

AUSTRALIA
Patents Act 1990

658291

Pub. 001 28/8/91
Section 20

PATENT REQUEST: STANDARD PATENT/PATENT OF ADDITION

We, being the person identified below as the Applicant, request the grant of a patent to the person identified below as the Nominated Person, for an invention described in the accompanying standard complete specification.

Full application details follow.

[71] Applicant: BASF AKTIENGESELLSCHAFT
Address: D-6700 LUDWIGSHAFEN, FEDERAL REPUBLIC OF GERMANY

[70] Nominated Person: BASF AKTIENGESELLSCHAFT
Address: D-6700 LUDWIGSHAFEN, FEDERAL REPUBLIC OF GERMANY

[54] Invention Title: NOVEL BENZYL ENOL ETHERS AND THEIR USE AS CROP PROTECTION AGENTS

[72] Name(s) of actual inventor(s): HORST WINGERT, HUBERT SAUATER, REMY BENOIT, FRANZ ROEHL,
EBERHARD AMMERMANN, GISELA LORENZ

[74] Address for service in Australia: c/o WATERMARK PATENT & TRADEMARK ATTORNEYS, of The Atrium,
290 Burwood Road, Hawthorn, Victoria 3122, Australia
Attorney Code: WM

BASIC CONVENTION APPLICATION(S) DETAILS

[31] Application Number	[33] Country	Country Code	[32] Date of Application
P42 14 189.3	GERMANY	DE	30TH APRIL 1992

Drawing number recommended to accompany the abstract

By our Patent Attorneys,
WATERMARK PATENT & TRADEMARK ATTORNEYS

Louis C. Gebhardt
Registered Patent Attorney

DATED this 28th day of April 1993.

AUSTRALIA

Patents Act 1990

NOTICE OF ENTITLEMENT
(To be filed before acceptance)

We, **BASF AKTIENGESELLSCHAFT**, of D-6700 Ludwigshafen, Federal Republic of Germany, being the applicant in respect of Application No. 38227/93 state the following:-

The Person nominated for the grant of the patent has entitlement from the actual inventors by virtue of their employment.

The person nominated for the grant of the patent is the applicant of the basic application listed on the patent request form.

The basic application listed on the request form is the first application made in a Convention country in respect of the invention.

By our Patent Attorneys,
WATERMARK PATENT & TRADEMARK ATTORNEYS


Louis C. Gebhardt
Registered Patent Attorney

16 January 1995



AU9338227

(12) PATENT ABRIDGMENT (11) Document No. AU-B-38227/93
(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 658291

(54) Title
NOVEL BENZYL ENOL ETHERS AND THEIR USE AS CROP PROTECTION AGENTS

International Patent Classification(s)			
C07C 069/734	C07C 205/56	C07C 251/50	C07C 255/15
C07C 255/17	C07C 255/23	C07C 255/31	C07C 255/37
C07C 255/40	C07C 255/54	C07C 255/57	C07C 323/60
C07D 203/10	C07D 205/04	C07D 207/08	C07D 213/53
C07D 213/57	C07D 213/61	C07D 213/69	C07D 215/22
C07D 233/61	C07D 237/16	C07D 239/26	C07D 249/08
C07D 277/30	C07D 303/46	C07D 307/16	C07D 307/54
C07D 307/58	C07D 309/06	C07D 309/12	C07D 309/38
C07D 311/30	C07D 311/46	C07D 311/74	C07D 319/06
C07D 333/24	C07D 335/02	C07C 069/738	C07D 207/327
C07D 213/643	C07D 295/145	C07D 295/155	

(21) Application No. : 38227/93

(22) Application Date : 29.04.93

(30) Priority Data

(31) Number (32) Date (33) Country
4214189 30.04.92 DE GERMANY

(43) Publication Date : 04.11.93

(44) Publication Date of Accepted Application : 06.04.95

(71) Applicant(s)

BASF AKTIENGESELLSCHAFT

**HORST WINGERT;
SISELA LORENZ**

GISELA LORENZ
Attorney or Agent

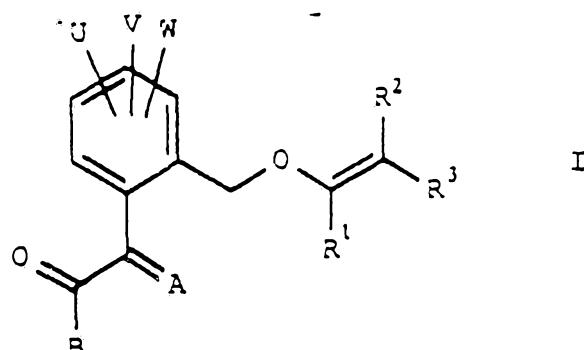
WATERMARK PATEN

Prior Art Doc
EP 513580

(57) The present invention relates to novel benzyl enol ethers, pesticides containing them, in particular fungicides, and to a process for controlling pests, in particular fungi, insects, nematodes and spider mites, using these compounds.

CLAIM

1. A benzyl enol ether derivative of the general formula I



where

A is

CH₂, CHCl, CH-C₁-C₄-alkyl, CH-O-C₁-C₄-alkyl, CH-S-C₁-C₄-alkyl, N-O-C₁-C₄-alkyl,

B is

OH, C₁-C₄-alkoxy, C₁-C₄-alkylthio and C₁-C₄-alkylamino,

U, V and W

are identical or different and are hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy,

R¹, R² and R³

are identical or different and are hydrogen, cyano, halogen, NR⁴R⁵, CO₂R⁴, CONR⁴R⁵, COR⁴, S(O)_nR⁴ where n = 0, 1 or 2, PO(OR⁴)₂, unbranched or branched C₁-C₁₀-alkyl, C₁-C₄-haloalkyl, C₃-C₆-cycloalkyl, C₃-C₆-halocycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄-alkylthio-C₁-C₄-alkyl, arylthio-C₁-C₄-alkyl, C₂-C₆-alkenyl, C₂-C₆-haloalkenyl, C₃-C₆-cycloalkenyl, C₃-C₆-halocycloalkenyl, C₂-C₆-alkynyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₄-alkylthio, benzylthio, C₁-C₄-alkylcarbonyl, unsubstituted or substituted phenylcarbonyl, unsubstituted or substituted benzylcarbonyl, C₁-C₄-alkoxycarbonyl, unsubstituted or substituted phenoxy carbonyl, unsubstituted or substituted benzyloxycarbonyl, unsubstituted or substituted aryl, unsubstituted or substituted aryloxy, unsubstituted or substituted arylthio, unsubstituted or substituted aryl-C₁-C₄-alkyl, unsubstituted or substituted aryl-C₂-C₄-alkenyl, unsubstituted or substituted aryloxy-C₁-C₄-alkyl, unsubstituted or substituted arylthio-C₁-C₄-alkyl, unsubstituted or substituted hetaryl, unsubstituted or substituted hetarylthio, unsubstituted or substituted heteroaryl-C₁-C₄-alkyl, unsubstituted or substituted hetaryl-C₂-C₄-alkenyl, unsubstituted or substituted hetarylthio-C₁-C₄-alkyl, unsubstituted or substituted heterocyclyl, unsubstituted or substituted heterocyclyloxy,

where unsubstituted or substituted, in addition to hydrogen, includes the radicals halogen, cyano, nitro,

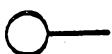
C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, C_1 - C_4 -haloalkyl, C_1 - C_4 -haloalkoxy, C_1 - C_{10} -alkoximino- C_1 - C_2 -alkyl, aryl, aryloxy, benzyloxy, hetaryl, hetaryloxy, C_1 - C_6 -cycloalkyl, heterocyclyl, heterocyclyloxy,
and the radicals

R^4 and R^5

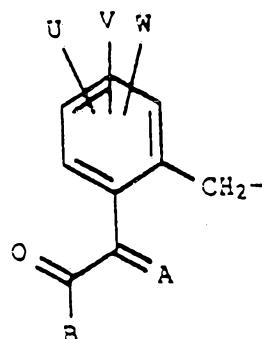
are identical or different and are hydrogen or C_1 - C_4 -alkyl,

R^1 and R^3 together, and also R^2 and R^3 together, in each case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - F are possible:

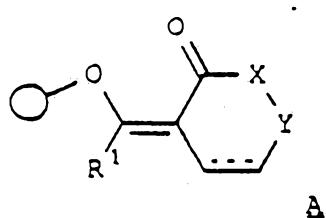
the symbol



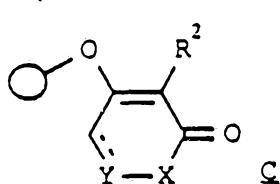
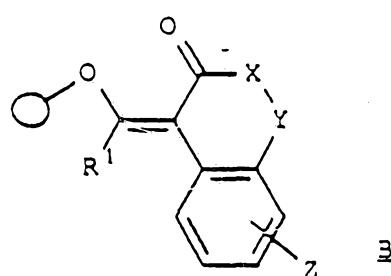
is the group



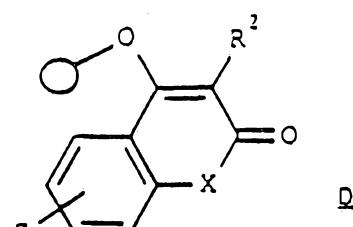
in the following



or

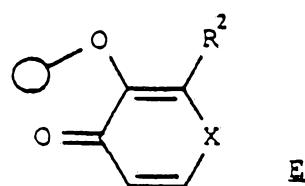


or



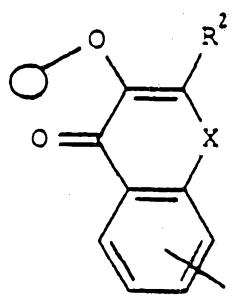
(11) AU-B-38227/93
(10) 658291

-4-



E

or



F

where

X is

CH₂, O, NR⁴,

Y is

CH, (CH₂)_n, where n = 0, 1 or 2,

Z is

hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy and

R⁴ is

hydrogen or C₁-C₄-alkyl and is a single bond or a double bond.

