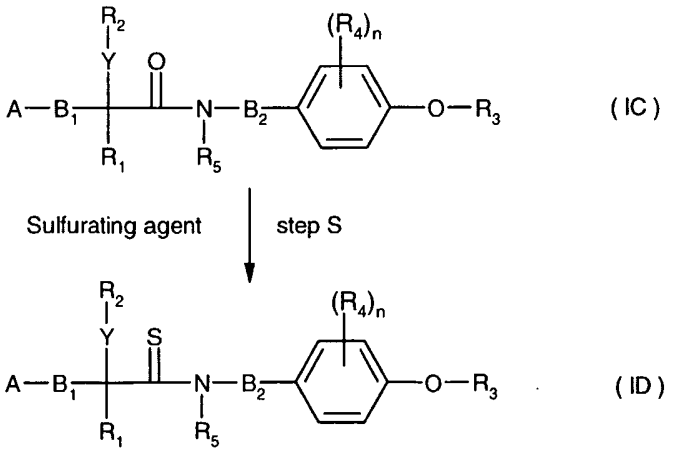
potassium hydroxide and subsequent acetal cleavage with the aid of an acid like hydrochloric acid or sulfuric acid under conditions known *per se* (J. Brussee, W.T. Loos, C.G. Kruse, A. Van der Gen, *Tetrahedron*, **1990**, *46*, 979).

Step P: An aldehyde of formula XXV wherein A is as defined for formula I is transformed into a cyanohydrin of formula XXVI wherein A is as defined for formula I with an inorganic cyanide like sodium cyanide or potassium cyanide, preferably in the presence of a base such as sodium bicarbonate, sodium carbonate, potassium carbonate, calcium carbonate or sodium monophosphate.

Step Q: A cyanohydrin of formula XXVI wherein A is as defined for formula I is hydrolyzed to an α-hydroxy-acid of formula XXIII wherein A is as defined for formula I in the presence of an acid like hydrochloric acid, nitric acid or sulfuric acid.

Step R: An acetophenone of formula XXVII wherein A is as defined for formula I is reacted with a glyoxylic acid derivative of formula XXVIII, which can be glyoxylic acid itself or glyoxylic acid monohydrate, to an α-hydroxy-α-keto-acid of formula XXIX under conditions known per se (M. Bianchi, A. Butti, Y. Christidis, J. Perronnet, F. Barzaghi, R. Cesana, A. Nencioni, *Eur. J. Med. Chem.*, **1988**, *23*, 45.).

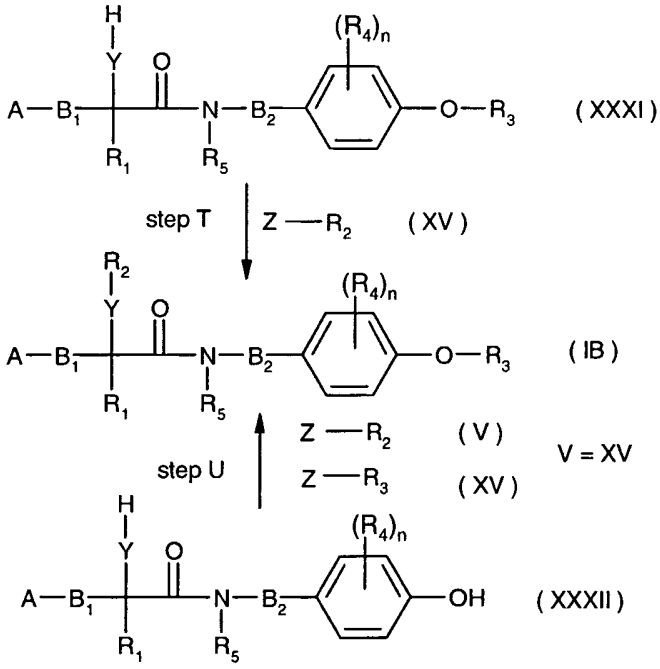
Scheme 4:




Step S: An amid of formula VI wherein A, $B_1$, $B_2$, $R_1$, $R_2$, $R_3$, $R_4$, and $R_5$ are as defined above is transformed to a thioamide of formula XXX, wherein A, $B_1$, $B_2$, $R_1$, $R_2$, $R_3$, $R_4$, and $R_5$ are as defined for formula I with a sulfurating agent, like a phosphorus sulfur compound,

e.g. phosphorus pentasulfide or 2,4-bis(4-methoxyphenyl)-1,3-dithia-2,4-diphosphetane-2,4-disulfide (Lawesson's reagent), in an inert diluting agent, like an inert organic solvent such as aromatic, non aromatic or halogenated hydrocarbons, e.g. benzene, toluene, xylene, chlorobenzene or chloroform, at temperatures ranging from –80 °C to +200 °C, preferably at temperatures ranging from 0 to +100 °C.

Scheme 5:




Step T: An amid of formula IB wherein A, $B_1$, $B_2$, $R_1$, $R_2$, $R_3$, $R_4$, $R_5$ and Y are as defined for formula I may be obtained by reaction of an amide of formula XXXI, wherein A, $B_1$, $B_2$, $R_1$, $R_3$, $R_4$, $R_5$ and Y are as defined for formula I with a compound of formula XV wherein $R_2$ is as defined for formula I and wherein Z is a leaving group like a halide such as chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate under the same conditions as defined for step B in Scheme 1.

Step U: An amide of formula XXXII wherein A, $B_1$, $B_2$, $R_1$, $R_4$ and Y are as defined for formula I is reacted with a compound XV wherein $R_2$ is as defined for formula I and Z is a leaving group like a halide such as a chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate and which is equal to a compound V wherein $R_3$ is as defined for formula I and Z is also a leaving group like a halide such as a chloride or bromide or a sulfonic ester such as a tosylate, mesylate or triflate to a compound of formula IB wherein

A, $B_1$, $B_2$, $R_1$, $R_2$, $R_3$, $R_4$ and Y are as defined for formula I and under the same conditions as defined for step B in Scheme 1.

The compounds of formula I are oils or solids at room temperature and are distinguished by valuable microbiocidal properties. They can be used in the agricultural sector or related fields preventatively and curatively in the control of plant-destructive microorganisms. The compounds of formula I according to the invention are distinguished at low rates of concentration not only by outstanding microbiocidal, especially fungicidal, activity but also by being especially well tolerated by plants.

Surprisingly, it has now been found that the compounds of formula I have for practical purposes a very advantageous microbiocidal spectrum in the control of phytopathogenic microorganisms, especially fungi. They possess very advantageous curative and preventive properties and are used in the protection of numerous crop plants. With the compounds of formula I it is possible to inhibit or destroy phytopathogenic microorganisms that occur on various crops of useful plants or on parts of such plants (fruit, blossom, leaves, stems, tubers, roots), while parts of the plants which grow later also remain protected, for example, against phytopathogenic fungi.

The novel compounds of formula I prove to be effective against specific genera of the fungus class Fungi imperfecti (e.g. Cercospora), Basidiomycetes (e.g. Puccinia) and Ascomycetes (e.g. Erysiphe and Venturia) and especially against Oomycetes (e.g. Plasmopara, Peronospora, Pythium and Phytophthora). They therefore represent in plant protection a valuable addition to the compositions for controlling phytopathogenic fungi. The compounds of formula I can also be used as dressings for protecting seed (fruit, tubers, grains) and plant cuttings from fungal infections and against phytopathogenic fungi that occur in the soil.

The invention relates also to compositions comprising compounds of formula I as active ingredient, especially plant-protecting compositions, and to the use thereof in the agricultural sector or related fields.

In addition, the present invention includes the preparation of those compositions, wherein the active ingredient is homogeneously mixed with one or more of the substances or groups

of substances described herein. Also included is a method of treating plants which is distinguished by the application of the novel compounds of formula I or of the novel compositions.

Target crops to be protected within the scope of this invention comprise, for example, the following species of plants: cereals (wheat, barley, rye, oats, rice, maize, sorghum and related species); beet (sugar beet and fodder beet); pomes, stone fruit and soft fruit (apples, pears, plums, peaches, almonds, cherries, strawberries, raspberries and blackberries); leguminous plants (beans, lentils, peas, soybeans); oil plants (rape, mustard, poppy, olives, sunflowers, coconut, castor oil plants, cocoa beans, groundnuts); cucurbitaceae (marrows, cucumbers, melons); fibre plants (cotton, flax, hemp, jute); citrus fruit (oranges, lemons, grapefruit, mandarins); vegetables (spinach, lettuce, asparagus, cabbages, carrots, onions, tomatoes, potatoes, paprika); lauraceae (avocado, cinnamon, camphor) and plants such as tobacco, nuts, coffee, sugar cane, tea, pepper, vines, hops, bananas and natural rubber plants, and also ornamentals.

The compounds of formula I are normally used in the form of compositions and can be applied to the area or plant to be treated simultaneously or in succession with other active ingredients. Those other active ingredients may be fertilisers, micronutrient donors or other preparations that influence plant growth. It is also possible to use selective herbicides or insecticides, fungicides, bactericides, nematicides, molluscicides or mixtures of several of those preparations, if desired together with further carriers, surfactants or other application-promoting adjuvants customarily employed in formulation technology.

The compounds of formula I can be mixed with other fungicides, resulting in some cases in unexpected synergistic activities. Such mixtures are not limited to two active ingredients (one of formula I and one of the list of other fungicides), but to the contrary many comprise more than one active ingredient of the component of formula I and more than one other fungicide. Mixing components which are particularly suited for this purpose include e.g. azoles, such as azaconazole, BAY 14120, bitertanol, bromuconazole, cyproconazole, difenoconazole, diniconazole, epoxiconazole, fenbuconazole, fluquinconazole, flusilazole, flutriafol, hexaconazole, imazalil, imibenconazole, ipconazole, metconazole, myclobutanil, pefurazoate, penconazole, pyrifenox, prochloraz, propiconazole, simeconazole, tebuconazole, tetraconazole, triadimefon, triadimenol, triflumizole, triticonazole; pyrimidinyl carbi-

noles, such as ancymidol, fenarimol, nuarimol; 2-amino-pyrimidines, such as bupirimate, dimethirimol, ethirimol; morpholines, such as dodemorph, fenpropidine, fenpropimorph, spiroxamine, tridemorph; anilinopyrimidines, such as cyprodinil, mepanipyrim, pyrimethanil; pyrroles, such as fenpiclonil, fludioxonil; phenylamides, such as benalaxyl, furalaxyl, metalaxyl, R-metalaxyl, ofurace, oxadixyl; benzimidazoles, such as benomyl, carbendazim, debacarb, fuberidazole, thiabendazole; dicarboximides, such as chlozolinate, dichlozoline, iprodione, myclozoline, procymidone, vinclozoline; carboxamides, such as carboxin, fenfuram, flutolanil, mepronil, oxycarboxin, thifluzamide; guanidines, such as guazatine, dodine, iminoctadine; strobilurines, such as azoxystrobin, kresoxim-methyl, metominostrobin, SSF-129, trifloxystrobin, picoxystrobin, BAS 500F (proposed name pyraclostrobin), BAS 520; dithiocarbamates, such as ferbam, mancozeb, maneb, metiram, propineb, thiram, zineb, ziram; N-halomethylthiotetrahydrophthalimides, such as captafol, captan, dichlofluanid, fluoromides, folpet, tolyfluanid; Cu-compounds, such as Bordeaux mixture, copper hydroxide, copper oxychloride, copper sulfate, cuprous oxide, mancopper, oxine-copper; nitrophenol-derivatives, such as dinocap, nitrothal-isopropyl; organo-p-derivatives, such as edifenphos, iprobenphos, isoprothiolane, phosdiphen, pyrazophos, tolclofos-methyl; various others, such as acibenzolar-S-methyl, anilazine, benthiavalicarb, blasticidin-S, chinomethionate, chloroneb, chlorothalonil, cyflufenamid, cymoxanil, dichlone, diclomezine, dicloran, diethofencarb, dimethomorph, SYP-LI90 (proposed name: flumorph), dithianon, ethaboxam, etridiazole, famoxadone, fenamidone, fenoxanil, fentin, ferimzone, fluazinam, flusulfamide, fenhexamid, fosetyl-aluminium, hymexazol, iprovalicarb, IKF-916 (cyazofamid), kasugamycin, methasulfocarb, metrafenone, nicobifen (new poposal: boscalid), pencycuron, phthalide, polyoxins, probenazole, propamocarb, pyroquilon, quinoxyfen, quintozene, sulfur, triazoxide, tricyclazole, triforine, validamycin, zoxamide (RH7281).

In the above mentioned mixtures, the mixture ratio of the active ingredients is so selected that it reaches optional control of the phytopathogenic microorganism on the host plants. This ratio is in general between 100:1 and 1:100, more preferably between 10:1 and 1:10 of a compound of formula I vis-à-vis the second fungicide. The mixtures may not only comprise one of the listed combinational active ingredients, but may comprise more than one additional active ingredients selected from that specified group, thus forming for example 3-way- or even 4-way-mixtures.

Suitable carriers and surfactants may be solid or liquid and correspond to the substances ordinarily employed in formulation technology, such as e.g. natural or regenerated mineral substances, solvents, dispersants, wetting agents, tackifiers, thickeners, binders or fertilisers. Such carriers and additives are described, for example, in WO 95/30651.

A preferred method of applying a compound of formula I, or an agrochemical composition comprising at least one of those compounds, is application to the foliage (foliar application), the frequency and the rate of application depending upon the risk of infestation by the pathogen in question. The compounds of formula I may also be applied to seed grains (coating) either by impregnating the grains with a liquid formulation of the active ingredient or by coating them with a solid formulation.

The compounds of formula I are used in unmodified form or, preferably, together with the adjuvants conventionally employed in formulation technology, and are for that purpose advantageously formulated in known manner e.g. into emulsifiable concentrates, coatable pastes, directly sprayable or dilutable solutions, dilute emulsions, wettable powders, soluble powders, dusts, granules, and by encapsulation in e.g. polymer substances. As with the nature of the compositions, the methods of application, such as spraying, atomising, dusting, scattering, coating or pouring, are chosen in accordance with the intended objectives and the prevailing circumstances.

Advantageous rates of application are normally from 1 g to 2 kg of active ingredient (a.i.) per hectare (ha), preferably from 10 g to 1 kg a.i./ha, especially from 25 g to 750 g a.i./ha. When used as seed dressings, rates of from 0.001 g to 1.0 g of active ingredient per kg of seed are advantageously used.

The formulations, i.e. the compositions, preparations or mixtures comprising the compound(s) (active ingredient(s)) of formula I and, where appropriate, a solid or liquid adjuvant, are prepared in known manner, e.g. by homogeneously mixing and/or grinding the active ingredient with extenders, e.g. solvents, solid carriers and, where appropriate, surface-active compounds (surfactants).

Further surfactants customarily used in formulation technology will be known to the person skilled in the art or can be found in the relevant technical literature.

The agrochemical compositions usually comprise 0.01 to 99 % by weight, preferably 0.1 to 95 % by weight, of a compound of formula I, 99.99 to 1 % by weight, preferably 99.9 to 5 % by weight, of a solid or liquid adjuvant, and 0 to 25 % by weight, preferably 0.1 to 25 % by weight, of a surfactant.

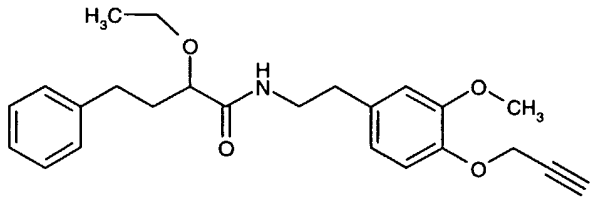
Whereas commercial products will preferably be formulated as concentrates, the end user will normally employ dilute formulations.

The compositions may also comprise further ingredients, such as stabilisers, antifoams, viscosity regulators, binders and tackifiers, as well as fertilisers or other active ingredients for obtaining special effects.

The Examples which follow illustrate the invention described above, without limiting the scope thereof in any way. Temperatures are given in degrees Celsius. Ph stands for phenyl.

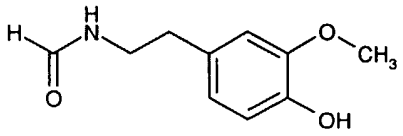
Preparation Examples :

Example 1: 2-Ethoxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide



(Compound E1.02)

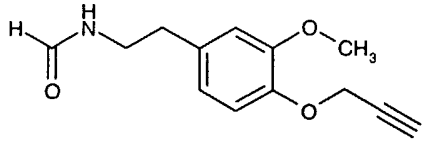
a) *N*-[2-(4-Hydroxy-3-methoxy-phenyl)-ethyl]-formamide



Formic acid (230 g, 5.0 mol) is added dropwise to acetic anhydride (383 g, 3.75 mol) at 0°C. This mixture is stirred for 2 hours at +55°C and subsequently cooled again to 0°C. Tetrahydrofuran (500 ml) is added at this temperature followed by 4-(2-amino-ethyl)-2-methoxy-phenol hydrochloride (50 g, 0.25 mol). The resulting white suspension is stirred for 18 hours at +75°C, changing into a yellow solution. The reaction mixture is evaporated and the residue is submitted to flash-chromatography to yield *N*-[2-(4-hydroxy-3-methoxy-phenyl)-ethyl]-formamide.