AUSTRALIA

Patents Act 1990

658291

ORIGINAL
COMPLETE SPECIFICATION
STANDARD PATENT

Application Number:

Lodged:

Invention Title: NOVEL BENZYL ENOL ETHERS AND THEIR USE AS CROP PROTECTION AGENTS

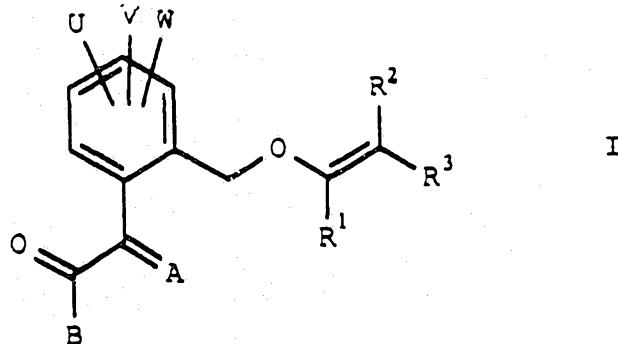
The following statement is a full description of this invention, including the best method of performing it known to : -US

Novel benzyl enol ethers and their use
as crop protection agents

The present invention relates to novel benzyl enol ethers, pesticides containing them, in particular fungicides, and to a process for controlling pests, in particular fungi, insects, nematodes and spider mites, using these compounds.

It is known that β -methoxyacrylates, for example methyl 2-[2-(phenyloxymethylene)phenyl]-3-methoxyacrylate (EP 178 826) and also oxime ethers, for example methyl 2-[2-(phenyloxymethylene)phenyl]glyoxylate O-methyloxime ether (cf. EP 253 213) have fungicidal or insecticidal activity. Their action, however, is unsatisfactory.

It has now surprisingly been found that benzyl enol ethers of the general formula I



where

A is

CH₂, CHCl, CH-C₁-C₄-alkyl, CH-O-C₁-C₄-alkyl, CH-S-C₁-C₄-alkyl, N-O-C₁-C₄-alkyl,

B is

OH, C₁-C₄-alkoxy, C₁-C₄-alkylthio and C₁-C₄-alkylamino,

U, V and W

are identical or different and are hydrogen, halogen,

C₁-C₄-alkyl or C₁-C₄-alkoxy,

R¹, R² and R³

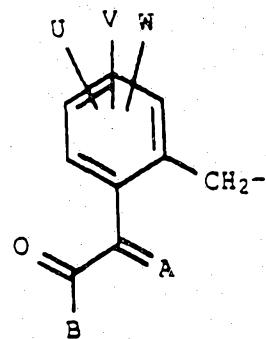
are identical or different and are hydrogen, cyano, halogen, NR⁴R⁵, CO₂R⁴, CONR⁴R⁵, COR⁴, S(O)_nR⁴ where n = 0, 1

or 2, $\text{PO}(\text{OR}^4)_2$, unbranched or branched $\text{C}_1\text{-C}_{10}\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-haloalkyl}$, $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, $\text{C}_3\text{-C}_6\text{-halocycloalkyl}$, $\text{C}_3\text{-C}_6\text{-cycloalkyl-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkoxy-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkylthio-C}_1\text{-C}_4\text{-alkyl}$, $\text{arylthio-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_2\text{-C}_6\text{-alkenyl}$,
5 $\text{C}_2\text{-C}_5\text{-haloalkenyl}$, $\text{C}_3\text{-C}_6\text{-cycloalkenyl}$, $\text{C}_3\text{-C}_6\text{-halocycloalkenyl}$, $\text{C}_2\text{-C}_6\text{-alkynyl}$, $\text{C}_1\text{-C}_6\text{-alkoxy}$, $\text{C}_1\text{-C}_6\text{-haloalkoxy}$,
10 $\text{C}_1\text{-C}_4\text{-alkylthio}$, benzylthio , $\text{C}_1\text{-C}_4\text{-alkylcarbonyl}$, unsubstituted or substituted phenylcarbonyl, unsubstituted or substituted benzylcarbonyl, $\text{C}_1\text{-C}_4\text{-alkoxycarbonyl}$,
15 unsubstituted or substituted phenoxy carbonyl, unsubstituted or substituted benzyloxycarbonyl, unsubstituted or substituted aryl, unsubstituted or substituted aryloxy, unsubstituted or substituted arylthio, unsubstituted or substituted aryl-
20 $\text{C}_1\text{-C}_4\text{-alkyl}$, unsubstituted or substituted aryl- $\text{C}_2\text{-C}_4\text{-alkenyl}$, unsubstituted or substituted aryloxy- $\text{C}_1\text{-C}_4\text{-alkyl}$, unsubstituted or substituted hetaryl, unsubstituted or substituted hetaryl-
25 thio, unsubstituted or substituted heteroaryl- $\text{C}_1\text{-C}_4\text{-alkyl}$, unsubstituted or substituted hetaryl- $\text{C}_2\text{-C}_4\text{-alkenyl}$, unsubstituted or substituted hetaryl- $\text{C}_1\text{-C}_4\text{-alkyl}$, unsubstituted or substituted heterocyclyl, unsubstituted or substituted heterocyclxy,
30 where unsubstituted or substituted, in addition to hydrogen, includes the radicals halogen, cyano, nitro, $\text{C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkoxy}$, $\text{C}_1\text{-C}_4\text{-haloalkyl}$, $\text{C}_1\text{-C}_4\text{-haloalkoxy}$, $\text{C}_1\text{-C}_{10}\text{-alkoximino-C}_1\text{-C}_2\text{-alkyl}$, aryl, aryloxy, benzyloxy, hetaryl, hetaryl-
35 cyclyl, heterocyclxy, and the radicals R^4 and R^5 are identical or different and are hydrogen or $\text{C}_1\text{-C}_4\text{-alkyl}$, R^1 and R^3 together, and also R^2 and R^3 together, in each case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the

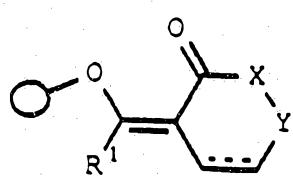
radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - F are possible:

the symbol 

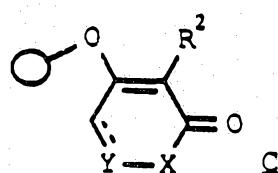
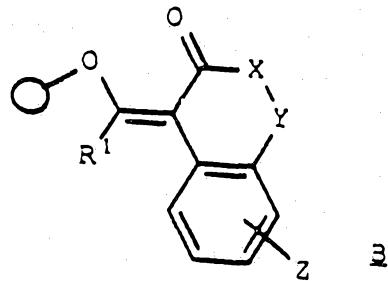
5. is the group



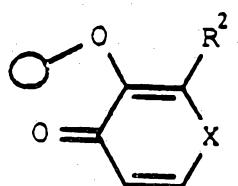
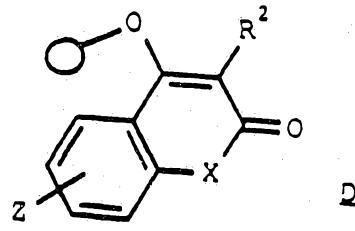
in the following



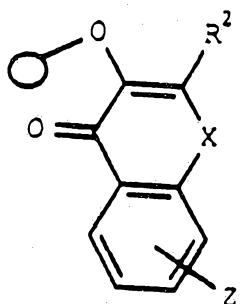
or



or



or



where

X is

CH_2 , O, NR^4 ,

Y is

5 CH, $(\text{CH}_2)_n$, where $n = 0, 1$ or 2 ,

Z is

hydrogen, halogen, $\text{C}_1\text{-C}_4$ -alkyl or $\text{C}_1\text{-C}_4$ -alkoxy and

R^4 is

hydrogen or $\text{C}_1\text{-C}_4$ -alkyl and is a single bond or a double bond,

10 have an excellent fungicidal, insecticidal, nematicidal and acaricidal action which is better than that of the known β -methoxyacrylates or oxime ethers. The fungicidal action is preferred.