$^1$H-NMR (300 MHz, $CDCl_3$): 2.85 (t, 2H, $CH_2CH_2$), 3.57 (t, 2H, $CH_2CH_2$), 3.82 (s, 3H, $OCH_3$), 5.69 (bs, 1H, NH), 6.67 – 7.09 (m, 3H, CH arom.), 8.12 (s, 1H, CHO).

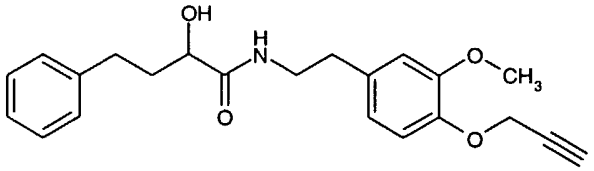
b) *N*-[2-(3-Methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-formamide



Sodium methoxide (32 ml of a 5.4 M solution in methanol, 0.17 mol) is added to a solution of N-[2-(4-hydroxy-3-methoxy-phenyl)-ethyl]-formamide (32 g, 0.16 mol) in methanol (400 ml). Propargyl bromide (20 g, 0.17 mol) is added and the mixture is refluxed for 4 hours. After evaporation the residue is taken up in ethyl acetate (400 ml) and washed with water (2 x 200 ml). The organic layer is dried over magnesium sulfate and evaporated. The residue is submitted to flash-chromatography to give the *N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-formamide.

$^1$H-NMR (300 MHz, $CDCl_3$): 2.44 (t, 1H, C≡CH), 2.73 (t, 2H, $CH_2CH_2$), 3.51 (t, 2H, $CH_2CH_2$), 3.82 (s, 3H, $OCH_3$), 4.69 (m, 2H, $OCH_2$), 5.53 (bs, 1H, NH), 6.62 – 6.95 (m, 3H, CH arom.), 8.09 (s, 1H, CHO).

c) 2-Hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide



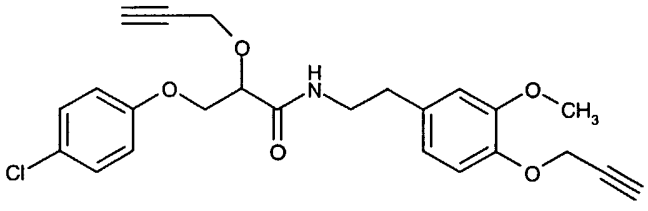
(Compound E1.01)

*N*-[2-(3-Methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-formamide (8.0 g, 34 mmol) and triethylamine (8.3 g, 82 mmol) are dissolved in dichloromethane (80 ml). Bis(trichloromethyl) carbonate (triphosgene, 4.0 g, 14 mmol) in dichloromethane (40 ml) is added at +5°C. The mixture is stirred for 4 hours at +5°C and then cooled to -78°C. A solution of titanium tetrachloride (7.0 g, 38 mmol) in dichloromethane (70 ml) is added and the mixture is stirred for 2 hours at -40°C. 3-Phenylpropionaldehyde (4.8 g, 36 mmol) in dichloromethane (50 ml) is added dropwise and the mixture is stirred for 17 hours at room temperature. The mixture is hydrolysed with 5N HCl (25 ml), stirred 30 minutes at room temperature and washed with water. After evaporation of the organic layer the residue is submitted to flash-chromatography (ethyl acetate/ hexane 6 : 3) to give 2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide (Compound E1.01).

$^1$H-NMR (300 MHz, $CDCl_3$): 1.93 (q, 1H, $CH_2CH_2$), 2.13 (m, 1H, $CH_2CH_2$), 2.51 (t, 1H, C≡CH), 2.70 – 2.83 (m, 4H, $CH_2CH_2$), 3.55 (q, 2H, $CH_2CH_2$), 3.82 (s, 3H, $OCH_3$), 4.15 (q, 1H, CHOH), 4.73 (d, 2H, $OCH_2$), 6.53 (bs, 1H, NH), 6.73 – 7.31 (m, 8H, CH arom.).

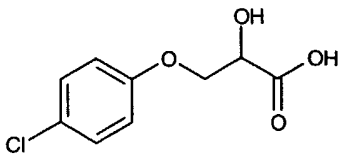
d) Ethyl iodide (1.5 g, 10 mmol) is added slowly at room temperature to a mixture of 2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide (3.0 g, 8.2 mmol), 30 % sodium hydroxide solution (7.0 ml, 41 mmol) and catalytic amounts of tetrabutylammonium bromide (50 mg) in 30 ml of dichloromethane. The reaction is stirred for 16 hours at +40°C. Subsequently the mixture is evaporated and the residue is diluted with water and dichloromethane. The phases are separated and the aqueous phase is extracted three times with dichloromethane. The combined organic layer is washed with brine, dried over sodium sulfate and evaporated. The remaining oil is purified by chromatography on silica gel (ethyl acetate / hexane 1 : 1) to yield 2-ethoxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide (Compound E1.02).
$^1$H-NMR (300 MHz, $CDCl_3$): 1.19 (t, 3H, $CH_3$), 1.88 – 2.12 (m, 2H, $CH_2CH_2$), 2.51 (t, 1H, C≡CH), 2.70 (q, 2H, $CH_2CH_2$), 2.82 (t, 2H, $CH_2CH_2$), 3.43 (dq, 2H, $CH_2CH_2$), 3.55 (q, 2H, $CH_2CH_3$), 3.71 (q, 1H, CHO), 3.88 (s, 3H, $OCH_3$), 4.73 (d, 2H, $OCH_2$), 6.67 (bs, 1H, NH), 6.72 – 7.31 (m, 8H, CH arom.).

Example 2: 3-(4-Chloro-phenoxy)-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide



(Compound E1.26)

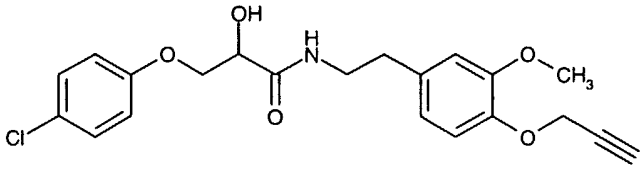
a) 3-(4-Chloro-phenoxy)-2-hydroxy-propionic acid



A mixture of 3-chlorolactic acid (5.0 g, 40 mmol) and 4-chlorophenol (9.3 g, 72 mmol) in 40 ml 3.3 N sodium hydroxide is stirred under reflux for 2 hours. Subsequently the reaction mixture is cooled to room temperature and acidified to pH 3 with concentrated hydrochloric acid. The resulting white crystals are filtered and dissolved in hot water. This hot solution is

adjusted to pH 1 with concentrated sulfuric acid. Upon cooling, 3-(4-chloro-phenoxy)-2-hydroxy-propionic acid is collected as clear crystals.
$^1$H-NMR (300 MHz, $CDCl_3$): 3.93 (d, 2H, $OCH_2$), 4.14 (t, 1H, CHOH), 6.74 (d, 2H, CH arom.), 7.12 (d, 2H, CH arom.). M.p.: 136°C.

b) 3-(4-Chloro-phenoxy)-2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide




(Compound E1.24)

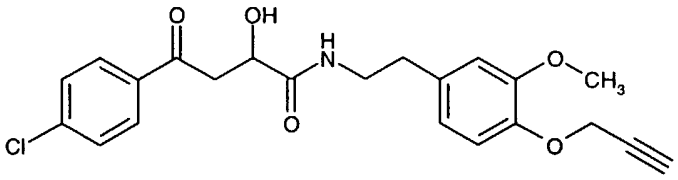
2-(3-Methoxy-4-prop-2-ynyloxy-phenyl)-ethylamine hydrochloride (5.0 g, 20 mmol) and N,N-diisopropylethylamine (10 g, 78 mmol) are dissolved in 70 ml of N,N-dimethylformamide. To this solution 3-(4-chloro-phenoxy)-2-hydroxy-propionic acid (4.3 g, 20 mmol) and (benzotriazol-1-yloxy)-tris-(dimethylamino)-phosphonium hexafluorophosphate (9.5 g, 22 mmol) are added successively. The reaction mixture is stirred for 16 hours at room temperature, subsequently poured on ice-water and extracted several times with ethyl acetate. The combined organic layer is washed with brine, dried over sodium sulfate and evaporated in vacuum. The remaining oil is purified by chromatography on silicagel (ethyl acetate / hexane 6 : 4) to give 3-(4-chloro-phenoxy)-2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide (Compound E1.24).
$^1$H-NMR (300 MHz, $CDCl_3$): 2.52 (t, 1H, C≡CH), 2.82 (t, 2H, $CH_2CH_2$), 3.60 (q, 2H, $CH_2CH_2$), 3.87 (s, 3H, $OCH_3$), 4.12 (m, 2H, $OCH_2$), 4.23 (q, 1H, CHOH), 4.76 (d, 2H, $OCH_2$), 6.73 – 7.29 (m, 8H, NH, CH arom.).

c) A 80 % solution of propargyl bromide in toluene (1.6 g, 11 mmol) is added slowly at room temperature to a mixture of 3-(4-chloro-phenoxy)-2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide (3.5 g, 8.7 mmol), 30 % sodium hydroxide solution (4.5 ml, 44 mmol) and catalytic amounts of tetrabutylammonium bromide (50 mg) in 30 ml of dichloromethane. The reaction is stirred for 16 hours at +40°C. Subsequently the mixture is evaporated and the residue is diluted with water and dichloromethane. The phases are separated and the aqueous phase is extracted three times with dichloromethane. The combined organic layer is washed with brine, dried over sodium sulfate and evaporated. The remaining oil is purified by chromatography on silica gel (ethyl acetate / hexane 1 : 1) to

yield 3-(4-chloro-phenoxy)-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide (Compound E1.24).

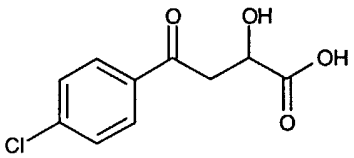
$^1$H-NMR (300 MHz, $CDCl_3$): 2.38 (t, 1H, C≡CH), 2.43 (t, 1H, C≡CH), 2.73 (t, 2H, $CH_2CH_2$), 3.50 (q, 2H, $CH_2CH_2$), 3.81 (s, 3H, $OCH_3$), 4.11 (q, 1H, CHO), 4.22 – 4.32 (m, 4H, $OCH_2$), 4.68 (d, 2H, $OCH_2$), 6.52 (bs, 1H, NH), 6.67 – 7.20 (m, 8H, NH, CH arom.).

Example 3: 4-(4-Chloro-phenyl)-2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-oxo-butyramide



(Compound E1.10)

a) 4-(4-Chloro-phenyl)-2-hydroxy-4-oxo-butyric acid



A mixture of glyoxylic acid monohydrate (4.6 g, 50 mmol) and 4-chloroacetophenone (15.4 g, 0.1 mol) are heated at +95°C under reduced pressure (50 mbar) for 3 hours. During this time, water is continually removed. After cooling, the reaction mixture is taken up in aqueous sodium carbonate solution and extracted with diethyl ether. The aqueous layer is acidified with 15 % hydrochloric acid and extracted with ethyl acetate. The organic layer is dried over sodium sulfate and evaporated, the residue is crystallized from ethyl acetate / hexane to obtain 4-(4-chloro-phenyl)-2-hydroxy-4-oxo-butyric acid.

$^1$H-NMR (300 MHz, $CDCl_3$): 3.41 (dd, 1H, $CH_2$), 3.53 (dd, 1H, $CH_2$), 4.65 (q, 1H, CHOH), 7.38 – 7.92 (m, 4H, CH arom.).

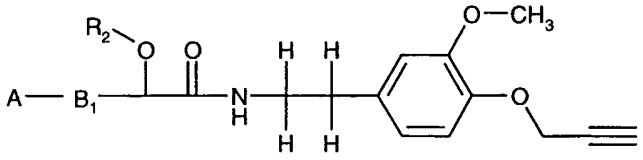
b) 2-(3-Methoxy-4-prop-2-ynyloxy-phenyl)-ethylamine hydrochloride (5.4 g, 22 mmol) and N,N-diisopropylethylamine (11 g, 83 mmol) are dissolved in 70 ml of N,N-dimethylformamide. To this solution 4-(4-chloro-phenyl)-2-hydroxy-4-oxo-butyric acid (4.8 g, 21 mmol) and (benzotriazol-1-yloxy)-tris-(dimethylamino)-phosphonium hexafluorophosphate (10 g, 23 mmol) are added successively. The reaction mixture is stirred for 16 hours at room temperature, subsequently poured on ice-water and extracted several times with ethyl acetate. The combined organic layer is washed with brine, dried over sodium sulfate and

evaporated in vacuum. The remaining oil is purified by chromatography on silicagel (ethyl acetate / hexane 6 : 4) to give 4-(4-chloro-phenyl)-2-hydroxy-*N*-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-oxo-butyramide (Compound E1.10).

$^1$H-NMR (300 MHz, $CDCl_3$): 2.51 (t, 1H, C≡CH), 2.82 (t, 2H, $CH_2CH_2$), 3.27 (dd, 1H, $CH_2$), 3.53 - 3.66 (m, 3H, $CH_2$,$CH_2CH_2$), 3.90 (s, 3H, $OCH_3$), 4.62 (q, 1H, CHOH), 4.74 (d, 2H, $OCH_2$), 6.72 – 7.92 (m, 8H, NH, CH arom.).

According to the procedures of Examples E1, E2 and E3 the compounds listed in table E1 are obtained.

Table E1: (Ph designates phenyl)




| No. | A | B | $R_2$ | $^1$H-NMR |
|---|---|---|---|---|
| E1.01 | Ph | -$CH_2CH_2$- | H | 1.93 (q, 1H), 2.13 (m, 1H), 2.51 (t, 1H), 2.70 – 2.83 (m, 4H), 3.55 (q, 2H), 3.82 (s, 3H), 4.09 (q, 1H), 4.73 (d, 2H), 6.73 – 7.31 (m, 8H). |
| E1.02 | Ph | -$CH_2CH_2$- | -$CH_2CH_3$ | 1.19 (t, 3H), 1.88 – 2.12 (m, 2H), 2.51 (t, 1H), 2.70 (q, 2H), 2.82 (t, 2H), 3.43 (dq, 2H), 3.55 (q, 2H), 3.71 (q, 1H), 3.88 (s, 3H), 4.73 (d, 2H), 6.72 – 7.31 (m, 8H). |
| E1.03 | Ph | -$CH_2CH_2$- | $CH_2C$≡CH- | 2.06 (q, 1H), 2.20 (m, 1H), 2.54 (t, 1H), 2.59 (t, 1H), 2.78 (q, 2H), 2.89 (t, 2H), 3.62 (q, 2H), 3.92 (s, 3H), 4.05 (q, 1H), 4.19 (d, 2H), 4.81 (d, 2H), 6.82 – 7.39 (m, 8H). |
| E1.04 | 4-$CH_3$-Ph | -$CH_2CH_2$- | H | 1.82 (q, 1H), 2.05 (m, 1H), 2.24 (s, 3H), 2.42 (t, 1H), 2.59 – 2.73 (m, 4H), 3.46 (q, 2H), 3.75 (s, 3H), 4.00 (q, 1H), 4.66 (d, 2H), 6.62 – 7.20 (m, 7H). |
| E1.05 | 4-$CH_3$-Ph | -$CH_2CH_2$- | $CH_2CH_3$- | 1.06 (t, 3H), 1.77 – 1.98 (m, 2H), 2.24 (s, 3H), 2.41 (t, 1H), 2.56 (q, 2H), 2.73 (t, 2H), 3.35 (q, 2H), 3.48 (q, 2H), 3.61 (q, 1H), 3.78 (s, 3H), 4.62 (d, 2H), 6.63 – 7.20 (m, 7H). |
| E1.06 | 4-$CH_3$-Ph | -$CH_2CH_2$- | -$CH_2C$≡CH | 1.83 - 2.03 (m, 2H), 2.25 (s, 3H), 2.38 (t, 1H), 2.42 (t, 1H), 2.56 (q, 2H), 2.72 (t, 2H), 3.47 (q, 2H), 3.79 (s, 3H), 3.86 (q, 1H), 4.02 (d, 2H), 4.63 (d, 2H), 6.64 – 7.20 (m, 7H). |

| | | | | |
|---|---|---|---|---|
| E1.07 | Ph | $-CH(CH_3)CH_2-$ | H | 1.32 (d, 3H), 1.84 (m, 1H), 2.17 (m, 1H), 2.51 (t, 1H), 2.76 (q, 2H), 3.00 (q, 1H), 3.49 (q, 2H), 3.84 (s, 3H), 4.09 (m, 1H), 4.74 (d, 2H), 6.72 – 7.34 (m, 8H). |
| E1.08 | Ph | $-CH(CH_3)CH_2-$ | $-CH_2CH_3$ | 1.09 (t, 3H), 1.29 (d, 3H), 1.83 (m, 1H), 2.07 (m, 1H), 2.51 (t, 1H), 2.82 (q, 2H), 2.98 (q, 1H), 3.28 – 3.59 (m, 4H), 3.86 (s, 3H), 4.13 (q, 1H), 4.74 (d, 2H), 6.60 – 7.32 (m, 8H). |
| E1.09 | Ph | $-CH(CH_3)CH_2-$ | $-CH_2C\equiv CH$ | 1.33 (d, 2H), 1.93 (m, 1H), 2.19 (m, 1H), 2.44 (t, 1H), 2.53 (t, 1H), 2.83 (q, 2H), 3.07 (q, 1H), 3.56 (q, 2H), 3.92 (s, 3H), 4.00 (dd, 1H), 4.09 (dd, 1H), 4.20 (q, 1H), 4.81 (d, 2H), 6.74 – 7.40 (m, 8H). |
| E1.10 | 4-Cl-Ph | $-C(=O)CH_2-$ | H | 2.51 (t, 1H), 2.82 (t, 2H), 3.27 (dd, 1H), 3.53 - 3.66 (m, 3H), 3.90 (s, 3H), 4.62 (q, 1H), 4.74 (d, 2H), 6.72 – 7.92 (m, 7H). |
| E1.11 | $4-CH_3$-Ph | $-C(=O)CH_2-$ | H | 2.52 (s, 3H), 2.61 (t, 1H), 2.92 (t, 2H), 3.38 (dd, 1H), 3.62 - 3.73 (m, 3H), 4.00 (s, 3H), 4.70 (q, 1H), 4.84 (d, 2H), 6.84 – 7.97 (m, 7H). |
| E1.12 | Ph | $-OCH_2-$ | H | 2.72 (t, 1H), 3.03 (t, 2H), 3.79 (q, 2H), 4.06 (s, 3H), 4.32 (q, 2H), 4.45 (q, 1H), 4.94 (d, 2H), 6.92 – 7.56 (m, 8H). |
| E1.13 | Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.22 (t, 3H), 2.51 (t, 1H), 2.83 (t, 2H), 3.52 – 3.63 (m, 4H), 3.90 (s, 3H), 4.10 – 4.19 (m, 3H), 4.76 (d, 2H), 6.75 – 7.32 (m, 8H). |
| E1.14 | Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.43 (t, 1H), 2.50 (t, 1H), 2.79 (t, 2H), 3.53 (q, 2H), 3.84 (s, 3H), 4.19 (q, 1H), 4.30 (d, 2H), 4.38 (m, 2H), 4.72 (d, 2H), 6.71 – 7.28 (m, 8H). |
| E1.15 | 4-F-Ph | $-OCH_2-$ | H | 2.39 (t, 1H), 2.69 (t, 2H), 3.45 (q, 2H), 3.73 (s, 3H), 3.98 (q, 2H), 4.06 (q, 1H), 4.61 (d, 2H), 6.58 – 6.89 (m, 7H). |
| E1.16 | 4-F-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.20 (t, 3H), 2.51 (t, 1H), 2.82 (t, 2H), 3.52 – 3.70 (m, 4H), 3.89 (s, 3H), 4.07 – 4.15 (m, 2H), 4.31 (dd, 1H), 4.78 (d, 2H), 6.75 – 7.01 (m, 7H). |
| E1.17 | 4-F-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.48 (t, 1H), 2.53 (t, 1H), 2.82 (t, 2H), 3.58 (q, 2H), 3.88 (s, 3H), 4.13 – 4.39 (m, 5H), 4.77 (d, 2H), 6.74 – 7.02 (m, 7H). |
| E1.18 | 2-Cl-Ph | $-OCH_2-$ | H | 2.42 (t, 1H), 2.73 (t, 2H), 3.52 (q, 2H), 3.76 (s, 3H), 4.05 (dq, 2H), 4.18 (q, 1H), 4.64 (d, 2H), 6.61 – 7.30 (m, 7H). |
| E1.19 | 2-Cl-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.12 (t, 3H), 2.42 (t, 1H), 2.74 (t, 2H), 3.43 – 3.54 (m, 4H), 3.75 (q, 1H), 3.81 (s, 3H), 4.07 (q, 2H), 4.68 (d, 2H), 6.67 – 7.28 (m, 7H). |
| E1.20 | 2-Cl-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.37 (t, 1H), 2.42 (t, 1H), 2.73 (t, 2H), 3.47 (q, 2H), 3.80 (s, 3H), 4.06 (q, 1H), 4.33 – 4.47 (m, 4H), 4.66 (d, 2H), 6.64 – 7.28 (m, 7H). |
| E1.21 | 3-Cl-Ph | $-OCH_2-$ | H | 2.42 (t, 1H), 2.73 (t, 2H), 3.50 (q, 2H), 3.80 (s, 3H), 4.05 (q, 2H), 4.17 (q, 1H), 4.68 (d, 2H), 6.63 – 7.18 (m, 7H). |

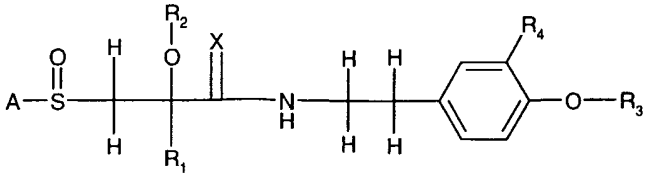
| | | | | |
|---|---|---|---|---|
| E1.22 | 3-Cl-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.11 (t, 3H), 2.40 (t, 1H), 2.72 (t, 2H), 3.42 – 3.60 (m, 4H), 3.78 (s, 3H), 3.98 - 4.09 (m, 3H), 4.67 (d, 2H), 6.66 – 7.15 (m, 7H). |
| E1.23 | 3-Cl-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.40 (t, 1H), 2.44 (t, 1H), 2.73 (t, 2H), 3.48 (q, 2H), 3.80 (s, 3H), 4.06 – 4.39 (m, 5H), 4.67 (d, 2H), 6.65 – 7.19 (m, 7H). |
| E1.24 | 4-Cl-Ph | $-OCH_2-$ | H | 2.52 (t, 1H), 2.82 (t, 2H), 3.60 (q, 2H), 3.87 (s, 3H), 4.12 (m, 2H), 4.23 (q, 1H), 4.76 (d, 2H), 6.73 – 7.29 (m, 7H). |
| E1.25 | 4-Cl-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.19 (t, 3H), 2.51 (t, 1H), 2.82 (t, 2H), 3.55 – 3.69 (m, 4H), 3.89 (s, 3H), 4.06 – 4.20 (m, 3H), 4.77 (d, 2H), 6.78 – 7.28 (m, 7H). |
| E1.26 | 4-Cl-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.38 (t, 1H), 2.43 (t, 1H), 2.73 (t, 2H), 3.50 (q, 2H), 3.81 (s, 3H), 4.11 (q, 1H), 4.22 – 4.32 (m, 4H), 4.68 (d, 2H), 6.67 – 7.20 (m, 7H). |
| E1.27 | 4-Br-Ph | $-OCH_2-$ | H | 2.52 (t, 1H), 2.81 (t, 2H), 3.59 (q, 2H), 3.87 (s, 3H), 4.08 – 4.23 (m, 3H), 4.76 (d, 2H), 6.72 – 7.42 (m, 7H). |
| E1.28 | 4-Br-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.17 (t, 3H), 2.48 (t, 1H), 2.79 (t, 2H), 3.50 – 3.66 (m, 4H), 3.84 (s, 3H), 4.05 – 4.26 (m, 3H), 4.73 (d, 2H), 6.72 – 7.38 (m, 7H). |
| E1.29 | 4-Br-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.72 (t, 1H), 2.77 (t, 1H), 3.05 (t, 2H), 3.81 (q, 2H), 4.13 (s, 3H), 4.39 – 4.63 (m, 5H), 4.98 (d, 2H), 6.99 – 7.63 (m, 7H). |
| E1.30 | 4-$CH_3$-Ph | $-OCH_2-$ | H | 2.48 (s, 3H), 2.67 (t, 1H), 2.97 (t, 2H), 3.74 (q, 2H), 4.05 (s, 3H), 4.30 (m, 2H), 4.58 (q, 1H), 4.91 (d, 2H), 6.88 – 7.45 (m, 7H). |
| E1.31 | 4-$CH_3$-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.20 (t, 3H), 2.32 (s, 3H), 2.51 (t, 1H), 2.83 (t, 2H), 3.53 – 3.82 (m, 4H), 3.90 (s, 3H), 4.12 (m, 2H), 4.34 (q, 1H), 4.76 (d, 2H), 6.73 – 7.30 (m, 7H). |
| E1.32 | 4-$CH_3$-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 2.32 (s, 3H), 2.48 (t, 1H), 2.52 (t, 1H), 2.83 (t, 2H), 3.58 (q, 2H), 3.91 (s, 3H), 4.19 (q, 1H), 4.35 – 4.44 (m, 4H), 4.76 (d, 2H), 6.80 – 7.29 (m, 7H). |
| E1.33 | 4-Cl-Ph | $-SCH_2-$ | H | 2.51 (t, 1H), 2.78 (t, 2H), 3.04 (dd, 1H), 3.45 – 3.54 (m, 3H), 3.88 (s, 3H), 4.09 (q, 1H), 4.76 (d, 2H), 6.72 – 7.37 (m, 7H). |
| E1.34 | 4-Cl-Ph | $-SCH_2-$ | $-CH_2CH_3$ | 0.99 (t, 3H), 2.41 (t, 1H), 2.70 (t, 2H), 3.02 (dd, 1H), 3.29 – 3.48 (m, 5H), 3.78 (s, 3H), 3.82 (q, 1H), 4.66 (d, 2H), 6.62 – 7.23 (m, 7H). |
| E1.35 | 4-Cl-Ph | $-SCH_2-$ | $-CH_2C\equiv CH$ | 2.31 (t, 1H), 2.40 (t, 1H), 2.68 (t, 2H), 3.08 (dd, 1H), 3.33 – 3.45 (m, 3H), 3.79 (s, 3H), 4.02 – 4.10 (m, 3H), 4.64 (d, 2H), 6.62 – 7.25 (m, 7H). |
| E1.36 | Ph | $-CH_2OCH_2-$ | H | 2.53 (t, 1H), 2.82 (t, 2H), 3.57 (q, 2H), 3.78 (d, 2H), 3.90 (s, 3H), 4.22 (q, 1H), 4.59 (s, 2H), 4.79 (d, 2H), 6.73 – 7.41 (m, 8H). |

| | | | | |
|---|---|---|---|---|
| E1.37 | Ph | $-CH_2OCH_2-$ | $-CH_2CH_3$ | 1.03 (t, 3H), 2.33 (t, 1H), 2.64 (t, 2H), 3.31 – 3.55 (m, 6H), 3.64 – 3.78 (m, 6H), 4.40 (s, 2H), 4.61 (d, 2H), 6.59 – 7.23 (m, 8H). |
| E1.38 | Ph | $-CH_2OCH_2-$ | $-CH_2C\equiv CH$ | 2.36 (t, 1H), 2.42 (t, 1H), 2.71 (t, 2H), 3.45 (q, 2H), 3.68 (d, 2H), 3.80 (s, 3H), 4.12 (q, 1H), 4.20 (d, 2H), 4.49 (s, 2H), 4.67 (d, 2H), 6.65 – 7.28 (m, 8H). |
| E1.39 | 4-F-Ph | $-SCH_2CH_2-$ | H | 1.91 (m, 1H), 2.09 (m, 1H), 2.53 (t, 1H), 2.79 (t, 2H), 3.02 (m, 2H), 3.56 (q, 2H), 3.88 (s, 3H), 4.26 (q, 1H), 4.75 (d, 2H), 6.71 – 7.37 (m, 7H). |
| E1.40 | 4-F-Ph | $-SCH_2CH_2-$ | $-CH_2C\equiv CH$ | 1.90 – 2.09 (m, 2H), 2.47 (t, 1H), 2.52 (t, 1H), 2.81 (t, 2H), 2.93 (m, 2H), 3.56 (q, 2H), 3.89 (s, 3H), 4.05 – 4.16 (m, 3H), 4.73 (d, 2H), 6.72 – 7.38 (m, 7H). |
| E1.41 | 4-F-Ph | $-CH_2CH_2-$ | H | 1.76 (q, 1H), 1.94 (m, 1H), 2.37 (t, 1H), 2.53 – 2.68 (m, 4H), 3.49 (q, 2H), 3.70 (s, 3H), 3.95 (q, 1H), 4.59 (d, 2H), 6.57 – 7.02 (m, 7H). |
| E1.42 | 4-F-Ph | $-CH_2CH_2-$ | $-CH_2CH_3$ | 1.01 (t, 3H), 1.74 (q, 1H), 1.85 (m, 1H), 2.34 (t, 1H), 2.49 (t, 2H), 2.66 (t,2H), 3.28 (dq, 2H), 3.39 (q, 2H), 3.52 (q, 1H), 3.72 (s, 3H), 4.58 (d, 2H), 6.58 – 7.00 (m, 7H). |
| E1.43 | 4-F-Ph | $-CH_2CH_2-$ | $-CH_2C\equiv CH$ | 1.80 – 2.01 (m, 2H), 2.38 (t, 1H), 2.43 (t, 1H), 2.58 (t, 2H), 2.72 (t, 2H), 3.48 (q, 2H), 3.79 (s, 3H), 3.87 (q, 1H), 4.01 (d, 2H), 4.65 (d, 2H), 6.64 – 7.08 (m, 7H). |
| E1.44 | 4-$CH_3CH_2$-Ph | $-CH_2CH_2-$ | H | 1.09 (t, 3H), 1.78 (q, 1H), 1.98 (m, 1H), 2.35 (t, 1H), 2.47 (q, 2H), 2.58 (t, 2H), 2.64 (t, 2H), 3.41 (q, 2H), 3.70 (s, 3H), 3.98 (q, 1H), 4.59 (d, 2H), 6.57 – 7.00 (m, 7H). |
| E1.45 | 4-$CH_3CH_2$-Ph | $-CH_2CH_2-$ | $-CH_2CH_3$ | 1.16 (t, 3H), 1.25 (t, 3H), 1.92 (q, 1H), 2.05 (m, 1H), 2.50 (t, 1H), 2.59 – 2.70 (m, 4H), 2.81 (t,2H), 3.43 (dq, 2H), 3.58 (q, 2H), 3.71 (q, 1H), 3.88 (s, 3H), 4.74 (d, 2H), 6.72 – 7.13 (m, 7H). |
| E1.46 | 4-$CH_3CH_2$-Ph | $-CH_2CH_2-$ | $-CH_2C\equiv CH$ | 1.23 (t, 3H), 1.97 (q, 1H), 2.09 (m, 1H), 2.48 (t, 1H), 2.51 (t, 1H), 2.59 – 2.69 (m, 4H), 2.80 (t, 2H), 3.55 (q, 2H), 3.87 (s, 3H), 3.96 (q, 1H), 4.12 (d, 2H), 4.73 (d, 2H), 6.73 – 7.15 (m, 7H). |
| E1.47 | 4-$CH_3CH_2$-Ph | $-OCH_2-$ | H | 1.15 (t, 3H), 2.42 (t, 1H), 2.52 (t, 2H), 2.72 (t, 2H), 3.51 (q, 2H), 3.79 (s, 3H), 4.02 – 4.13 (m, 2H), 4.33 (q, 1H), 4.66 (d, 2H), 6.64 – 7.07 (m, 7H). |
| E1.48 | 4-$CH_3CH_2$-Ph | $-OCH_2-$ | $-CH_2CH_3$ | 1.32 – 1.41 (m, 6H), 2.67 (t, 1H), 2.74 (q, 2H), 2.97 (t, 2H), 3.68 – 3.77 (m, 4H), 4.03 (s, 3H), 4.27 (q, 2H), 4.49 (q, 1H), 4.92 (d, 2H), 6.91 – 7.29 (m, 7H). |
| E1.49 | 4-$CH_3CH_2$-Ph | $-OCH_2-$ | $-CH_2C\equiv CH$ | 1.22 (t, 3H), 2.48 (t, 1H), 2.53 (t, 1H), 2.60 (q, 2H), 2.83 (t, 2H), 3.55 (q, 2H), 3.88 (s, 3H), 4.17 (q, 1H), 4.31 – 4.43 (m, 4H), 4.76 (d, 2H), 6.75 – 7.11 (m, 7H). |