15 The radicals shown in the general formula I can have, for example, the following meanings:

A

can be, for example, $\text{C}_1\text{-C}_4$ -alkylidene (eg. methylidene, ethylidene, n- or isopropylidene, n-, iso-, sec- or tert-butylidene), $\text{C}_1\text{-C}_4$ -alkoxymethylidene (eg. methoxy-, ethoxy-, n- or isopropoxy, n-, iso-, sec- or tert-butoxy-methylidene), $\text{C}_1\text{-C}_4$ -alkylthiomethylidene (eg. methyl-, ethyl-, n- or isopropyl, n-, iso-, sec- or tert-butyl-thiomethylidene), $\text{C}_1\text{-C}_4$ -alkoxyimino (eg. methoxy-, ethoxy-, n- or isopropoxy, n-, iso-, sec- or tert-butoxy-imino), chloromethylidene,

B

can be OH, $\text{C}_1\text{-C}_4$ -alkoxy (for example methoxy, ethoxy, n- or isopropoxy, n-, iso-, sec- or tert-butoxy), $\text{C}_1\text{-C}_4$ -alkylthio (eg. methylthio, ethylthio, n- or isopropylthio, n-, iso-, sec- or tert-butylthio) and $\text{C}_1\text{-C}_4$ -alkyl-amine (eg. methylamine, ethylamine, n- or isopropylamine, n-, iso-, sec- or tert-butylamino),

U, V and W

35 can be, for example, H, halogen (eg. fluorine, chlorine,

bromine, iodine), methyl, methoxy,
R¹, R² and R³

can be identical or different and are hydrogen, cyano,
halogen (for example fluorine, chlorine, bromine,
5 iodine), NR⁴R⁵, CO₂R⁴, CONR⁴R⁵, COR⁴, S(O)_nR⁴ where n = 0, 1
or 2, PO(OR⁴)₂,

where the radicals

R⁴ and R⁵

10 are identical or different and are hydrogen or C₁-C₄-alkyl
(for example methyl, ethyl, n- or isopropyl, n-, iso-,
sec- and tert-butyl),

R¹, R² and R³

15 can also be unbranched or branched C₁-C₁₀-alkyl (for
example methyl, ethyl, n- or isopropyl, n-, iso-, sec- or
tert-butyl, n-, iso-, sec-, tert- or neopentyl, n-hexyl,
n-decyl),

20 C₁-C₄-haloalkyl (eg. trifluoromethyl, 2-fluoroethyl,
2,2,2-trifluoroethyl, pentafluoroethyl, fluorodichloro-
methyl, difluorochloromethyl, chloromethyl, dichloro-
methyl, trichloromethyl, 2-chloroethyl, 2,2,2-trichloro-
ethyl, pentachloroethyl),

C₃-C₆-cycloalkyl (eg. cyclopropyl, cyclobutyl, cyclo-
pentyl, cyclohexyl),

25 C₁-C₆-halocycloalkyl (eg. 2,2-difluorocyclopropyl, 2,2-
dichlorocyclopropyl, 2,2-dibromocyclopropyl, 2,2-
dichloro-3-methylcyclopropyl, tetrafluorocyclobutyl), C₃-
C₆-cycloalkyl-C₁-C₄-alkyl (eg. 1-methylcyclopropyl, 2,2-
dimethylcyclopropyl, 1-methylcyclohexyl),

30 C₁-C₄-alkoxy-C₁-C₄-alkyl (eg. methoxymethyl, ethoxymethyl,
n- or isopropoxymethyl, n-, iso-, sec- or tert-butoxy-
methyl, 2-methoxy-prop-2-yl, 2-ethoxyprop-2-yl, 2-n- or
isopropoxyprop-2-yl, 2-n-, iso-, sec- or tert-butoxyprop-
2-yl),

35 C₁-C₄-alkylthio-C₁-C₄-alkyl (eg. methylthiomethyl, ethyl-
thiomethyl, n- or isopropylthiomethyl, n-, iso-, sec- or
tert-butylthiomethyl, 2-methylthioprop-2-yl, 2-ethyl-
thioprop-2-yl, 2-n- or isopropylthio-prop-2-yl, 2-n-,

iso-, sec- or tert-butylthio-prop-2-yl),
aryl(phenyl)thio-C₁-C₄-alkyl (eg. phenylthiomethyl, 2-chlorophenyl-thiomethyl),
,=C₆-alkenyl (eg. vinyl, 1-propenyl, 2-propenyl, 2-
5 butenyl, 3-butenyl, 1-methyl-2-propenyl, 3-methyl-2-butenyl, 2-methyl-2-penten-5-yl),
C₂-C₅-haloalkenyl (eg. 2,2-difluorovinyl, 2,2-dichlorovinyl, 3,3,3-trifluoropropenyl, 3,3,3-trichloropropenyl, 3-chloro-2-propenyl),
10 C₃-C₆-cycloalkenyl (eg. cyclopent-1-enyl, cyclopentadienyl, cyclohex-1-enyl),
C₃-C₆-halocycloalkenyl (eg. pentafluorocyclopentadienyl, pentachlorocyclopentadienyl),
C₂-C₄-alkynyl (eg. ethynyl, 1-propynyl, 1-propargyl),
15 C₁-C₄-alkoxy (eg. methoxy, ethoxy, n- or isopropoxy, n-, iso-, sec- or tert-butoxy),
C₁-C₄-alkylthio (eg. methylthio, ethylthio, n- or iso-propylthio, n-, iso-, sec- or tert-butylthio), benzylthio,
20 C₁-C₄-haloalkoxy (eg. trifluoromethoxy, pentafluoroethoxy, 1,1,2,2-tetrafluoroethoxy),
C₁-C₄-alkylcarbonyl (eg. acetyl, propionyl, butyryl, isobutyryl, pivaloyl),
25 unsubstituted or substituted phenylcarbonyl (eg. benzoyl, 4-chlorobenzoyl),
unsubstituted or substituted benzylcarbonyl (eg. benzylcarbonyl),
C₁-C₄-alkoxycarbonyl (eg. methoxycarbonyl, ethoxycarbonyl, n- or isopropoxycarbonyl, n-, iso-, sec- or tert-butoxycarbonyl),
30 unsubstituted or substituted phenoxy carbonyl (eg. phenoxy carbonyl, 4-chlorophenoxy carbonyl),
unsubstituted or substituted benzyloxycarbonyl (eg. benzyloxycarbonyl),
35 unsubstituted or substituted aryl (eg. phenyl, naphthyl, anthryl),
unsubstituted or substituted aryloxy (eg. phenoxy,

naphthoxy, anthroxy),
unsubstituted or substituted arylthio (eg. phenylthio),
unsubstituted or substituted aryl-C₁-C₄-alkyl (eg. benzyl,
1-phenethyl, 2-phenethyl, 1-phenylpropyl, 2-phenylpropyl,
5 3-phenylpropyl, 2-methyl-3-phenylpropyl, 2-methyl-2-phenylpropyl, 4-phenylbutyl),
unsubstituted or substituted aryl-C₁-C₄-alkenyl (eg. phenyl-1-ethenyl, 2-phenyl-1-propenyl, 2,2-diphenyl-ethenyl, 1-phenyl-1-propen-2-yl, 1-phenyl-1-ethenyl),
10 unsubstituted or substituted arylloxy-C₁-C₄-alkyl (eg. phenoxyethyl),
unsubstituted or substituted arylthio-C₁-C₄-alkyl (eg. phenylthiomethyl),
unsubstituted or substituted heteroaryl (eg. pyridyl, 2-
15 pyridyl, 3-pyridyl, 4-pyridyl, pyrimidinyl, 4-pyrimidinyl, 2-pyrimidinyl, thienyl, 2-thienyl, 3-thienyl, furyl, 2-furyl, 3-furyl, 1-pyrrolyl, 1-imidazolyl, 1,2,4-triazolyl, 1,3,4-triazolyl, 4-thiazolyl, 2-benzothiazolyl),
20 unsubstituted or substituted heteroaryloxy (eg. 2-pyridyloxy, 2-pyrimidinyloxy),
unsubstituted or substituted heteroarylthio (eg. 2-pyridylthio, 2-pyrimidinylthio, 2-benzothiazolylthio),
unsubstituted or substituted heteroaryl-C₁-C₄-alkyl (eg. 25 2-pyridylmethyl, 3-pyridylmethyl),
unsubstituted or substituted heteroaryloxy-C₁-C₄-alkyl (eg. furfurylmethoxy, thienylmethoxy, 3-isoxazolylmethoxy, 2-oxazolylmethoxy, 2-pyridylmethoxy),
unsubstituted or substituted heteroaryl-C₂-C₄-alkenyl (eg. 30 2'-furyl-2-ethenyl, 2'-thienyl-2-ethenyl, 3'-pyridyl-2-ethenyl),
unsubstituted or substituted heterocyclyl (eg. oxiranyl, 1-aziridinyl, 1-azetidinyl, 1-pyrrolidinyl, 2-tetrahydrofuryl, 2-tetrahydropyran, 3-tetrahydropyran, 1-piperidinyl, 1-morpholinyl, 1-piperazinyl, 1,3-dioxanyl, 35 3-tetrahydrothiopyran),
unsubstituted or substituted heterocycloxy (eg. 2-

dihydropyranyloxy, 2-tetrahydropyranyloxy).

The radicals called unsubstituted or substituted in the above are, in addition to hydrogen, for example, fluorine, chlorine, bromine, iodine, cyano, nitro, 5 methyl, ethyl, isopropyl, tert-butyl, methoxy, ethoxy, isopropoxy, tert-butoxy, trifluoromethyl, chloromethyl, dichloromethyl, trichloromethyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, methoxyiminomethyl, ethoxyiminomethyl, n-propoxyiminomethyl, n-butoxyiminomethyl, 10 n-pentoxymiminomethyl, n-hexoxymiminomethyl, allyloxymino- methyl, benzyloxymiminomethyl, isopropoxymiminomethyl, isobutoxymiminomethyl, tert-butoxymiminomethyl, methyl-imino-ethyl, ethoxyimino-1-ethyl, n-propoxymino-1-ethyl, n-butoxymino-1-ethyl, n-pentoxymino-1-ethyl, n- 15 hexoxymino-1-ethyl, allyloxymino-1-ethyl, benzyloxymino-1-ethyl, phenyl, phenoxy, benzyloxy, imidazol-1-yl, piperazin-1-yl, 4-morpholinyl, piperidin-1-yl, pyridyl-2-oxy, cyclopropyl, cyclohexyl, oxiranyl, 1,3-dioxan-2- yl, 1,3-dioxolan-2-yl, tetrahydropyran-2-yloxy.

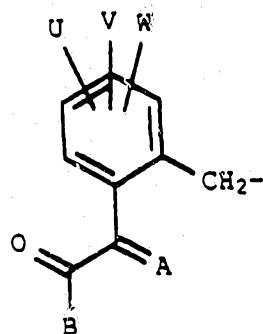
20 R¹ and R³ together, and also R² and R³ together, in each case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - E are possible:

25

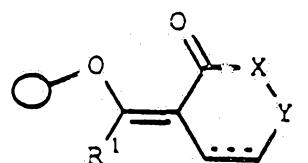
the symbol



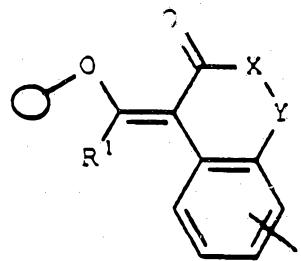
is the group



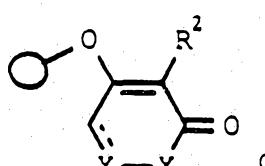
in the following



A

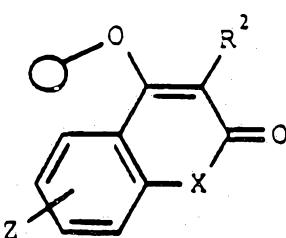


B

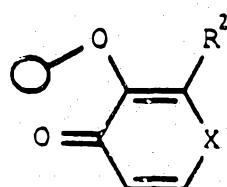


C

or

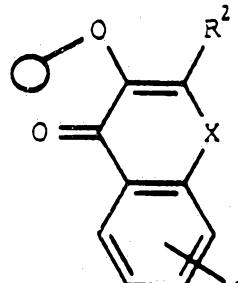


D



E

or



F

where

5 X is

CH_2 , O, NR^4 ,

Y is

CH_3 , $(\text{CH}_2)_n$, where $n = 0, 1$ or 2 ,

Z is

10 H, halogen (for example fluorine, chlorine, bromine, iodine), $\text{C}_1\text{-C}_4$ -alkyl (for example methyl, ethyl) and $\text{C}_1\text{-C}_4$ -alkoxy (for example methoxy, ethoxy),

R^4 is

15 hydrogen and $\text{C}_1\text{-C}_4$ -alkyl (for example methyl, ethyl, n-propyl and n-butyl).

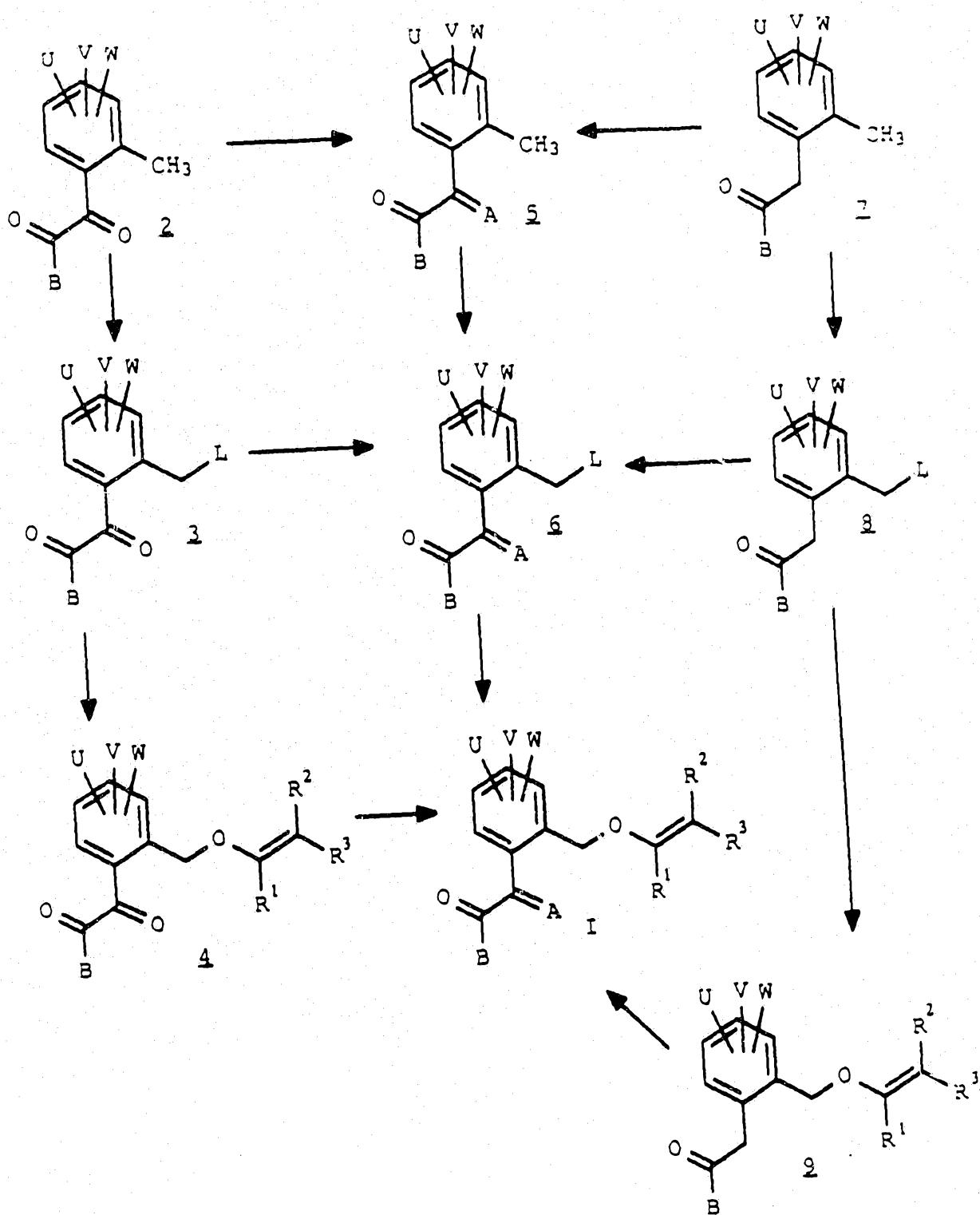
Preferred compounds of the general formula I are

those in which
A is
CHCH₃, CH-CH₂CH₃, CH-OCH₃, NOCH₃
B is
5 OCH₃, NHCH₃
U, V and W are
hydrogen
R¹, R², R³, R⁴ and R⁵
are identical or different and have the meanings described in claim 1.

10 The novel compounds of the general formula I can be obtained as E/Z isomer mixtures during preparation owing to the C=C or C=N double bonds. These can be separated into the individual components in the customary manner, for example by crystallization or chromatography. Both the individual isomeric compounds and their mixtures are encompassed by the invention and are utilizable as pesticides.

15 The compounds of the general formula I as claimed in claim 1 are prepared, for example, as described in Scheme 1.

Scheme 1



The compounds of the general formula I where A is CH₂, CH-alkyl or CH-alkoxy can be prepared, for example, from the ketoesters 4 by Wittig or Wittig-Horner reaction (cf. EP 348 766, DE 3 705 389, EP 178 826). The similar 5 compounds 5 are likewise obtained from the ketoesters 2.