| | | | | |
|---|---|---|---|---|
| E1.50 | 3,4-$Cl_2$-Ph | -$OCH_2$- | H | 2.52 (t, 1H), 2.83 (t, 2H), 3.60 (q, 2H), 3.88 (s, 3H), 4.09 – 4.25 (m, 3H), 4.77 (d, 2H), 6.73 – 7.38 (m, 7H). |
| E1.51 | 3,4-$Cl_2$-Ph | -$OCH_2$- | -$CH_2C{\equiv}CH$ | 2.50 (t, 1H), 2.53 (t, 1H), 2.82 (t, 2H), 3.58 (q, 2H), 3.90 (s, 3H), 4.18 (m, 2H), 4.31 – 4.43 (m, 3H), 4.77 (d, 2H), 6.74 – 7.35 (m, 6H). |
| E1.52 | 4-$CH_3$-Ph | -$SCH_2$- | H | 2.25 (s, 3H), 2.42 (t, 1H), 2.68 (t, 2H), 2.90 (dd, 1H), 3.35 – 3.44 (m, 3H), 3.79 (s, 3H), 3.95 (q, 1H), 4.68 (d, 2H), 6.62 – 7.24 (m, 7H). |
| E1.53 | 4-$CH_3$-Ph | -$SCH_2$- | -$CH_2CH_3$ | 1.12 (t, 3H), 2.32 (s, 3H), 2.50 (t, 1H), 2.79 (t, 2H), 3.10 (dd, 1H), 3.39 – 3.54 (m, 5H), 3.85 (s, 3H), 3.89 (q, 1H), 4.76 (d, 2H), 6.72 – 7.32 (m, 7H). |
| E1.54 | 4-$CH_3$-Ph | -$SCH_2$- | -$CH_2C{\equiv}CH$ | 2.24 (s, 3H), 2.33 (t, 1H), 2.42 (t, 1H), 2.70 (t, 2H), 3.05 (dd, 1H), 3.36 – 3.47 (m, 3H), 3.80 (s, 3H), 4.03 – 4.12 (m, 3H), 4.68 (d, 2H), 6.63 – 7.22 (m, 7H). |
| E1.55 | Ph | -$CH_2CH_2CH_2CH_2$- | H | 1.22 (q, 2H), 1.33 – 1.47 (m, 4H), 2.26 (t, 1H), 2.38 (t, 2H), 2.52 (t, 2H), 3.29 (q, 2H), 3.62 (s, 3H), 3.83 (q, 1H), 4.50 (d, 2H), 6.47 – 7.06 (m, 8H). |
| E1.56 | Ph | -$CH_2CH_2CH_2CH_2$- | -$CH_2CH_3$ | 0.99 (t, 3H), 1.28 (q, 2H), 1.41 – 1.52 (m, 4H), 2.34 (t, 1H), 2.48 (t, 2H), 2.63 (t, 2H), 3.28 (q, 2H), 3.40 (q, 2H), 3.53 (q, 1H), 3.72 (s, 3H), 4.62 (d, 2H), 6.58 – 7.16 (m, 8H). |
| E1.57 | Ph | -$CH_2CH_2CH_2CH_2$- | -$CH_2C{\equiv}CH$ | 1.36 (q, 2H), 1.51 – 1.63 (m, 4H), 2.36 (t, 1H), 2.42 (t, 1H), 2.54 (t, 2H), 2.72 (t, 2H), 3.49 (q, 2H), 3.80 (s, 3H), 3.87 (q, 1H), 4.02 (d, 2H), 4.69 (d, 2H), 6.65 – 7.23 (m, 8H). |
| E1.58 | 4-Cl-Ph | -$CH_2CH_2OCH_2$- | H | 2.50 (t, 1H), 2.72 (t, 2H), 2.80 (t, 2H), 3.43 (q, 2H), 3.58 – 3.69 (m, 4H), 3.88 (s, 3H), 4.09 (q, 1H), 4.73 (d, 2H), 6.69 – 7.27 (m, 7H). |
| E1.59 | 4-Cl-Ph | -$CH_2CH_2OCH_2$- | -$CH_2CH_3$ | 1.05 (t, 3H), 2.42 (t, 1H), 2.65 – 2.78 (m, 4H), 3.31 – 3.60 (m, 8H), 3.77 (q, 1H), 3.80 (s, 3H), 4.66 (d, 2H), 6.62 – 7.19 (m, 7H). |
| E1.60 | 4-Cl-Ph | -$CH_2CH_2OCH_2$- | -$CH_2C{\equiv}CH$ | 2.39 (t, 1H), 2.44 (t, 1H), 2.72 (t, 2H), 2.78 (t, 2H), 3.43 (q, 2H), 3.59 (q, 2H), 3.82 (s, 3H), 4.07 (q, 1H), 4.13 (d, 2H), 4.69 (d, 2H), 6.66 – 7.20 (m, 7H). |

Analogously to the above examples the compounds of tables 1 to 64 are obtained.

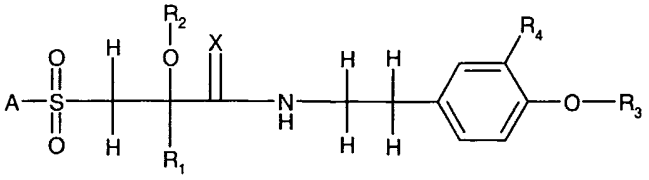
Table 1: Compounds represented by the Formula I.01



( I.01 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

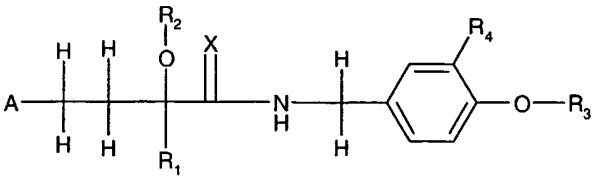
Table 2: Compounds represented by the Formula I.02



( I.02 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

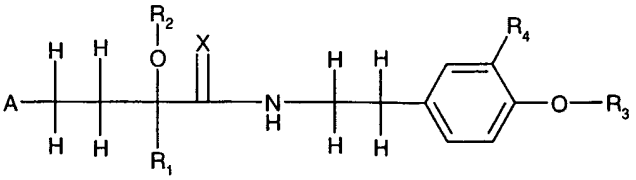
Table 3: Compounds represented by the Formula I.03



( I.03 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

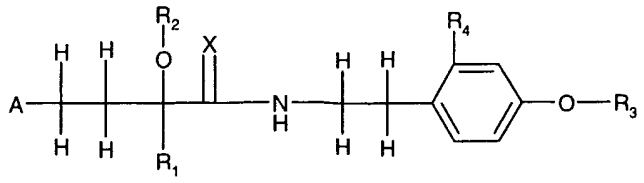
Table 4: Compounds represented by the Formula I.04



( I.04 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

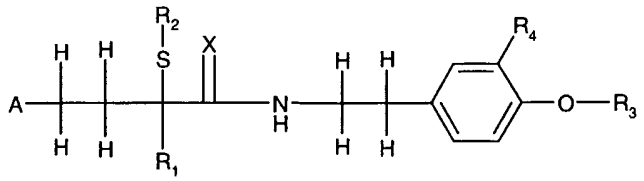
Table 5: Compounds represented by the Formula I.05



( I.05 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

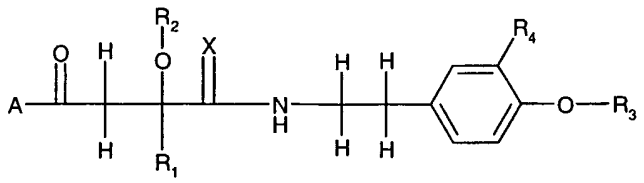
Table 6: Compounds represented by the Formula I.06



( I.06 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

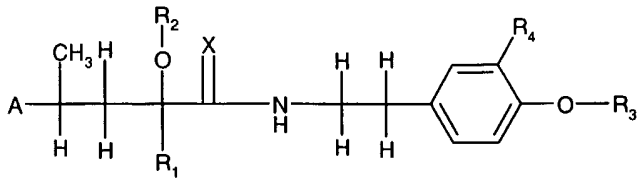
Table 7: Compounds represented by the Formula I.07



( I.07 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

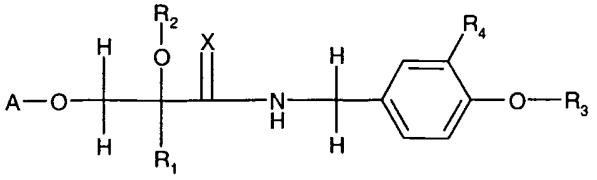
Table 8: Compounds represented by the Formula I.08



( I.08 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

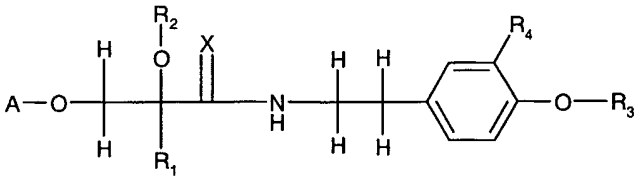
Table 9: Compounds represented by the Formula I.09



( I.09 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

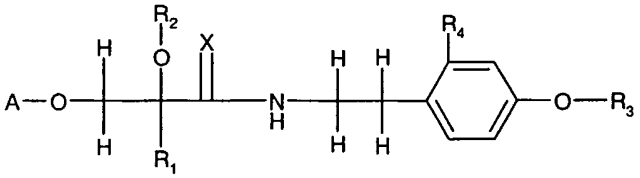
Table 10: Compounds represented by the Formula I.10



( I.10 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

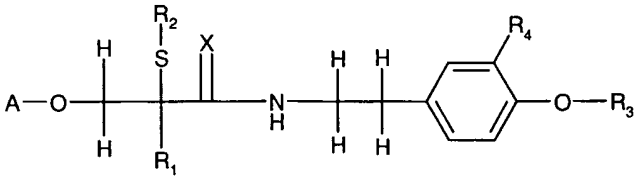
Table 11: Compounds represented by the Formula I.11



( I.11 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

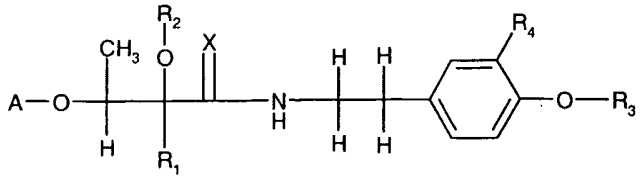
Table 12: Compounds represented by the Formula I.12



( I.12 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

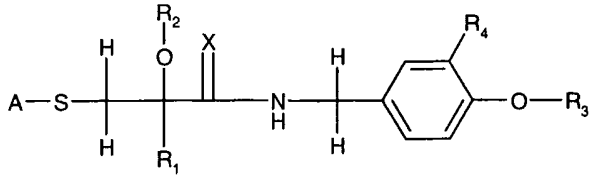
Table 13: Compounds represented by the Formula I.13



( I.13 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

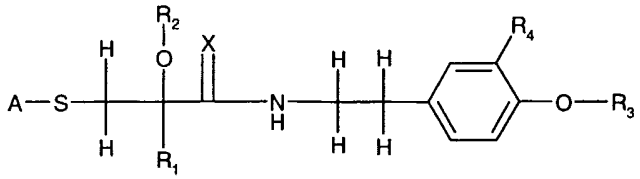
Table 14: Compounds represented by the Formula I.14



( I.14 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

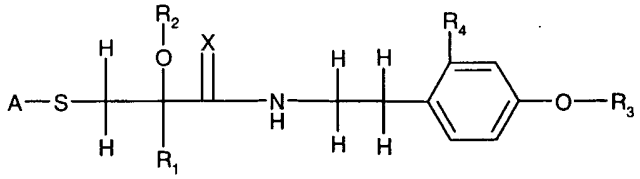
Table 15: Compounds represented by the Formula I.15



( I.15 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

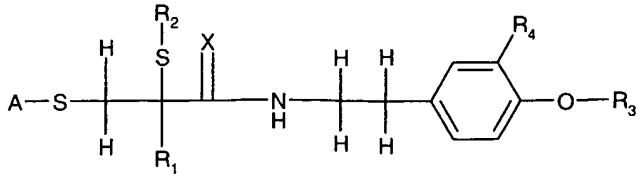
Table 16: Compounds represented by the Formula I.16



( I.16 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

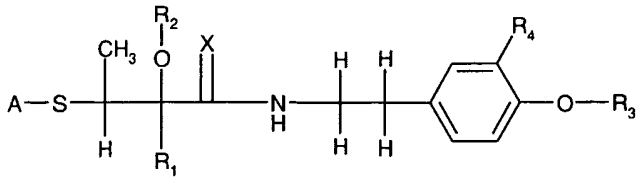
Table 17: Compounds represented by the Formula I.17



( I.17 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

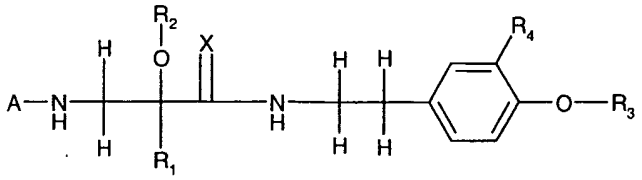
Table 18: Compounds represented by the Formula I.18



( I.18 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

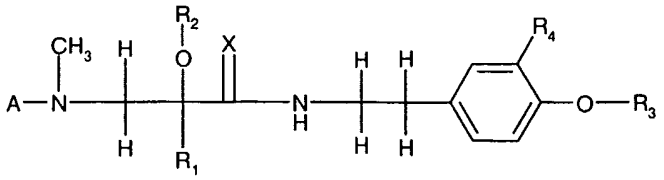
Table 19: Compounds represented by the Formula I.19



( I.19 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

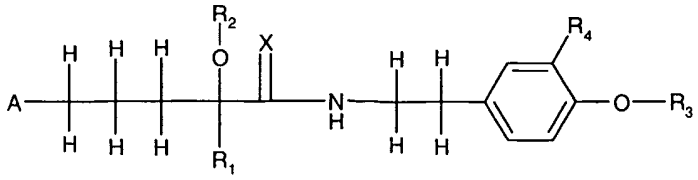
Table 20: Compounds represented by the Formula I.20



( I.20 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

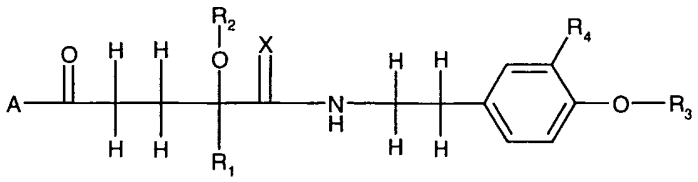
Table 21: Compounds represented by the Formula I.21



( I.21 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

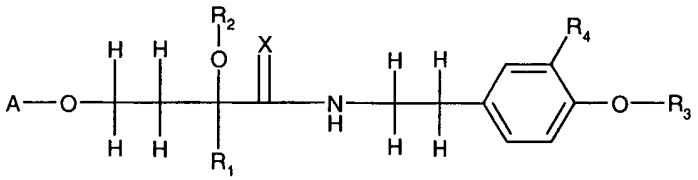
Table 22: Compounds represented by the Formula I.22



( I.22 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

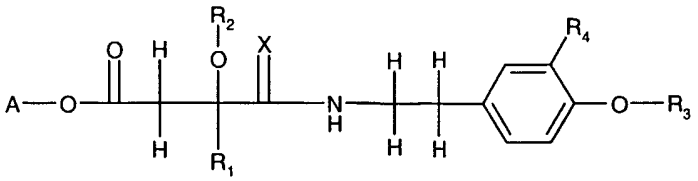
Table 23: Compounds represented by the Formula I.23



( I.23 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

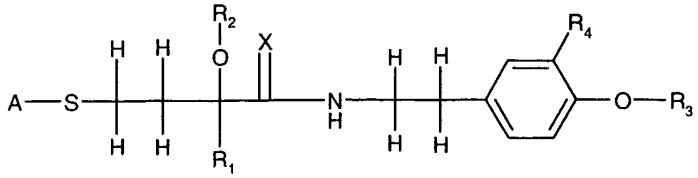
Table 24: Compounds represented by the Formula I.24



( I.24 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

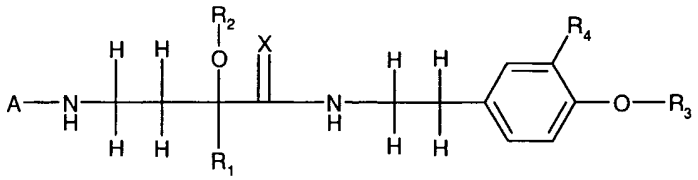
Table 25: Compounds represented by the Formula I.25



( I.25 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

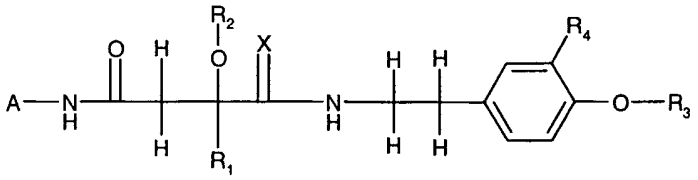
Table 26: Compounds represented by the Formula I.26



( I.26 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

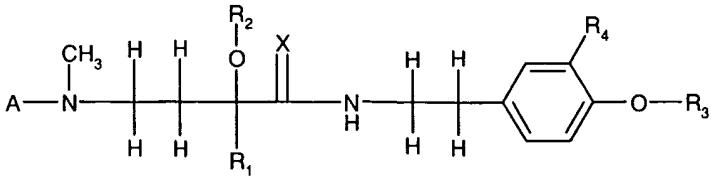
Table 27: Compounds represented by the Formula I.27



( I.27 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

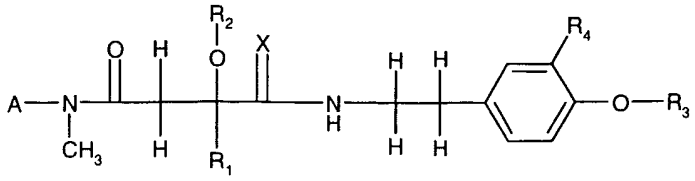
Table 28: Compounds represented by the Formula I.28



( I.28 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

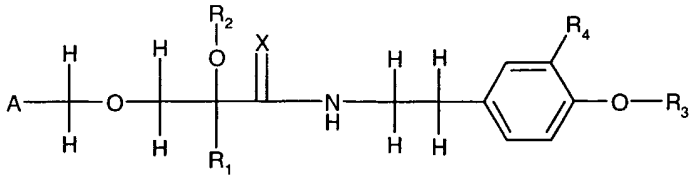
Table 29: Compounds represented by the Formula I.29