Alternatively, a procedure can be used in which compounds of the formula 7 or 9 are condensed with suitable reagents, for example: for A = CH₂ with formaldehyde (see DE 3 317 356), for A = CH-alkyl a) with 10 aldehydes (cf. D.M. Brown, J. Chem. Soc. 1948, 2147) or b) first with N,N-dimethylformamide dimethyl acetal, followed by reaction with a Grignard reagent (similarly to C. Jutz Chem. Ber. 91 (1958), 1867), for A = CH-O-alkyl with ethyl formate followed by alkylation (see 15 EP 178 826). Other preparation procedures for the compounds of the formula 5 and I where A = CH-O-alkyl are described in EP 178 826.

A further possibility for preparing the compounds of the formula I where A = CH-alkyl and B = O-alkyl is the reaction of ketene acetals with phenyl chlorocarbonates (see N. Slougni, G. Rousseau, Synth. Commun. 12 (5) (1982) 401-7).

For compounds of the general formula I in which A is CH-S-alkyl and A is CHCl, the preparation can be 25 carried out by the methods from EP 244 077 or 310 954.

The intermediates of the formula 3, 6 or 8 can be prepared from the compounds 2, 5 and 7 by halogenating these according to known methods, for example with chlorine, bromine or N-bromosuccinimide in an inert 30 solvent (for example CCl₄ or cyclohexane) under illumination with, for example, an Hg vapor lamp or free radical initiators, such as, for example, dibenzoyl peroxide, or by introducing the radicals L such as, for example, mesylate, tosylate, acetate or triflate by means of 35 suitable intermediate compounds (L = halogen, OH).

The oxime ethers of the formula I where A = N-O-alkyl can be prepared from 4 a) by reaction with O-alkyl-

hydroxylamine hydrochloride or b) with hydroxylamine hydrochloride and subsequent alkylation with an alkylating agent (such as, for example, alkyl iodide, dialkyl sulfate etc.) (cf. DE 3 623 921).

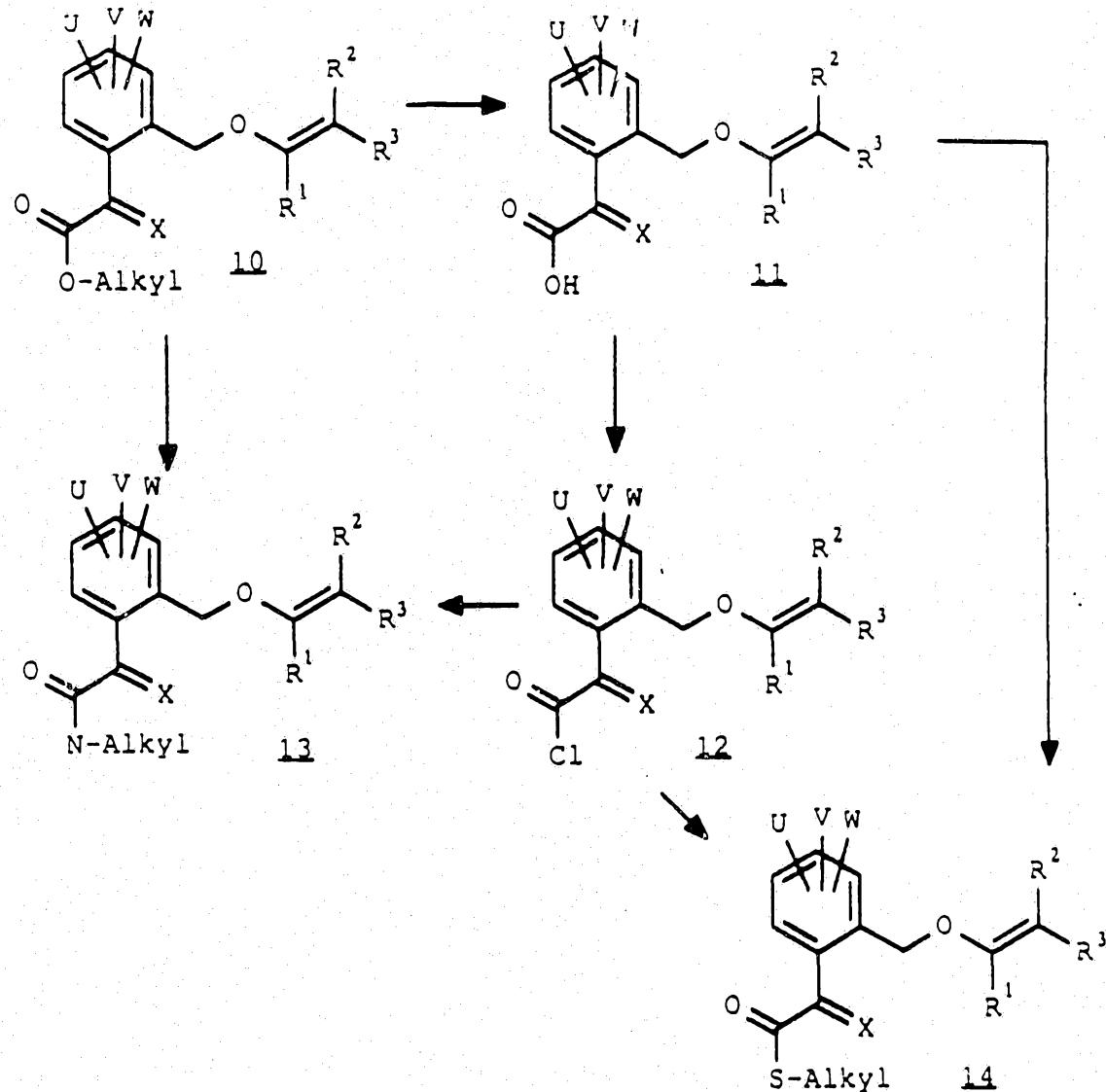
5 Likewise, similarly to the method in EP 254 426, a phenylacetic ester of the formula 9 can be converted into its anion using a base (such as, for example, NaOMe, NaH, K tert-butoxide, etc.) in a solvent (such as, for example, diethyl ether, toluene, tert-butanol etc.) and 10 oximated using a suitable nitrosating agent (such as, for example, methyl nitrite, amyl nitrite, tert-butyl nitrite etc.). The resulting oximate is alkylated using an alkylating agent (such as, for example, alkyl iodide, dialkyl sulfate).

15 The same processes can correspondingly also be transferred to the compounds of the formula 2 or 7, where the resulting oxime ethers 5 can as known (EP 254 426) be converted into the target compounds I via the intermediates 6 (L = eg. halogen).

20 Customarily, in the preparation processes described above the radical B is alkoxy and U, V and W are H.

25 The compounds where B = OH (11) can be prepared by methods known from the literature (Organikum 16th edition, p. 415, 622) from the compounds of the general formula I where B is O-alkyl (10) (see Scheme 2):

Scheme 2:



5 Starting from the carboxylic acids 11 thus obtained, the acid chlorides 12 can be prepared in a manner known per se (cf. Organikum 16th edition, (1985) p. 423f B.). The conversion of 12 to the amides 13 is carried out similarly to Organikum 16th edition (1985) p. 412.

10

The thioesters 14 are obtained from the acid chlorides 12 (similarly to Houben-Weyl Vol. 8 (1952), p. 464 et seq.).

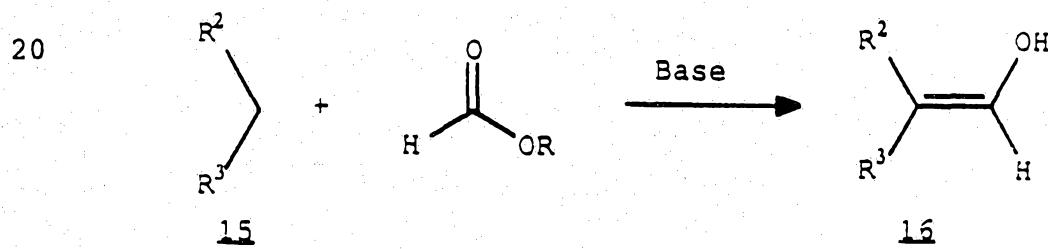
5 Alternatively, the thioesters 14 can also be prepared from the acids 11 (similarly to Houben-Weyl Vol. E5 (1985), p. 855 et seq.).

The amides 13 can also be prepared from the ester 10 by methods known from the literature.

10 The preparation of the compounds of the general formulae 2 and 7 having ortho-methyl substitution on the aromatic ring is known (B = O-alkyl; U, V and W = H; see EP 178 826, EP 260 832).