( I.29 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

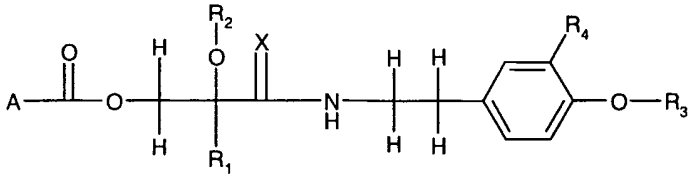
Table 30: Compounds represented by the Formula I.30



( I.30 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

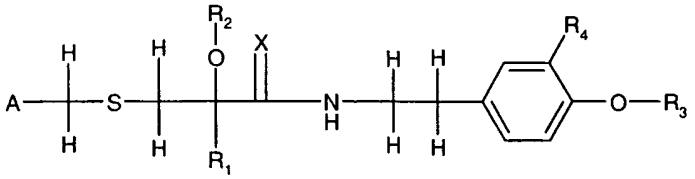
Table 31: Compounds represented by the Formula I.31



( I.31 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

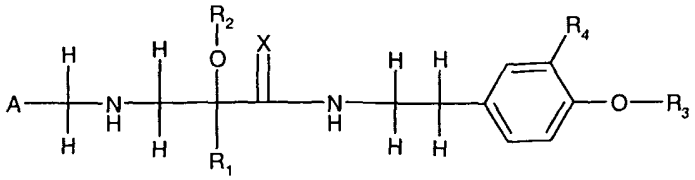
Table 32: Compounds represented by the Formula I.32



( I.32 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

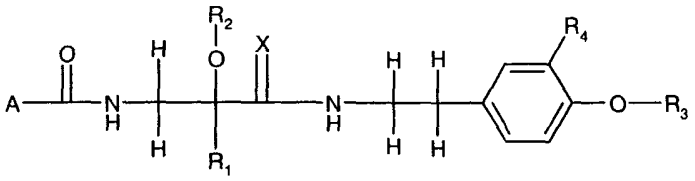
Table 33: Compounds represented by the Formula I.33



( I.33 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

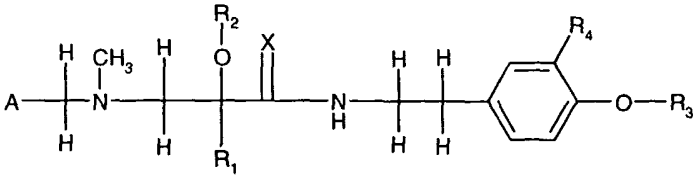
Table 34: Compounds represented by the Formula I.34



( I.34 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

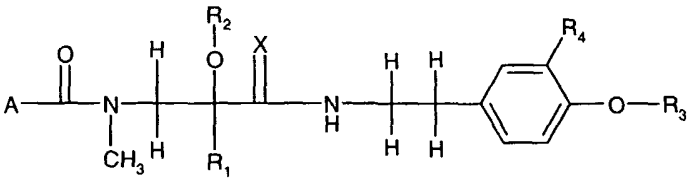
Table 35: Compounds represented by the Formula I.35



( I.35 )

wherein the combination of the groups A; $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

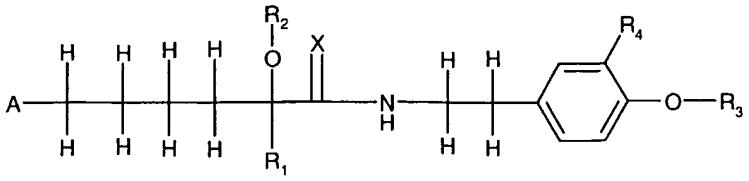
Table 36: Compounds represented by the Formula I.36



( I.36 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

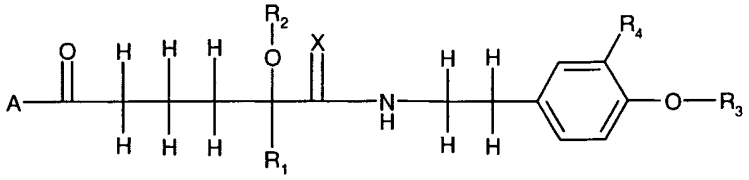
Table 37: Compounds represented by the Formula I.37



( I.37 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

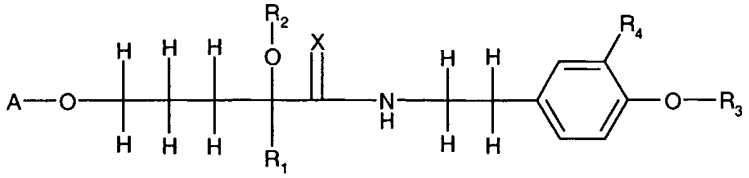
Table 38: Compounds represented by the Formula I.38



( I.38 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

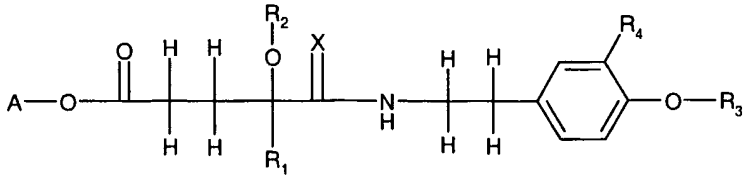
Table 39: Compounds represented by the Formula I.39



( I.39 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

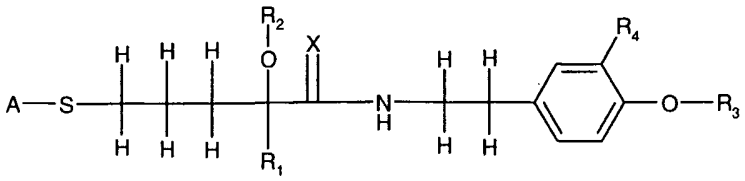
Table 40: Compounds represented by the Formula I.40



( I.40 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

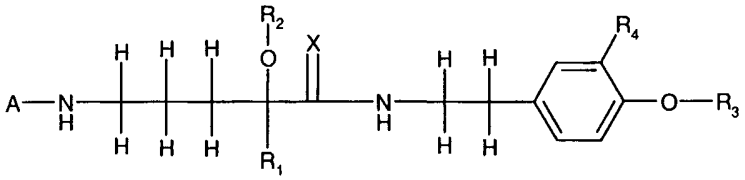
Table 41: Compounds represented by the Formula I.41



( I.41 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

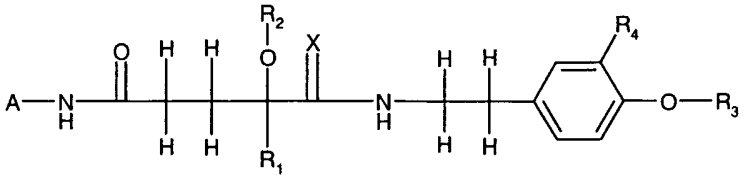
Table 42: Compounds represented by the Formula I.42



( I.42 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

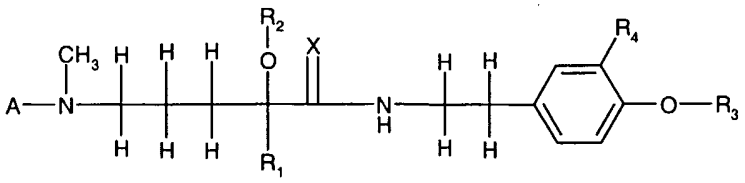
Table 43: Compounds represented by the Formula I.43



( I.43 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

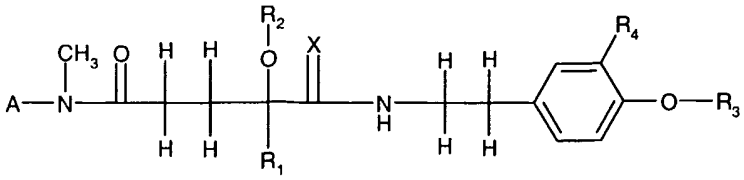
Table 44: Compounds represented by the Formula I.44



( I.44 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

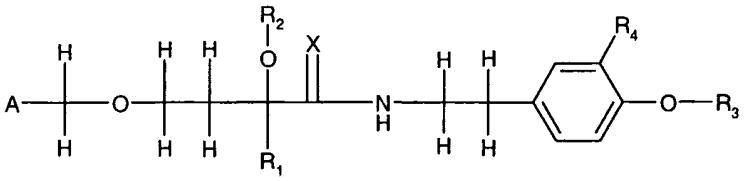
Table 45: Compounds represented by the Formula I.45



( I.45 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

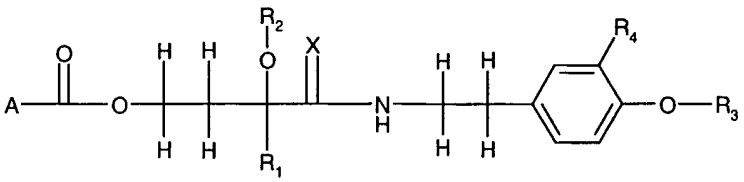
Table 46: Compounds represented by the Formula I.46



( I.46 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

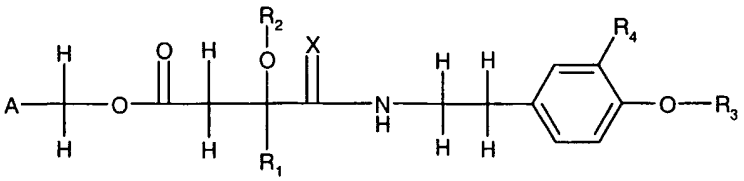
Table 47: Compounds represented by the Formula I.47



( I.47 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

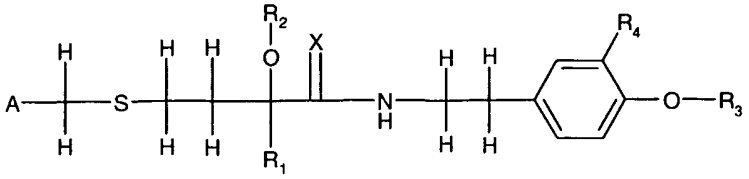
Table 48: Compounds represented by the Formula I.48



( I.48 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

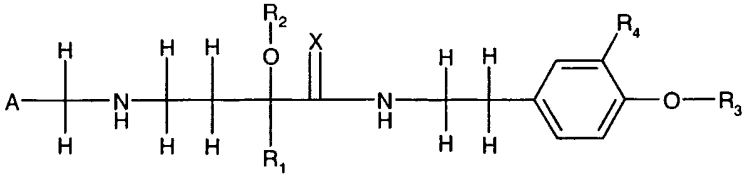
Table 49: Compounds represented by the Formula I.49



( I.49 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

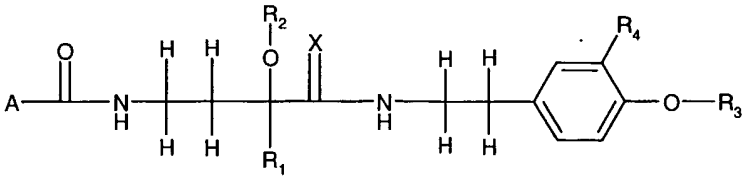
Table 50: Compounds represented by the Formula I.50



( I.50 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

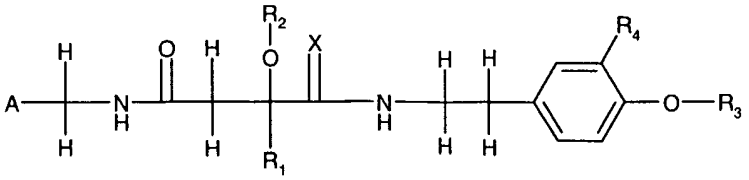
Table 51: Compounds represented by the Formula I.51



( I.51 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

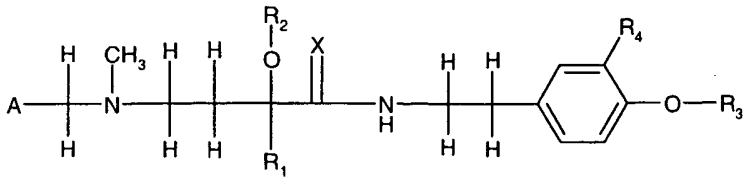
Table 52: Compounds represented by the Formula I.52



( I.52 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

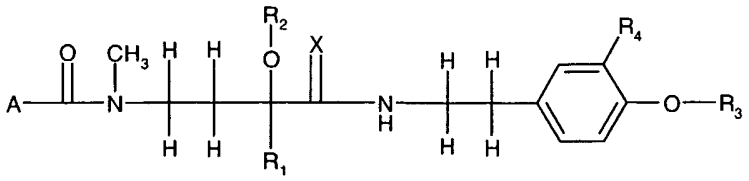
Table 53: Compounds represented by the Formula I.53



( I.53 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

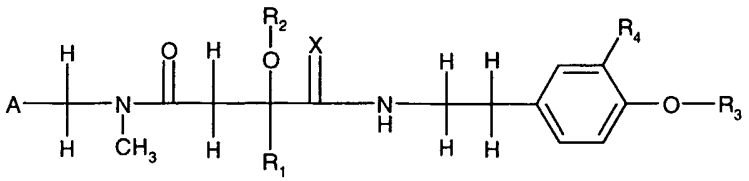
Table 54: Compounds represented by the Formula I.54



( I.54 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

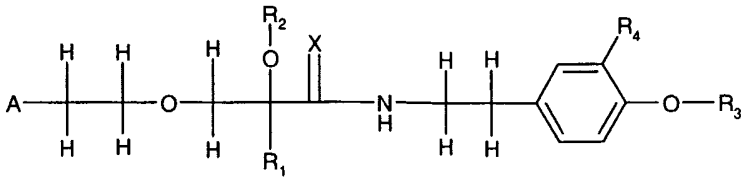
Table 55: Compounds represented by the Formula I.55



( I.55 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

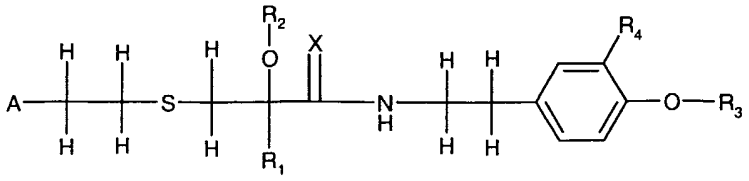
Table 56: Compounds represented by the Formula I.56



( I.56 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

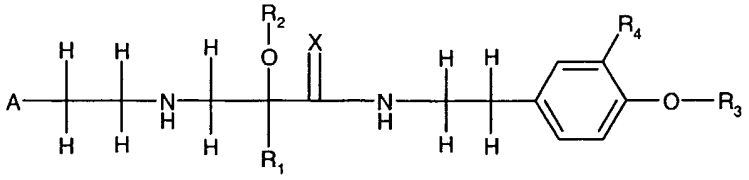
Table 57: Compounds represented by the Formula I.57



( I.57 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

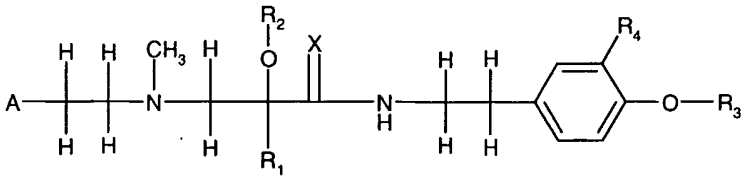
Table 58: Compounds represented by the Formula I.58



( I.58 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

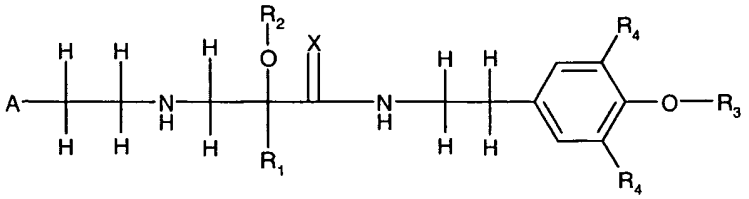
Table 59: Compounds represented by the Formula I.59



( I.59 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

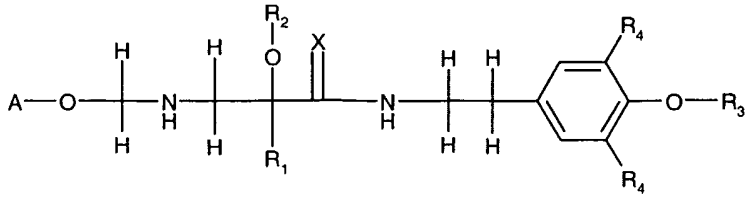
Table 60: Compounds represented by the Formula I.60



( I.60 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

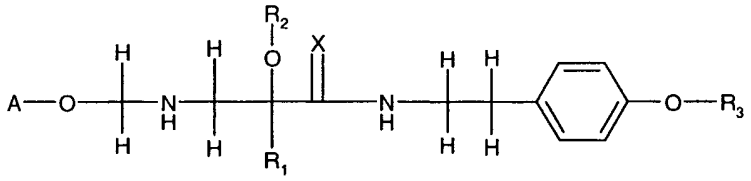
Table 61: Compounds represented by the Formula I.61



( I.61 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, $R_4$ and X corresponds each to one row in table A.

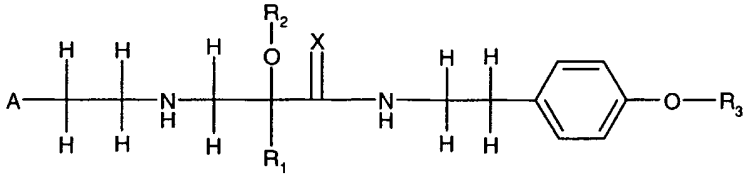
Table 62: Compounds represented by the Formula I.62



( I.62 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$ and X corresponds each to one row in table A.