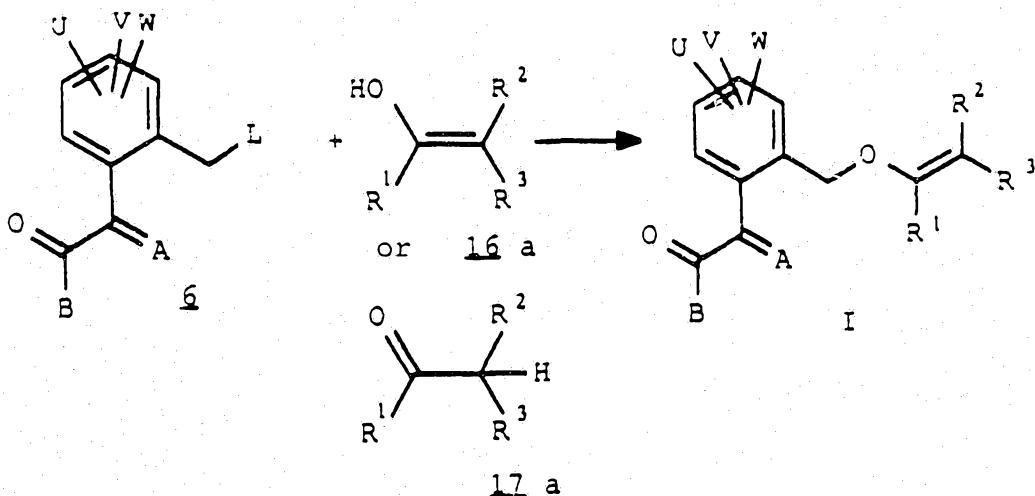
15 The enols required for preparing the compounds of the general formula I are either known or can be prepared by methods known per se, for example by reacting an activated methylene unit 15 with a formic acid ester in the presence of a base, such as, for example, NaH, or sodium methoxide (cf. Scheme 3).

Scheme 3:



Other methods of preparation are found in Houben-Weyl, Methoden der Organischen Chemie (Methods of Organic Chemistry), Vol. 6/11, (1977), pages 1-217.

25 The novel compounds of the general formula I as claimed in claim 1 are prepared, for example, by reacting an enol 16 a or the tautomeric ketone 17 a with a benzyl compound of the formula 6.



$R^1 - R^3$, A, B, U, V and W have the meaning described in claim 1; L is a leaving group (for example chloride, bromide, iodide, triflate, methanesulfonate, p-toluenesulfonate).

5 The reactions described can be carried out, for example, in an inert solvent or diluent (for example acetone, acetonitrile, dimethylformamide, dimethyl sulfoxide, N-methylpyrrolidone) using a base (for example sodium carbonate, potassium carbonate, sodium hydroxide, potassium hydroxide, sodium hydride, sodium methoxide).

10 The reaction can also be carried out in a two-phase system (for example dichloromethane, water) with the addition of a suitable phase transfer catalyst (for example cetyltrimethylammonium chloride, benzyltriethyl-
15 ammonium chloride).

EXAMPLES

Methyl E/Z-2-methoximino-2-[2-cyano-2-(4-methyl)phenylethen-1-yloxymethyl]phenylacetate (compound 2.100; Table 2)

20 2.8 g (17.5 mmol) of 3-hydroxy-2-(4-methyl-phenyl)acrylonitrile, 2.6 g of potassium carbonate and 100 mg of potassium iodide are added to a solution of 5 g (17.5 mmol) of methyl 2-methoximino-2-(2'-bromomethyl)-

phenylacetate in 80 ml of acetone and the mixture is stirred at room temperature (20°C) for 16 hours. It is then poured into water, extracted with ethyl acetate, and the organic phase is dried and concentrated. 6.2 g (97%) of colorless solid remain, having a melting point of 93-95°C. Isomer distribution according to GC: 7:1. E- to Z-isomer

10 $^1\text{H-NMR}$ (CDCl₃): δ = 2.34 (s, 3H, isomer 1 + 2); 3.73; 4.03 (s, OCH₃, isomer 1); 3.87; 4.03 (s, OCH₃, isomer 2); 4.99 (s, CH₂, isomer 2); 5.00 (s, CH₂, isomer 1); 6.97 - 7.61 ppm (m, aryl-H and =CH).

Methyl E/Z α -[2{2-cyano-2-(4-methyl)phenyl-ethen-1-yloxy}methylphenyl]- β -methoxy-acrylate (compound i.100; Table 1)

15 1.7 g (11 mmol) of 3-hydroxy-2-(4-methylphenyl)-acrylonitrile, 1.6 g of potassium carbonate and 100 mg of potassium iodide are added to a solution of 3 g (11 mmol) of methyl 3-methoxy-2-(2'-bromomethyl)phenylacrylate in 50 ml of acetone and the mixture is stirred at room temperature for 16 hours. It is poured into water and extracted with ethyl acetate, and the organic phase is dried and concentrated. 3.6 g (92.7%) of a yellow oil remain. Isomer ratio according to GC: 5:1 E- to Z-isomer.

20 $^1\text{H-NMR}$ (CDCl₃): δ = 2.55 (s, 2x CH₃); 3.66; 3.77 (s, OCH₃; isomer 1); 3.71; 3.82 (s, OCH₃; isomer 2); 5.04 (s, CH₂; isomer 2); 5.05 (s, CH₂; isomer 1); 7.03 - 7.65 (m, aryl-H; =CH).

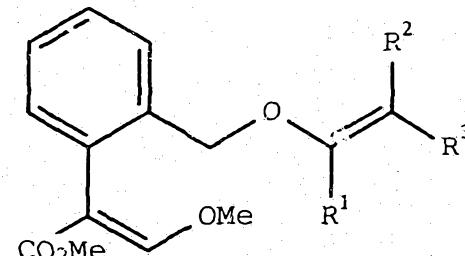
The following compounds can be prepared in a corresponding manner.

29.04.93 36227.

O.Z. 0050/43197

18

Table 1



No.	R ¹	R ²	R ³	phys. data
1.1.	H	H	CF ₃	
1.2.	H	CF ₃	CF ₃	
1.3.	H	CF ₃	Phenyl	
1.4.	H	CN	Methyl	
1.5.	H	CN	Ethyl	
1.6.	H	CN	n-Propyl	
1.7.	H	CN	iso-Propyl	
1.8.	H	CN	n-Butyl	
1.9.	H	CN	sec.-Butyl	
1.10.	H	CN	tert.-Butyl	
1.11.	H	CN	Cyclopropyl	
1.12.	H	CN	Cyclohexyl	

29.04.93 38227:

O.Z. 0050/43197

19

No.	R ¹	R ²	R ³	phys. data
1.13.	H	CN	Methoxymethyl	
1.14.	H	CN	Ethoxymethyl	
1.15.	H	CN	Phenoxyethyl	
1.16.	H	CN	3-Chlorophenoxyethyl	
1.17.	H	CN	Benzylloxymethyl	
1.18.	H	CN	2-Methylbenzylloxymethyl	
1.19.	H	CN	Methylthiomethyl	
1.20.	H	CN	Phenylthiomethyl	
1.21.	H	CN	Ethynyl	
1.22.	H	CN	Phenylethynyl	
1.23.	H	CN	1-Propynyl	
1.24.	H	CN	CN	
1.25.	H	CN	Acetyl	
1.26.	H	CN	Propion-1-yl	
1.27.	H	CN	Butyr-1-yl	
1.28.	H	CN	iso-Butyr-1-yl	
1.29.	H	CN	Pivaloyl	
1.30.	H	CN	Benzoyl	
1.31.	H	CN	4-Chlorobenzoyl	
1.32.	H	CN	Benzylcarbonyl	
1.33.	H	CN	Methoxycarbonyl	
1.34.	H	CN	Ethoxycarbonyl	

29 04 93 36227:

O.Z. 0050/43197

20

No.	R ¹	R ²	R ³	phys. data
1.35.	H	CN	n-Propoxycarbonyl	
1.36.	H	CN	iso-Propoxycarbonyl	
1.37.	H	CN	n-Butoxycarbonyl	
1.38.	H	CN	iso-Butoxycarbonyl	
1.39.	H	CN	sec.-Butoxycarbonyl	
1.40.	H	CN	tert.-Butoxycarbonyl	
1.41.	H	CN	n-Hexoxycarbonyl	
1.42.	H	CN	Phenoxy carbonyl	
1.43.	H	CN	4-Chlorophenoxy carbonyl	
1.44.	H	CN	Benzyl oxy carbonyl	
1.45.	H	CN	Aminocarbonyl	
1.46.	H	CN	Dimethylaminocarbonyl	
1.47.	H	CN	Diethylaminocarbonyl	
1.48.	H	CN	Di-isopropylaminocarbonyl	
1.49.	H	CN	Phenylaminocarbonyl	
1.50.	H	CN	N-Methyl-N-Phenylaminocarbonyl	
1.51.	H	CN	Phenyl	
1.52.	H	CN	2-Fluorophenyl	E/Z $\delta(\text{CH}_2)$ = 5.00 or 5.08
1.53.	H	CN	3-Fluorophenyl	E/Z $\delta(\text{CH}_2)$ = 5.07 or 5.10
1.54.	H	CN	4-Fluorophenyl	$\delta(\text{CH}_2)$ = 5.05
1.55.	H	CN	Pentafluorophenyl	

29 04 23 36227:

O.Z. 0050/43197

21

No.	R ¹	R	R ³	phys. data
1.56.	H	CN	1-Chlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.95 or 5.05
1.57.	H	CN	3-Chlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.07 or 5.10
1.58.	H	CN	4-Chlorophenyl	$\delta(\text{CH}_2)$ = 5.06
1.59.	H	CN	Pentachlorophenyl	
1.60.	H	CN	2,3-Dichlorophenyl	
1.61.	H	CN	2,4-Dichlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.98 or 5.08
1.62.	H	CN	2,5-Dichlorophenyl	
1.63.	H	CN	2,6-Dichlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.98 or 5.09
1.64.	H	CN	3,4-Dichlorophenyl	E/Z $\delta(\text{CH}_2)$ = 5.09 or 5.11
1.65.	H	CN	3,5-Dichlorophenyl	
1.66.	H	CN	2,3,4-Trichlorophenyl	
1.67.	H	CN	2,3,5-Trichlorophenyl	
1.68.	H	CN	2,3,6-Trichlorophenyl	
1.69.	H	CN	2,4,5-Trichlorophenyl	
1.70.	H	CN	2,4,6-Trichlorophenyl	
1.71.	H	CN	3,4,5-Trichlorophenyl	
1.72.	H	CN	2,3,4,6-Tetrachlorophenyl	
1.73.	H	CN	2,3,5,6-Tetrachlorophenyl	
1.74.	H	CN	2-Bromophenyl	
1.75.	H	CN	3-Bromophenyl	
1.76.	H	CN	4-Bromophenyl	$\delta(\text{CH}_2)$ = 5.09

29.04.93 36227:

O.Z. 0050/43197

22

No.	R ¹	R	R	phys. data
1.77.	H	CN	2,4-Dibromophenyl	
1.78.	H	CN	3-Bromo-4-Fluorophenyl	
1.79.	H	CN	3-Bromo-4-Methoxyphenyl	
1.80.	H	CN	2-Iodophenyl	
1.81.	H	CN	3-Iodophenyl	
1.82.	H	CN	4-Iodophenyl	
1.83.	H	CN	2-Chloro-4-fluorophenyl	
1.84.	H	CN	2-Chloro-5-fluorophenyl	
1.85.	H	CN	2-Chloro-6-fluorophenyl	
1.86.	H	CN	2-Chloro-4-bromophenyl	
1.87.	H	CN	2-Bromo-4-chlorophenyl	
1.88.	H	CN	2-Bromo-4-fluorophenyl	
1.89.	H	CN	3-Bromo-4-fluorophenyl	
1.90.	H	CN	3-Chloro-4-fluorophenyl	
1.91.	H	CN	3-Fluoro-4-chlorophenyl	
1.92.	H	CN	2-Cyanophenyl	
1.93.	H	CN	3-Cyanophenyl	
1.94.	H	CN	4-Cyanophenyl	
1.95.	H	CN	2-Nitrophenyl	
1.96.	H	CN	3-Nitrophenyl	
1.97.	H	CN	4-Nitrophenyl	
1.98.	H	CN	2-Methylphenyl	83 - 85 C

29 04 93 38227:

O.Z. 0050/43197

23

No.	R ¹	R ²	R ³	phys. data
1.99.	H	CN	3-Methylphenyl	$\delta(\text{CH}_3) = 5.06$
1.100.	H	CN	4-Methylphenyl	E/Z $\delta(\text{CH}_3) = 5.04$ or 5.05
1.101.	H	CN	2,4-Dimethylphenyl	
1.102.	H	CN	2,6-Dimethylphenyl	
1.103.	H	CN	3,4-Dimethylphenyl	
1.104.	H	CN	3,5-Dimethylphenyl	
1.105.	H	CN	2,3,4-Trimethylphenyl	
1.106.	H	CN	2,3,5-Trimethylphenyl	
1.107.	H	CN	2,3,6-Trimethylphenyl	
1.108.	H	CN	2,4,5-Trimethylphenyl	
1.109.	H	CN	2,4,6-Trimethylphenyl	
1.110.	H	CN	3,4,5-Trimethylphenyl	
1.111.	H	CN	Pentamethylphenyl	
1.112.	H	CN	2-Ethylphenyl	
1.113.	H	CN	3-Ethylphenyl	
1.114.	H	CN	4-Ethylphenyl	
1.115.	H	CN	3,5-Diethylphenyl	
1.116.	H	CN	2-n-Propylphenyl	
1.117.	H	CN	3-n-Propylphenyl	
1.118.	H	CN	4-n-Propylphenyl	
1.119.	H	CN	2-iso-Propylphenyl	
1.120.	H	CN	3-iso-Propylphenyl	

29.06.93 30227:

O.Z. 0050/43197

24

No.	R ¹	R	R ³	phys. data
1.121.	H	CN	4-iso-Propylphenyl	
1.122.	H	CN	2,4-Di-isopropylphenyl	
1.123.	H	CN	3,5-Di-isopropylphenyl	
1.124.	H	CN	4-n-Butylphenyl	
1.125.	H	CN	4-sec.-Butylphenyl	
1.126.	H	CN	4-iso-Butylphenyl	
1.127.	H	CN	4-tert.-Butylphenyl	
1.128.	H	CN	3-tert.-Butylphenyl	
1.129.	H	CN	2-tert.-Butylphenyl	
1.130.	H	CN	2,4-Di-tert.-Butylphenyl	
1.131.	H	CN	3,5-Di-tert.-Butylphenyl	
1.132.	H	CN	4-n-Hexylphenyl	
1.133.	H	CN	4-n-Dodecylphenyl	
1.134.	H	CN	2-Methyl-4-tert.-Butylphenyl	
1.135.	H	CN	2-Methyl-6-tert.-Butylphenyl	
1.136.	H	CN	2-Methyl-4-isopropylphenyl	
1.137.	H	CN	2-Methyl-4-Cyclohexylphenyl	
1.138.	H	CN	2-Methyl-4-Phenylphenyl	
1.139.	H	CN	2-Methyl-4-Benzylphenyl	
1.140.	H	CN	2-Methyl-4-Phenoxyphenyl	
1.141.	H	CN	2-Methyl-4-Benzylxyphenyl	
1.142.	H	CN	2-Methyl-3-Chlorophenyl	

29.06.93 30227:

O.Z. 0050/43197

25

No.	R ⁱ	R ^j	R ^p	phys. data
1.143.	H	CN	2-Methyl-4-Chlorophenyl	
1.144.	H	CN	2-Methyl-5-Chlorophenyl	
1.145.	H	CN	2-Methyl-6-Chlorophenyl	
1.146.	H	CN	2-Methyl-4-Fluorophenyl	
1.147.	H	CN	2-Methyl-3-Bromophenyl	
1.148.	H	CN	2-Methyl-4-Bromophenyl	
1.149.	H	CN	2-Methyl-3-Methoxyphenyl	
1.150.	H	CN	2-Methyl-4-Methoxyphenyl	
1.151.	H	CN	2-Methyl-5-Methoxyphenyl	
1.152.	H	CN	2-Methyl-6-Methoxyphenyl	
1.153.	H	CN	2-Methyl-4-isopropoxyphenyl	
1.154.	H	CN	2-Methyl-2,5-Dimethoxyphenyl	
1.155.	H	CN	2-Methoxyphenyl	
1.156.	H	CN	3-Methoxyphenyl	
1.157.	H	CN	4-Methoxyphenyl	
1.158.	H	CN	2,3-Dimethoxyphenyl	
1.159.	H	CN	2,4-Dimethoxyphenyl	
1.160.	H	CN	2,5-Dimethoxyphenyl	
1.161.	H	CN	2,6-Dimethoxyphenyl	
1.162.	H	CN	3,4-Dimethoxyphenyl	
1.163.	H	CN	3,5-Dimethoxyphenyl	
1.164.	H	CN	3,6-Dimethoxyphenyl	

29.04.93 36227:

O.Z. 0050/43197

26

No.	R ¹	R	R ³	phys. data
1.165.	H	CN	2,3,4-Trimethoxyphenyl	
1.166.	H	CN	2,3,5-Trimethoxyphenyl	
1.167.	H	CN	2,3,6-Trimethoxyphenyl	
1.168.	H	CN	2,4,5-Trimethoxyphenyl	
1.169.	H	CN	2,4,6-Trimethoxyphenyl	
1.170.	H	CN	3,4,5-Trimethoxyphenyl	
1.171.	H	CN	2-Ethoxyphenyl	
1.172.	H	CN	3-Ethoxyphenyl	
1.173.	H	CN	4-Ethoxyphenyl	
1.174.	H	CN	2-isopropoxyphenyl	
1.175.	H	CN	3-isopropoxyphenyl	
1.176.	H	CN	4-isopropoxyphenyl	
1.177.	H	CN	3-tert.-Butoxyphenyl	
1.178.	H	CN	4-tert.-Butoxyphenyl	
1.179.	H	CN	2-Trifluoromethoxyphenyl	
1.180.	H	CN	3-Trifluoromethoxyphenyl	
1.181.	H	CN	4-Trifluoromethoxyphenyl	
1.182.	H	CN	3-(1',1',2',2'-Tetrafluoro)ethoxy-phenyl	
1.183.	H	CN	4-(1',1',2',2'-Tetrafluoro)ethoxy-phenyl	
1.184.	H	CN	2-Chloromethylphenyl	

29 06 93 30227.