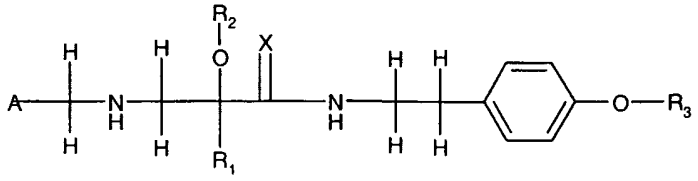
Table 63: Compounds represented by the Formula I.63



( I.63 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, and X corresponds each to one row in table A.

Table 64: Compounds represented by the Formula I.64



( I.64 )

wherein the combination of the groups A, $R_1$, $R_2$, $R_3$, and X corresponds each to one row in table A.

Table A: (Ph designates phenyl)

| No. | A | $R_1$ | $R_2$ | $R_3$ | $R_4$ | X |
|---|---|---|---|---|---|---|
| 001 | Ph | H | H | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 002 | Ph | H | $CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 003 | Ph | H | $CH_2CH_3$ | $CH_2C^oCH$ | $OCH_3$ | O |
| 004 | Ph | H | $CH_2C\equiv CH$ | $CH_3$ | $OCH_3$ | O |
| 005 | Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 006 | Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 007 | Ph | $CH_3$ | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 008 | Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $CH_3$ | O |
| 009 | Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | S |
| 010 | 4-F-Ph | H | H | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 011 | 4-F-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 012 | 4-F-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 013 | 4-F-Ph | H | $CH_2C\equiv CH$ | $CH_3$ | $OCH_3$ | O |
| 014 | 4-F-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 015 | 4-F-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 016 | 4-F-Ph | $CH_3$ | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 017 | 4-F-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $CH_3$ | O |
| 018 | 4-F-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | S |
| 019 | 4-Cl-Ph | H | H | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 020 | 4-Cl-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 021 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 022 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_3$ | $OCH_3$ | O |
| 023 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 024 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 025 | 4-Cl-Ph | $CH_3$ | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 026 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $CH_3$ | O |
| 027 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | S |
| 028 | 4-Br-Ph | H | H | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 029 | 4-Br-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 030 | 4-Br-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 031 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_3$ | $OCH_3$ | O |
| 032 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 033 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 034 | 4-Br-Ph | $CH_3$ | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 035 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $CH_3$ | O |
| 036 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | $OCH_3$ | S |
| 037 | 4-$CH_3$-Ph | H | H | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 038 | 4-$CH_3$-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 039 | 4-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | $OCH_3$ | O |
| 040 | 4-$CH_3$-Ph | H | $CH_2C\equiv CH$ | $CH_3$ | $OCH_3$ | O |
| 041 | 4-$CH_3$-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | $OCH_3$ | O |

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|---|---|---|---|---|---|---|
| 042 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 043 | 4-$CH_3$-Ph | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 044 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 045 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 046 | 4-$CF_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 047 | 4-$CF_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 048 | 4-$CF_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 049 | 4-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 050 | 4-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 051 | 4-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 052 | 4-$CF_3$-Ph | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 053 | 4-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 054 | 4-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 055 | 4-$CH_3CH_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 056 | 4-$CH_3CH_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 057 | 4-$CH_3CH_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 058 | 4-$CH_3CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 059 | 4-$CH_3CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 060 | 4-$CH_3CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 061 | 4-$CH_3CH_2$-Ph | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 062 | 4-$CH_3CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 063 | 4-$CH_3CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 064 | 4-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 065 | 4-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 066 | 4-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 067 | 4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 068 | 4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 069 | 4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 070 | 4-$CH_3O$-Ph | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 071 | 4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 072 | 4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 073 | 3,4-$Cl_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 074 | 3,4-$Cl_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 075 | 3,4-$Cl_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 076 | 3,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 077 | 3,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 078 | 3,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 079 | 3,4-$Cl_2$-Ph | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 080 | 3,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 081 | 3,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 082 | 2-F-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 083 | 2-F-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 084 | 2-F-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 085 | 2-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 086 | 2-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |

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|---|---|---|---|---|---|---|
| 087 | 2-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 088 | 2-Cl-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 089 | 2-Cl-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 090 | 2-Cl-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 091 | 2-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 092 | 2-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 093 | 2-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 094 | 2-$CH_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 095 | 2-$CH_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 096 | 2-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 097 | 2-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 098 | 2-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 099 | 2-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 100 | 2-$CF_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 101 | 2-$CF_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 102 | 2-$CF_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 103 | 2-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 104 | 2-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 105 | 2-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 106 | 2-CN-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 107 | 2-CN-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 108 | 2-CN-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 109 | 2-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 110 | 2-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 111 | 2-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 112 | 2-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 113 | 2-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 114 | 2-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 115 | 2-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 116 | 2-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 117 | 2-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 118 | 3-F-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 119 | 3-F-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 120 | 3-F-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 121 | 3-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 122 | 3-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 123 | 3-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 124 | 3-Cl-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 125 | 3-Cl-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 126 | 3-Cl-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 127 | 3-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 128 | 3-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 129 | 3-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 130 | 3-Br-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 131 | 3-Br-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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|---|---|---|---|---|---|---|
| 132 | 3-Br-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 133 | 3-Br-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 134 | 3-Br-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 135 | 3-Br-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 136 | 3-$CH_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 137 | 3-$CH_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 138 | 3-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 139 | 3-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 140 | 3-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 141 | 3-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 142 | 3-$CF_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 143 | 3-$CF_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 144 | 3-$CF_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 145 | 3-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 146 | 3-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 147 | 3-$CF_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 148 | 3-CN-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 149 | 3-CN-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 150 | 3-CN-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 151 | 3-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 152 | 3-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 153 | 3-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 154 | 3-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 155 | 3-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 156 | 3-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 157 | 3-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 158 | 3-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 159 | 3-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 160 | 3-$CF_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 161 | 3-$CF_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 162 | 3-$CF_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 163 | 3-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 164 | 3-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 165 | 3-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 166 | 4-$CH_2$=CH-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 167 | 4-$CH_2$=CH-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 168 | 4-$CH_2$=CH-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 169 | 4-$CH_2$=CH-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 170 | 4-$CH_2$=CH-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 171 | 4-$CH_2$=CH-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 172 | 4-CH≡C-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 173 | 4-CH≡C-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 174 | 4-CH≡C-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 175 | 4-CH≡C-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 176 | 4-CH≡C-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |

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|---|---|---|---|---|---|---|
| 177 | 4-CH≡C-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 178 | 4-$CH_3CH_2CH_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 179 | 4-$CH_3CH_2CH_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 180 | 4-$CH_3CH_2CH_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 181 | 4-$CH_3CH_2CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 182 | 4-$CH_3CH_2CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 183 | 4-$CH_3CH_2CH_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 184 | 4-$(CH_3)_2CH$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 185 | 4-$(CH_3)_2CH$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 186 | 4-$(CH_3)_2CH$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 187 | 4-$(CH_3)_2CH$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 188 | 4-$(CH_3)_2CH$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 189 | 4-$(CH_3)_2CH$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 190 | 4-$(CH_3)_3C$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 191 | 4-$(CH_3)_3C$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 192 | 4-$(CH_3)_3C$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 193 | 4-$(CH_3)_3C$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 194 | 4-$(CH_3)_3C$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 195 | 4-$(CH_3)_3C$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 196 | 4-CN-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 197 | 4-CN-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 198 | 4-CN-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 199 | 4-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 200 | 4-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 201 | 4-CN-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 202 | 4-$CF_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 203 | 4-$CF_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 204 | 4-$CF_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 205 | 4-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 206 | 4-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 207 | 4-$CF_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 208 | 4-$CH_3S$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 209 | 4-$CH_3S$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 210 | 4-$CH_3S$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 211 | 4-$CH_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 212 | 4-$CH_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 213 | 4-$CH_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 214 | 4-$CF_3S$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 215 | 4-$CF_3S$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 216 | 4-$CF_3S$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 217 | 4-$CF_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 218 | 4-$CF_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 219 | 4-$CF_3S$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 220 | 4-$CH_3CH_2O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 221 | 4-$CH_3CH_2O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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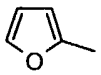
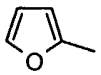
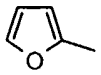
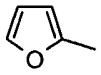
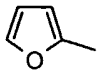
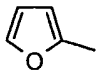
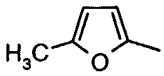
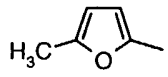
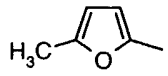
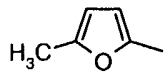
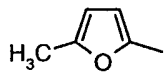
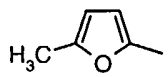
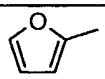
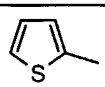
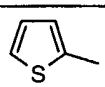
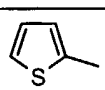
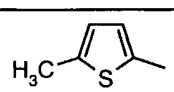
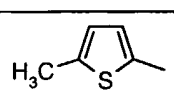
|---|---|---|---|---|---|---|
| 222 | 4-$CH_3CH_2O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 223 | 4-$CH_3CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 224 | 4-$CH_3CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 225 | 4-$CH_3CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 226 | 4-$CH_3CH_2CH_2O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 227 | 4-$CH_3CH_2CH_2O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 228 | 4-$CH_3CH_2CH_2O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 229 | 4-$CH_3CH_2CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 230 | 4-$CH_3CH_2CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 231 | 4-$CH_3CH_2CH_2O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 232 | 3,4-$Br_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 233 | 3,4-$Br_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 234 | 3,4-$Br_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 235 | 3,4-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 236 | 3,4-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 237 | 3,4-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 238 | 3,5-$Br_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 239 | 3,5-$Br_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 240 | 3,5-$Br_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 241 | 3,5-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 242 | 3,5-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 243 | 3,5-$Br_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 244 | 2,3-$Cl_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 245 | 2,3-$Cl_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 246 | 2,3-$Cl_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 247 | 2,3-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 248 | 2,3-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 249 | 2,3-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 250 | 2,4-$Cl_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 251 | 2,4-$Cl_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 252 | 2,4-$Cl_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 253 | 2,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 254 | 2,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 255 | 2,4-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 256 | 3,5-$Cl_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 257 | 3,5-$Cl_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 258 | 3,5-$Cl_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 259 | 3,5-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 260 | 3,5-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 261 | 3,5-$Cl_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 262 | 2,4-$F_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 263 | 2,4-$F_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 264 | 2,4-$F_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 265 | 2,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 266 | 2,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |

| | | | | | | |
|---|---|---|---|---|---|---|
| 267 | 2,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 268 | 3,4-$F_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 269 | 3,4-$F_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 270 | 3,4-$F_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 271 | 3,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 273 | 3,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 274 | 3,4-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 275 | 3,5-$F_2$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 276 | 3,5-$F_2$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 277 | 3,5-$F_2$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 278 | 3,5-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 279 | 3,5-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 280 | 3,5-$F_2$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 281 | 3-Br-4-F-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 282 | 3-Br-4-F-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 283 | 3-Br-4-F-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 284 | 3-Br-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 285 | 3-Br-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 286 | 3-Br-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 287 | 3-Cl-4-F-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 288 | 3-Cl-4-F-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 289 | 3-Cl-4-F-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 290 | 3-Cl-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 291 | 3-Cl-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 292 | 3-Cl-4-F-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 293 | 3-F-4-Cl-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 294 | 3-F-4-Cl-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 295 | 3-F-4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 296 | 3-F-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 297 | 3-F-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 298 | 3-F-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 299 | 3-$CF_3$-4-Cl-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 300 | 3-$CF_3$-4-Cl-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 301 | 3-$CF_3$-4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 302 | 3-$CF_3$-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 303 | 3-$CF_3$-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 304 | 3-$CF_3$-4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 305 | 3,4-$CH_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 306 | 3,4-$CH_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 307 | 3,4-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 308 | 3,4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 309 | 3,4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 310 | 3,4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 311 | 3,5-$CH_3$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 312 | 3,5-$CH_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

| | | | | | | |
|---|---|---|---|---|---|---|
| 313 | 3,5-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 314 | 3,5-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 315 | 3,5-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 316 | 3,5-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 317 | 3,4-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 318 | 3,4-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 319 | 3,4-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 320 | 3,4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 321 | 3,4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 322 | 3,4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 323 | 3,5-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 324 | 3,5-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 325 | 3,5-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 326 | 3,5-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 327 | 3,5-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 328 | 3,5-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 329 | 3-$CH_3$-4-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 330 | 3-$CH_3$-4-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 331 | 3-$CH_3$-4-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 332 | 3-$CH_3$-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 333 | 3-$CH_3$-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 334 | 3-$CH_3$-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 335 | 3-F-4-$CH_3O$-Ph | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 336 | 3-F-4-$CH_3O$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 337 | 3-F-4-$CH_3O$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 338 | 3-F-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 339 | 3-F-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 340 | 3-F-4-$CH_3O$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 341 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 342 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 343 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 344 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 345 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 346 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 347 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

| | | | | | | |
|---|---|---|---|---|---|---|
| 348 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 349 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 350 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 351 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 352 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 353 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 354 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 355 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 356 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 357 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 358 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 359 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 360 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 361 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 362 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 363 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 364 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 365 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 366 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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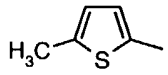
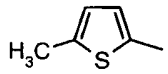
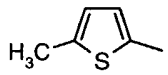
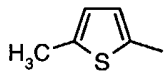
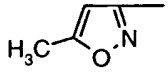
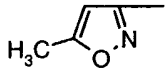
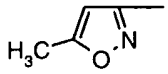
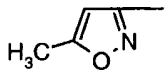
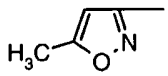
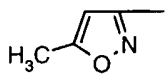
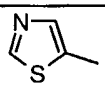
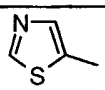
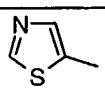
| 367 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 368 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 369 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 370 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 371 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 372 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 373 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 374 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 375 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 376 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 377 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 378 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 379 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 380 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 381 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 382 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 383 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 384 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 385 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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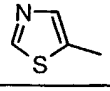
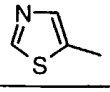
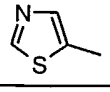
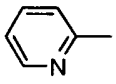
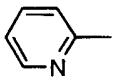
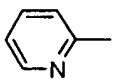
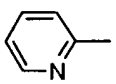
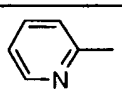
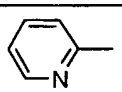
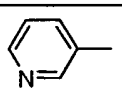
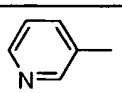
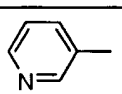
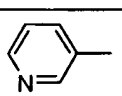
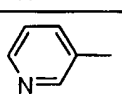
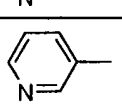
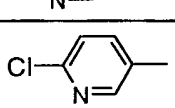
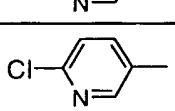
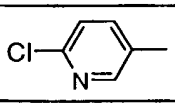
|---|---|---|---|---|---|---|
| 386 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 387 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 388 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 389 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 390 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 391 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 392 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 393 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 394 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 395 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 396 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 397 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 398 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 399 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 400 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 401 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 402 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 403 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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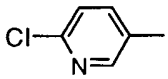
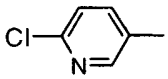
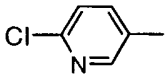
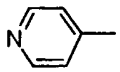
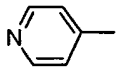
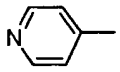
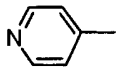
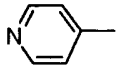
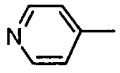
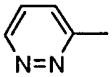
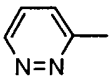
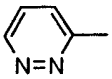
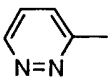
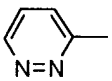
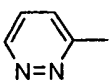
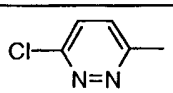
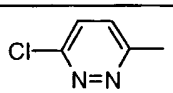
|---|---|---|---|---|---|---|
| 404 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 405 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 406 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 407 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 408 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 409 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 410 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 411 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 412 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 413 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 414 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 415 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 416 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 417 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 418 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 419 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 420 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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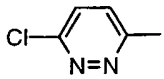
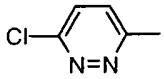
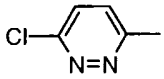
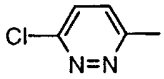
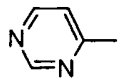
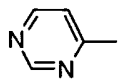
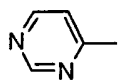
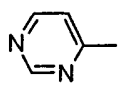
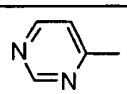
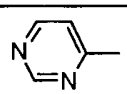
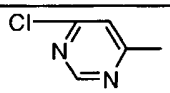
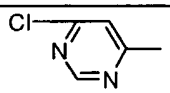
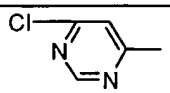
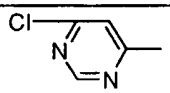
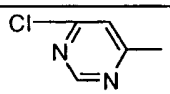
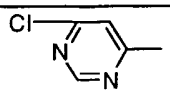
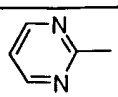
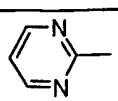
| 421 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 422 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 423 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 424 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 425 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 426 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 427 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 428 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 429 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 430 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 431 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 432 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 433 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 434 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 435 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 436 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 437 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 438 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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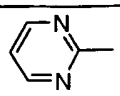
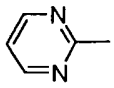
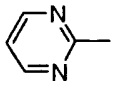
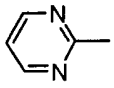
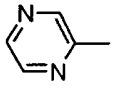
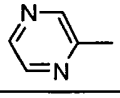
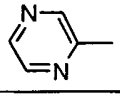
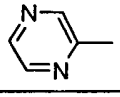
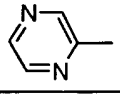
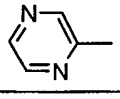
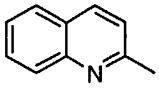
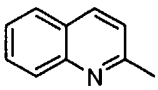
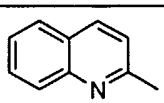
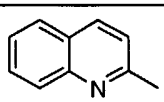
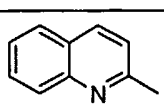
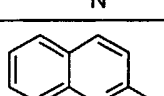
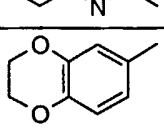
| 439 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 440 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 441 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 442 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 443 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 444 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 445 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 446 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 447 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 448 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 449 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 450 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 451 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 452 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 453 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 454 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 455 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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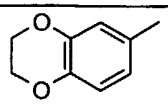
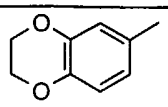
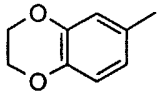
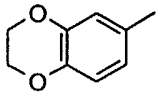
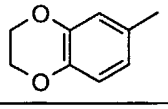
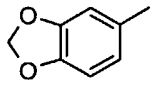
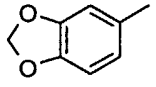
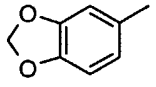
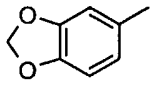
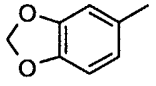
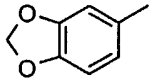
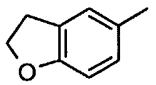
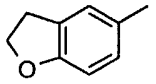
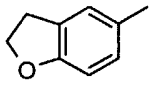
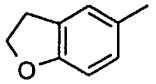
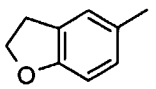
|---|---|---|---|---|---|---|
| 456 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 457 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 458 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 459 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 460 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 461 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 462 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 463 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 464 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 465 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 466 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 467 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 468 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 469 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 470 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 471 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |

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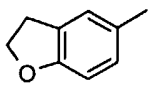
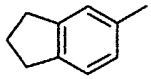
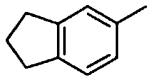
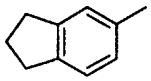
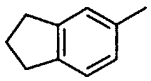
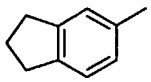
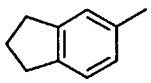
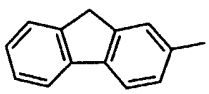
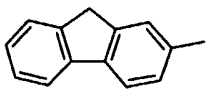
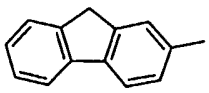
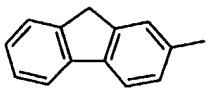
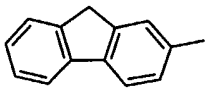
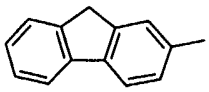
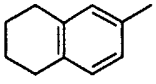
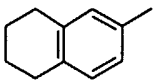
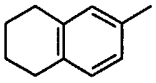
|---|---|---|---|---|---|---|
| 472 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 473 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 474 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 475 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 476 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 477 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 478 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 479 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 480 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 481 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 482 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 483 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 484 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 485 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 486 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 487 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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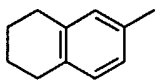
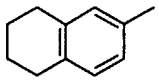
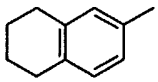
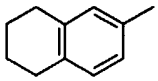
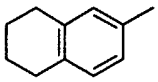
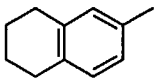
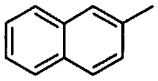
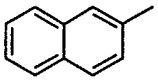
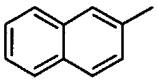
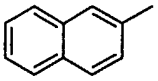
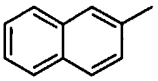
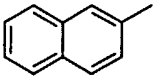
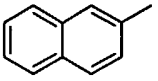
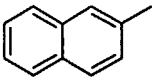
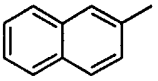
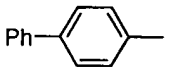
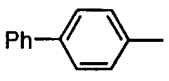
|---|---|---|---|---|---|---|
| 488 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 489 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 490 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 491 |  | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 492 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 493 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 494 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 495 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 496 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 497 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 498 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 499 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 500 |  | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 501 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 502 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 503 |  | H | H | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 504 |  | H | $CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |

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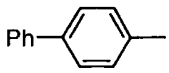
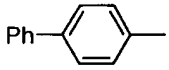
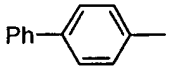
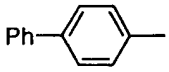
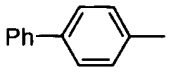
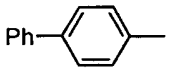
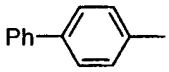
|---|---|---|---|---|---|---|
| 505 |  | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 506 |  | H | $CH_2C{\equiv}CH$ | $CH_3$ | $OCH_3$ | O |
| 507 |  | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | $OCH_3$ | O |
| 508 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 509 |  | $CH_3$ | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | O |
| 510 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $CH_3$ | O |
| 511 |  | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | $OCH_3$ | S |
| 512 | Ph | H | H | $CH_3$ | Cl | O |
| 513 | Ph | H | $CH_3$ | $CH_3$ | Cl | O |
| 514 | Ph | H | $CH_2CH_3$ | $CH_3$ | Cl | O |
| 515 | Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | Cl | O |
| 516 | Ph | H | H | $CH_2CH_3$ | Cl | O |
| 517 | Ph | H | $CH_3$ | $CH_2CH_3$ | Cl | O |
| 518 | Ph | H | $CH_2CH_3$ | $CH_2CH_3$ | Cl | O |
| 519 | Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | Cl | O |
| 520 | Ph | H | H | $CH_2C{\equiv}CH$ | Cl | O |
| 521 | Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | Cl | O |
| 522 | Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | Cl | O |
| 523 | Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | Cl | O |
| 524 | 4-Cl-Ph | H | H | $CH_3$ | Cl | O |
| 525 | 4-Cl-Ph | H | $CH_3$ | $CH_3$ | Cl | O |
| 526 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_3$ | Cl | O |
| 527 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | Cl | O |
| 528 | 4-Cl-Ph | H | H | $CH_2CH_3$ | Cl | O |
| 529 | 4-Cl-Ph | H | $CH_3$ | $CH_2CH_3$ | Cl | O |
| 530 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2CH_3$ | Cl | O |
| 531 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2CH_3$ | Cl | O |
| 532 | 4-Cl-Ph | H | H | $CH_2C{\equiv}CH$ | Cl | O |
| 533 | 4-Cl-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | Cl | O |
| 534 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | Cl | O |
| 535 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | Cl | O |
| 536 | 4-Cl-Ph | H | H | $CH_3$ | Br | O |
| 537 | 4-Cl-Ph | H | $CH_3$ | $CH_3$ | Br | O |
| 538 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_3$ | Br | O |
| 539 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_3$ | Br | O |
| 540 | 4-Cl-Ph | H | H | $CH_2CH_3$ | Br | O |

| | | | | | | |
|---|---|---|---|---|---|---|
| 541 | 4-Cl-Ph | H | $CH_3$ | $CH_2CH_3$ | Br | O |
| 542 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2CH_3$ | Br | O |
| 543 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | Br | O |
| 544 | 4-Cl-Ph | H | H | $CH_2C\equiv CH$ | Br | O |
| 545 | 4-Cl-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 546 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 547 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | Br | O |
| 548 | 4-Cl-Ph | H | H | $CH_3$ | CN | O |
| 549 | 4-Cl-Ph | H | $CH_3$ | $CH_3$ | CN | O |
| 550 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_3$ | CN | O |
| 551 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_3$ | CN | O |
| 552 | 4-Cl-Ph | H | H | $CH_2CH_3$ | CN | O |
| 553 | 4-Cl-Ph | H | $CH_3$ | $CH_2CH_3$ | CN | O |
| 554 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2CH_3$ | CN | O |
| 555 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2CH_3$ | CN | O |
| 556 | 4-Cl-Ph | H | H | $CH_2C\equiv CH$ | CN | O |
| 557 | 4-Cl-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 558 | 4-Cl-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 559 | 4-Cl-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | CN | O |
| 560 | Ph | H | H | $CH_2C\equiv CH$ | Br | O |
| 561 | Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 562 | Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 563 | Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | Br | O |
| 564 | Ph | H | H | $CH_2C\equiv CH$ | CN | O |
| 565 | Ph | H | $CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 566 | Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 567 | Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | CN | O |
| 568 | 4-Br-Ph | H | H | $CH_2C\equiv CH$ | Cl | O |
| 569 | 4-Br-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Cl | O |
| 570 | 4-Br-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | Cl | O |
| 571 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | Cl | O |
| 572 | 4-Br-Ph | H | H | $CH_2C\equiv CH$ | Br | O |
| 573 | 4-Br-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 574 | 4-Br-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | Br | O |
| 575 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | Br | O |
| 576 | 4-Br-Ph | H | H | $CH_2C\equiv CH$ | CN | O |
| 577 | 4-Br-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 578 | 4-Br-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | CN | O |
| 579 | 4-Br-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | CN | O |
| 580 | 4-$CH_3$-Ph | H | H | $CH_2C\equiv CH$ | Cl | O |
| 581 | 4-$CH_3$-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Cl | O |
| 582 | 4-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C\equiv CH$ | Cl | O |
| 583 | 4-$CH_3$-Ph | H | $CH_2C\equiv CH$ | $CH_2C\equiv CH$ | Cl | O |
| 584 | 4-$CH_3$-Ph | H | H | $CH_2C\equiv CH$ | Br | O |
| 585 | 4-$CH_3$-Ph | H | $CH_3$ | $CH_2C\equiv CH$ | Br | O |

| | | | | | | |
|---|---|---|---|---|---|---|
| 586 | 4-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | Br | O |
| 587 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | Br | O |
| 588 | 4-$CH_3$-Ph | H | H | $CH_2C{\equiv}CH$ | CN | O |
| 589 | 4-$CH_3$-Ph | H | $CH_3$ | $CH_2C{\equiv}CH$ | CN | O |
| 590 | 4-$CH_3$-Ph | H | $CH_2CH_3$ | $CH_2C{\equiv}CH$ | CN | O |
| 591 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CH$ | CN | O |
| 592 | Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CCH_3$ | $OCH_3$ | O |
| 593 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CCH_3$ | $OCH_3$ | O |
| 594 | 4-Br-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CCH_3$ | $OCH_3$ | O |
| 595 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}CCH_3$ | $OCH_3$ | O |
| 596 | Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}C\text{-}C_2H_5$ | $OCH_3$ | O |
| 597 | 4-Cl-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}C\text{-}C_2H_5$ | $OCH_3$ | O |
| 598 | 4-Br-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}C\text{-}C_2H_5$ | $OCH_3$ | O |
| 599 | 4-$CH_3$-Ph | H | $CH_2C{\equiv}CH$ | $CH_2C{\equiv}C\text{-}C_2H_5$ | $OCH_3$ | O |

Formulations may be prepared analogously to those described in, for example, WO 95/30651.

Biological Examples

D-1: Action against Plasmopara viticola on vines

a) Residual-protective action

Vine seedlings are sprayed at the 4- to 5-leaf stage with a spray mixture (0.02 % active ingredient) prepared from a wettable powder formulation of the test compound. After 24 hours, the treated plants are infected with a sporangia suspension of the fungus. Fungus infestation is evaluated after incubation for 6 days at 95-100 % relative humidity and +20°C.

b) Residual-curative action

Vine seedlings are infected at the 4- to 5-leaf stage with a sporangia suspension of the fungus. After incubation for 24 hours in a humidity chamber at 95-100 % relative humidity and +20°C, the infected plants are dried and sprayed with a spray mixture (0.02 % active ingredient) prepared from a wettable powder formulation of the test compound. After the spray coating has dried, the treated plants are placed in the humidity chamber again. Fungus infestation is evaluated 6 days after infection.

Compounds of Tables 1 to 64 exhibit a good fungicidal action against Plasmopara viticola on vines. Compounds E1.03, E1.06, E1.14, E1.17, E1.24, E1.25, E1.26, E1.29, E1.32, E1.35,E1.38, E1.43, E1.46, E1.49, E1.50, E1.51 and E1.53 at 200 ppm inhibit fungal

infestations in both tests D-1a) and D-1b) by 80 – 100 %. At the same time untreated plants showed pathogen attack of 80 – 100 %.

D-2: Action against Phytophthora on tomato plants

a) Residual-protective action

After a cultivation period of 3 weeks, tomato plants are sprayed with a spray mixture (0.02 % active ingredient) prepared from a wettable powder formulation of the test compound. After 48 hours, the treated plants are infected with a sporangia suspension of the fungus. Fungus infestation is evaluated after incubation of the infected plants for 5 days at 90-100 % relative humidity and +20°C.

b) Systemic action

After a cultivation period of 3 weeks, tomato plants are watered with a spray mixture (0.02 % active ingredient based on the volume of the soil) prepared from a wettable powder formulation of the test compound. Care is taken that the spray mixture does not come into contact with the parts of the plants that are above the ground. After 96 hours, the treated plants are infected with a sporangia suspension of the fungus. Fungus infestation is evaluated after incubation of the infected plants for 4 days at 90-100 % relative humidity and +20°C.

Compounds of Tables 1 to 64 exhibit a good fungicidal action against Plasmopara viticola on vines. Compounds E1.03, E1.06, E1.14, E1.17, E1.24, E1.25, E1.26, E1.28, E1.29, E1.32, E1.35, E1.41, E1.43, E1.46, E1.49, E1.50, E1.51, E1.53, E1.57 and E1.60 at 200 ppm inhibit fungal infestations in both tests D-2a) and D-2b) by 80 – 100 %. At the same time untreated plants showed pathogen attack of 80 – 100 %.

D-3 : Action against Phytophthora on potato plants

a) Residual-protective action

2-3 week old potato plants (Bintje variety) are sprayed with a spray mixture (0.02 % active ingredient) prepared from a wettable powder formulation of the test compound. After 48 hours, the treated plants are infected with a sporangia suspension of the fungus. Fungus infestation is evaluated after incubation of the infected plants for 4 days at 90-100 % relative humidity and +20°C.

b) Systemic action

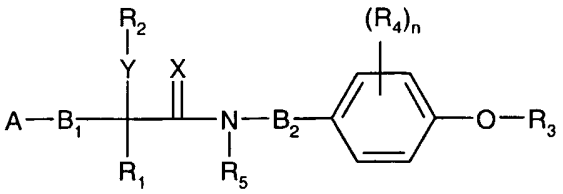
2-3 week old potato plants (Bintje variety) are watered with a spray mixture (0.02 % active ingredient based on the volume of the soil) prepared from a wettable powder formulation of

the test compound. Care is taken that the spray mixture does not come into contact with the parts of the plants that are above the ground. After 48 hours, the treated plants are infected with a sporangia suspension of the fungus. Fungus infestation is evaluated after incubation of the infected plants for 4 days at 90-100 % relative humidity and +20°C. Fungal infestation is effectively controlled with compounds of Tables 1 to 64.

Compounds E1.03, E1.14, E1.25, E1.26, E1.32, E1.35, E1.43, E1.46, E1.49, E1.51 and E1.53 at 200 ppm inhibit fungal infestations in both tests D-3a) and D-3b) by 80 – 100 %. At the same time untreated plants showed pathogen attack of 80 – 100 %.

What is claimed is:

1. A compound of the general formula



(I)

including the optical isomers thereof and mixtures of such isomers, wherein

A stands for optionally substituted aryl or optionally substituted heteroaryl;

X is oxygen or sulfur;

Y is oxygen or sulfur;

$R_1$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl or halocycloalkyl;

$R_2$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or optionally substituted aryl-alkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl or optionally substituted aryloxy-alkyl;

$R_3$ is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkoxy-alkenyl, alkoxy-alkynyl, whereof all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or is optionally substituted aryl-alkyl, optionally substituted aryl-alkenyl, optionally substituted aryl-alkynyl, optionally substituted aryloxy-alkyl, optionally substituted heteroaryl-alkyl, optionally substituted heteroaryl-alkenyl or optionally substituted heteroaryl-alkynyl

$R_4$ is alkyl, alkenyl, alkynyl, alkoxy-alkyl, alkoxy, alkenyloxy, alkynyloxy, alkylthio, alkanoyl, alkylamino, dialkylamino, alkoxycarbonyl, whereof all alkyl- alkenyl or alkynyl-groups may be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl;

$R_5$ is hydrogen, alkyl, alkenyl or alkynyl;

n is an integer 0,1, 2, 3, or 4;

$B_1$ represents a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$, wherein

q is an integer 2, 3 or 4;

r is an integer 0, 1, 2, 3; s is an integer 1, 2 or 3, provided that (r + s) is either 1, 2 or 3;

Z is –O-, -S-, -SO-, $-SO_2-$, $NR_6-$, -CO-, -OOC-, -COO-, $-NR_6-CO-$ or $-CO-NR_6-$ ;

$R_6$ is hydrogen or alkyl ;

$R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or alkyl ; and
$B_2$ is an alkylene bridge.

2. A compound according to claim 1 wherein
A is phenyl, naphthyl, 1,3-biphenyl, 1,4-biphenyl, fluorenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, tetrazinyl, indolyl, indazolyl, benzofuranyl, benzothienyl, benzothiazolyl, benzoxazolyl, quinolinyl or isoquinolinyl, each optionally substituted by one or more substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, $C_1$-$C_8$-cycloalkyl, $C_1$-$C_8$-cycloalkyl-$C_1$-$C_{10}$-alkyl, phenyl, phenyl-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_{10}$-alkoxy-$C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, $C_3$-$C_{10}$-alkenyloxycarbonyl, $C_3$-$C_{10}$-alkynyloxycarbonyl, $C_1$-$C_{10}$-alkylamino, di-$C_1$-$C_{10}$-alkylamino, hydroxy, halogen, cyano, nitro, amino and formyl radicals, wherein in turn the alkyl-alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by one or more halogen atoms; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ stands for hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl or $C_3$-$C_8$-cycloalkyl, wherein all alkyl-alkenyl-, alkynyl- and cycloalkyl-groups may be optionally substituted by halogen; and $R_2$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or stands for optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl or optionally substituted aryloxy-$C_1$-$C_6$-alkyl; and $R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkenyl or $C_1$-$C_6$-alkoxy-$C_3$-$C_{10}$-alkynyl, wherein all alkyl- alkenyl-, alkynyl-, or cycloalkyl-groups may be optionally substituted by halogen; or is optionally substituted aryl-$C_1$-$C_6$-alkyl, optionally substituted aryl-$C_3$-$C_{10}$-alkenyl, optionally substituted aryl-$C_3$-$C_{10}$-alkynyl, optionally substituted aryloxy-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_1$-$C_6$-alkyl, optionally substituted heteroaryl-$C_3$-$C_{10}$-alkenyl or optionally substituted heteroaryl-$C_3$-$C_{10}$-alkynyl; and $R_4$ is $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl, $C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkylamino, di-$C_1$-$C_6$-alkylamino or $C_1$-$C_6$-alkoxycarbonyl, wherein all

alkyl- alkenyl or alkynyl-groups may be optionally substituted by halogen; or is halogen, cyano, nitro, amino, formyl or carboxyl; and $R_5$ is hydrogen, $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl or $C_3$-$C_6$-alkynyl; and $B_2$ is an $C_1$-$C_6$-alkylene-bridge; and n is an integer from 0 to 2.

3. A compound according to claims 1 or 2 wherein
A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl or pyridyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-haloalkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, hydroxy, halogen, cyano, nitro and formyl.

4. A compound of formula I according to claim 1 wherein
A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, (1,2-ethylene)dioxyphenyl, furanyl, thienyl or pyridyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-haloalkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_3$-$C_{10}$-alkenyloxy, $C_3$-$C_{10}$-alkynyloxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkylsulfonyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, hydroxy, halogen, cyano, nitro and formyl; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl or $C_3$-$C_{10}$-haloalkynyl; and $R_2$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein phenyl may optionally be mono- or disubstituted by substituents selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and $R_3$ is hydrogen, $C_1$-$C_{10}$-alkyl, $C_3$-$C_{10}$-alkenyl, $C_3$-$C_{10}$-alkynyl, $C_3$-$C_8$-cycloalkyl, $C_3$-$C_8$-cycloalkyl-$C_1$-$C_6$-alkyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkenyl, $C_3$-$C_8$-cycloalkyl-$C_3$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy-$C_1$-$C_6$-alkyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkenyl, $C_1$-$C_6$-alkoxy-$C_3$-$C_6$-alkynyl, $C_1$-$C_{10}$-haloalkyl, $C_3$-$C_{10}$-haloalkenyl, $C_3$-$C_{10}$-haloalkynyl, phenyl-$C_1$-$C_6$-alkyl, phenyl-$C_1$-$C_6$-alkenyl or phenyl-$C_1$-$C_6$-alkynyl, wherein

the phenyl groups are optionally mono- or disubstituted by radicals selected from the group comprising $C_1$-$C_6$-alkyl, $C_2$-$C_6$-alkenyl, $C_2$-$C_6$-alkynyl, $C_1$-$C_6$-alkoxy, $C_1$-$C_6$-haloalkoxy, $C_1$-$C_6$-alkylthio, $C_1$-$C_6$-haloalkylthio, $C_1$-$C_6$-alkanoyl, $C_1$-$C_6$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and $R_4$ is $C_1$-$C_6$-alkyl, $C_1$-$C_6$-haloalkyl, $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy, $C_1$-$C_6$alkylthio, halogen, cyano or nitro; and $R_5$ is hydrogen, $C_1$-$C_6$-alkyl, $C_3$-$C_6$-alkenyl or $C_3$-$C_6$-alkynyl; and n is an integer from 0 to 2; and $B_2$ is an alkylene-bridge of the formula $-CH(R_{20})-(CH_2)_p-$ , wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0, 1 or 2.

5. A compound of formula I according to claim 1 wherein

A is phenyl, naphthyl, 1,4-biphenyl, tetralinyl, indanyl, methylendioxyphenyl, thienyl, each optionally substituted by one, two or three substituents selected from the group comprising $C_1$-$C_{10}$-alkyl, $C_1$-$C_{10}$-haloalkyl, $C_2$-$C_{10}$-alkenyl, $C_2$-$C_{10}$-alkynyl, benzyl, $C_1$-$C_{10}$-alkoxy, $C_1$-$C_{10}$-haloalkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_{10}$-haloalkylthio, $C_1$-$C_{10}$-alkanoyl, $C_1$-$C_{10}$-alkoxycarbonyl, halogen, cyano, nitro and formyl; and X is oxygen or sulfur; and Y is oxygen or sulfur; and $R_1$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl or $C_3$-$C_8$-alkynyl; and $R_2$ stands for hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; and $R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl, $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl, $C_1$-$C_8$-haloalkyl or $C_3$-$C_8$-haloalkynyl; and $R_4$ is $C_1$-$C_6$-alkoxy, $C_3$-$C_6$-alkenyloxy, $C_3$-$C_6$-alkynyloxy or halogen; and $R_5$ is hydrogen or $C_1$-$C_4$-alkyl; and $B_1$ stands for a bridge member $-(CR_{10}R_{11})_q-$ or $-(CHR_{10}R_{11})_r-Z-(CR_{12}R_{13})_s$ , wherein $R_{10}$, $R_{11}$, $R_{12}$ and $R_{13}$ independently of each other are hydrogen or $C_1$-$C_4$-alkyl, q is the integer 2, r is the integer 0; s is the integer 1, and Z is –O-, -S- or –CO- ; and n is the integer 0 or 1; and $B_2$ is an alkylene-bridge of the formula $-CH(R_{20})-(CH_2)_p-$ , wherein $R_{20}$ stands for hydrogen or $C_1$-$C_4$-alkyl and p is an integer 0, 1 or 2.

6. A compound of formula I according to claim 1 wherein ; or wherein

A is phenyl or thienyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, $C_2$-$C_4$-alkenyl, $C_1$-$C_4$-alkoxy, $C_1$-$C_{10}$-alkylthio, $C_1$-$C_4$-alkanoyl, halogen and cyano; and X is oxygen ; and Y is oxygen; and $R_1$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl or $C_3$-$C_8$-alkynyl; and $R_2$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-alkoxy-$C_3$-$C_4$-alkynyl; and $R_3$ is hydrogen, $C_1$-$C_8$-alkyl, $C_3$-$C_8$-alkenyl, $C_3$-$C_8$-alkynyl, $C_3$-$C_6$-cycloalkyl-$C_3$-$C_4$-alkynyl or $C_1$-$C_4$-al-

koxy-$C_3$-$C_4$-alkynyl; and $R_4$ is 3-$C_1$-$C_6$-alkoxy; and $R_5$ is hydrogen or methyl; and $B_1$ is selected from -$CH_2$-$CH_2$-, -O-$CH_2$- and –S-$CH_2$- ; and n is the integer 0 or 1; and $B_2$ is -$CH_2$-$CH_2$-, $CH_2$-, $CH(CH_3)$-$CH_2$- or $CH(CH_3)$- .

7. A compound according to claim 1, wherein
A is phenyl, optionally substituted by one or two substituents selected from the group comprising $C_1$-$C_4$-alkyl, $C_1$-$C_4$-haloalkyl, halogen and cyano; and X and Y are bot oxygen; and $R_1$ is hydrogen; and $R_2$ is hydrogen, $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; and $R_3$ is $C_1$-$C_4$-alkyl, $C_3$-$C_4$-alkenyl or $C_3$-$C_4$-alkynyl; and $R_4$ is 3-methoxy or 3-ethoxy; and $R_5$ is hydrogen; and $B_1$ is selected from -$CH_2$-$CH_2$-, -O-$CH_2$- and –S-$CH_2$- ; and n is the integer 1; and $B_2$ is -$CH_2$-$CH_2$- .

8. A compound of formula I according to claim 1 selected from the group comprising
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,

N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,

3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide, 3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,

(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
(R)-4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(R)-4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(R)-4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
(R)-3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-

propionamide,
(R)-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(R)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,

(R)-3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(R)-3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,(R)-3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-butyramide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-phenyl-2-prop-2-ynyloxy-butyramide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-4-p-tolyl-butyramide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-4-p-tolyl-butyramide,
(S)-4-(4-fluoro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-fluoro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-2-ethoxy-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-fluoro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,

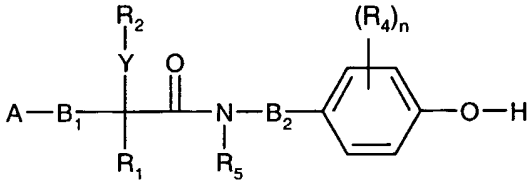
(S)-4-(4-chloro-phenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-butyramide,
(S)-4-(4-chloro-phenyl)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-butyramide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenoxy-2-prop-2-ynyloxy-propionamide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-p-tolyloxy-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-3-p-tolyloxy-propionamide,
(S)-3-(4-ethyl-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-ethyl-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-2-ethoxy-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-ethyl-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(4-fluoro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-fluoro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-2-ethoxy-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-fluoro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,

(S)-3-(4-chloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(3,4-dichloro-phenoxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-propionamide,
(S)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-3-phenylthio-2-prop-2-ynyloxy-propionamide,
(S)-3-(4-chloro-phenylthio)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-phenylthio)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,
(S)-3-benzyloxy-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-benzyloxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide,

(S)-3-(4-chloro-benzyloxy)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-benzyloxy)-2-methoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide,
(S)-3-(4-chloro-benzyloxy)-2-ethoxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-propionamide, and
(S)-3-(4-chloro-benzyloxy)-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-2-prop-2-ynyloxy-propionamide.

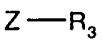
9. A process for the preparation of a compound of formula I according to claim 1, which comprises reacting

a) reacting the phenol of formula VI



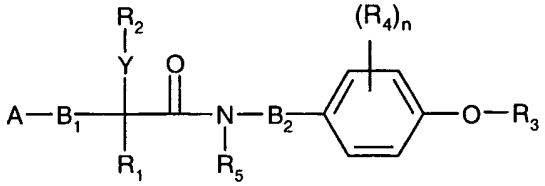
( IV )

wherein A, $R_1$, $R_2$, $R_4$, $R_5$, $B_1$, $B_2$ and n are as defined for formula I with a compound of formula V



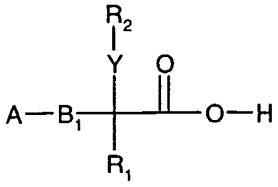
( V )

wherein $R_3$ is as defined for formula I and wherein Z is a leaving group yielding the subgroup IA



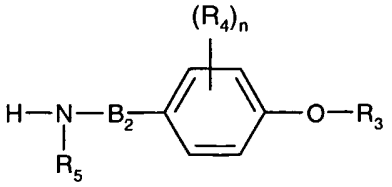
( IA ) ; or

b) reacting the acid of formula II



( II )

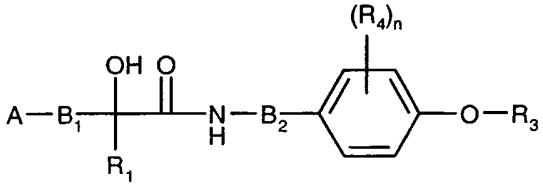
with an amine of formula VII



( VII )

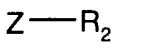
wherein A, $R_1$, $R_2$, $R_3$, $R_4$, $R_5$, $B_1$, $B_2$ and n are as defined for formula I, or

c) reacting the a-hydroxy-car of formula XIV



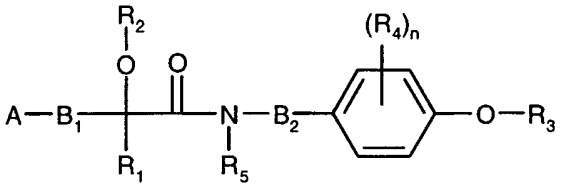
( XIV )

with an etherifying agent of formula XV



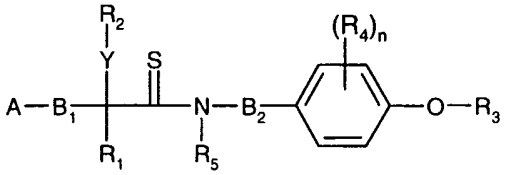
( XV )

wherein A, $R_1$, $R_2$, $R_3$, $R_4$, $R_5$, $B_1$, $B_2$ and n are as defined for formula I and wherein Z is a leaving group; yielding the subgroup IB



( IB )

and optionally converting the amide function of the compound of subgroup IA into a thioamide function as in the subgroup IC



( IC )

by treatment with a sulfurating agent.

10. A composition for controlling and protecting against phytopathogenic microorganisms, comprising a compound of formula I according to claim 1 as active ingredient together with a suitable carrier.

11. The use of a compound of formula I according to claim 1 in protecting plants against infestation by phytopathogenic microorganisms.

12.. A method of controlling and preventing an infestation of crop plants by phytopathogenic microorganisms, which comprises the application of a compound of formula I according to claim 1 as active ingredient to the plant, to parts of plants or to the locus thereof.

13. A method according to claim 12, wherein the phytopathogenic microorganisms are fungal organisms.

# INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 02/12845

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07C235/34 C07C327/44 C07C323/22 A01N37/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07C A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, PAJ, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | WO 94 29267 A (HOECHST SCHERING AGREVO GMBH) 22 December 1994 (1994-12-22) cited in the application tables 1,2,6 --- | 1-13 |
| A | WO 96 17840 A (AGREVO UK LTD ;DOELLER UWE (DE); BRAUN PETER (DE); SACHSE BURKHARD) 13 June 1996 (1996-06-13) cited in the application table 1 --- | 1-13 |
| P,A | WO 01 87822 A (CEDERBAUM FREDRIK ;KUNZ WALTER (CH); ZELLER MARTIN (CH); SYNGENTA) 22 November 2001 (2001-11-22) cited in the application abstract --- -/-- | 1-13 |

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 6 March 2003 | 13/03/2003 |

| Name and mailing address of the ISA | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL – 2280 HV Rijswijk<br>Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,<br>Fax: (+31–70) 340–3016 | Janus, S |

# INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 02/12845

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication,where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | WO 99 33810 A (IHARA CHEMICAL IND CO ;KUMIAI CHEMICAL INDUSTRY CO (JP); MATSUMOTO) 8 July 1999 (1999-07-08) abstract --- | 1-13 |
| A | PATENT ABSTRACTS OF JAPAN vol. 017, no. 391 (C-1087), 22 July 1993 (1993-07-22) & JP 05 070428 A (MITSUBISHI PETROCHEM CO LTD), 23 March 1993 (1993-03-23) abstract --- | 1-13 |
| A | PETTIT G R ET AL: "Isolation and Structure of Hemibastadinols 1-3 from the Papua New Guinea Marine Sponge Ianthella basta" JOURNAL OF NATURAL PRODUCTS, vol. 59, no. 10, 1996, pages 927-934, XP001146001 cited in the application examples 9,10,13-16 ----- | 1-13 |

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box I.2

Claims Nos.: 1-5, 9-13 (all in part)

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claim(s) may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, a meaningful search over the whole breadth of the claim(s) is impossible.

In addition, the claims relate to an extremely large number of possible compounds, whereas support within the meaning of Article 6 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support that a meaningful search over the whole of the claimed scope is impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds of formula (I) wherein B2 is a methylene or an ethylene group.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 02/12845

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 1-5, 9-13 (all in part)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP 02/12845

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---|---|---|
| WO 9429267 A | 22-12-1994 | DE 4319887 A1 | 22-12-1994 |
| | | AU 7123994 A | 03-01-1995 |
| | | CN 1128019 A | 31-07-1996 |
| | | WO 9429267 A1 | 22-12-1994 |
| | | EP 0703899 A1 | 03-04-1996 |
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| | | WO 0187822 A1 | 22-11-2001 |
| | | EP 1282595 A1 | 12-02-2003 |
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| | | WO 9933810 A1 | 08-07-1999 |
| | | JP 11263776 A | 28-09-1999 |
| JP 05070428 A | 23-03-1993 | NONE | |