O.Z. 0050/43197

27

No.	R ¹	R ²	R ³	phys. data
1.185.	H	CN	3-Chloromethylphenyl	
1.186.	H	CN	4-Chloromethylphenyl	
1.187.	H	CN	2-Trifluoromethylphenyl	
1.188.	H	CN	3-Trifluoromethylphenyl	
1.189.	H	CN	4-Trifluoromethylphenyl	
1.190.	H	CN	2-(Methoxyiminomethyl)phenyl	
1.191.	H	CN	3-(Methoxyiminomethyl)phenyl	
1.192.	H	CN	4-(Methoxyiminomethyl)phenyl	
1.193.	H	CN	2-(Ethoxyiminomethyl)phenyl	
1.194.	H	CN	3-(Ethoxyiminomethyl)phenyl	
1.195.	H	CN	4-(Ethoxyiminomethyl)phenyl	
1.196.	H	CN	2-(n-Propoxyiminomethyl)phenyl	
1.197.	H	CN	3-(n-Propoxyiminomethyl)phenyl	
1.198.	H	CN	4-(n-Propoxyiminomethyl)phenyl	
1.199.	H	CN	2-(iso-Propoxyiminomethyl)phenyl	
1.200.	H	CN	3-(iso-Propoxyiminomethyl)phenyl	
1.201.	H	CN	4-(iso-Propoxyiminomethyl)phenyl	
1.202.	H	CN	2-(n-Butoxyiminomethyl)phenyl	
1.203.	H	CN	3-(n-Butoxyiminomethyl)phenyl	
1.204.	H	CN	4-(n-Butoxyiminomethyl)phenyl	
1.205.	H	CN	2-(iso-Butoxyiminomethyl)phenyl	
1.206.	H	CN	3-(iso-Butoxyiminomethyl)phenyl	

29.04.93 36227:

O.Z. 0050/43197

28

No.	R ¹	R ²	R ³	phys. data
1.207.	H	CN	4-(iso-Butoxyiminomethyl)phenyl	
1.208.	H	CN	2-(tert.-Butoxyiminomethyl)phenyl	
1.209.	H	CN	3-(tert.-Butoxyiminomethyl)phenyl	
1.210.	H	CN	4-(tert.-Butoxyiminomethyl)phenyl	
1.211.	H	CN	2-(n-Pentoxymethoxyiminomethyl)phenyl	
1.212.	H	CN	3-(n-Pentoxymethoxyiminomethyl)phenyl	
1.213.	H	CN	4-(n-Pentoxymethoxyiminomethyl)phenyl	
1.214.	H	CN	2-(n-Hexoxyiminomethyl)phenyl	
1.215.	H	CN	3-(n-Hexoxyiminomethyl)phenyl	
1.216.	H	CN	4-(n-Hexoxyiminomethyl)phenyl	
1.217.	H	CN	2-(Allyloxyiminomethyl)phenyl	
1.218.	H	CN	3-(Allyloxyiminomethyl)phenyl	
1.219.	H	CN	4-(Allyloxyiminomethyl)phenyl	
1.220.	H	CN	2-(Benzylmethoxyiminomethyl)phenyl	
1.221.	H	CN	3-(Benzylmethoxyiminomethyl)phenyl	
1.222.	H	CN	4-(Benzylmethoxyiminomethyl)phenyl	
1.223.	H	CN	2-(Methoxyimino-1'-ethyl)phenyl	
1.224.	H	CN	3-(Methoxyimino-1'-ethyl)phenyl	
1.225.	H	CN	4-(Methoxyimino-1'-ethyl)phenyl	
1.226.	H	CN	2-(Ethoxyimino-1'-ethyl)phenyl	
1.227.	H	CN	3-(Ethoxyimino-1'-ethyl)phenyl	
1.228.	H	CN	4-(Ethoxyimino-1'-ethyl)phenyl	

29 04 93 36227:

O.Z. 0050/43197

29

No.	R ¹	R ²	R ³	phys. data
1.229.	H	CN	2-(n-Propoxyimino-1'-ethyl)phenyl	
1.230.	H	CN	3-(n-Propoxyimino-1'-ethyl)phenyl	
1.231.	H	CN	4-(n-Propoxyimino-1'-ethyl)phenyl	
1.232.	H	CN	2-(n-Butoxyamino-1'-ethyl)phenyl	
1.233.	H	CN	3-(n-Butoxyamino-1'-ethyl)phenyl	
1.234.	H	CN	4-(n-Butoxyamino-1'-ethyl)phenyl	
1.235.	H	CN	2-(n-Pentoxyimino-1'-ethyl)phenyl	
1.236.	H	CN	3-(n-Pentoxyimino-1'-ethyl)phenyl	
1.237.	H	CN	4-(n-Pentoxyimino-1'-ethyl)phenyl	
1.238.	H	CN	2-(n-Hexaoxyimino-1'-ethyl)phenyl	
1.239.	H	CN	3-(n-Hexaoxyimino-1'-ethyl)phenyl	
1.240.	H	CN	4-(n-Hexaoxyimino-1'-ethyl)phenyl	
1.241.	H	CN	2-(Allyloxyimino-1'-ethyl)-phenyl	
1.242.	H	CN	3-(Allyloxyimino-1'-ethyl)-phenyl	
1.243.	H	CN	4-(Allyloxyimino-1'-ethyl)-phenyl	
1.244.	H	CN	2-(Benzylxyimino-1'-ethyl)phenyl	
1.245.	H	CN	3-(Benzylxyimino-1'-ethyl)phenyl	
1.246.	H	CN	4-(Benzylxyimino-1'-ethyl)phenyl	
1.247.	H	CN	2-Phenylphenyl	
1.248.	H	CN	3-Phenylphenyl	
1.249.	H	CN	4-Phenylphenyl	
1.250.	H	CN	2-Phenoxyphenyl	

29.06.93 38227.

O.Z. 0050/43197

30

No.	R ¹	R ²	R ³	phys. data
1.251.	H	CN	3-Phenoxyphenyl	E/Z $\delta(\text{CH}_2)$ = 5.04 or 5.06
1.252.	H	CN	4-Phenoxyphenyl	
1.253.	H	CN	2-Benzylloxyphenyl	
1.254.	H	CN	3-Benzylloxyphenyl	
1.255.	H	CN	4-Benzylloxyphenyl	
1.256.	H	CN	4-(Imidazol-1'-yl)phenyl	
1.257.	H	CN	4-(Piperazin-1'-yl)phenyl	
1.258.	H	CN	4-(Morpholin-1'-yl)phenyl	
1.259.	H	CN	4-(Piperidin-1'-yl)phenyl	
1.260.	H	CN	4-(Pyridyl-2'-oxy)phenyl	
1.261.	H	CN	2-Cyclopropylphenyl	
1.262.	H	CN	3-Cyclopropylphenyl	
1.263.	H	CN	4-Cyclopropylphenyl	
1.264.	H	CN	3-Cyclohexylphenyl	
1.265.	H	CN	4-Cyclohexylphenyl	
1.266.	H	CN	4-Oxiranylphenyl	
1.267.	H	CN	4-(1',3'-Dioxan-2'-yl)-phenyl	
1.268.	H	CN	4-(Tetrahydropyran-2-yloxy)-phenyl	
1.269.	H	CN	1-Naphthyl	
1.270.	H	CN	2-Naphthyl	
1.271.	H	CN	Benzyl	
1.272.	H	CN	2-Methylbenzyl	

29.04.93 20227:

O.Z. 0050/43197

31

No.	R ¹	R ²	R ³	phys. data
1.273.	H	CN	3-Methylbenzyl	
1.274.	H	CN	4-Methylbenzyl	
1.275.	H	CN	4-tert.-Butylbenzyl	
1.276.	H	CN	2-Chlorobenzyl	
1.277.	H	CN	3-Chlorobenzyl	
1.278.	H	CN	4-Chlorobenzyl	
1.279.	H	CN	2,4-Dichlorobenzyl	
1.280.	H	CN	2,6-Dichlorobenzyl	
1.281.	H	CN	2,4,6-Trichlorobenzyl	
1.282.	H	CN	2-Trifluoromethylbenzyl	
1.283.	H	CN	3-Trifluoromethylbenzyl	
1.284.	H	CN	4-trifluoromethylbenzyl	
1.285.	H	CN	2-Methoxybenzyl	
1.286.	H	CN	4-Methoxybenzyl	
1.287.	H	CN	4-tert.-Butoxybenzyl	
1.288.	H	CN	4-Phenoxybenzyl	
1.289.	H	CN	1-Phenethyl	
1.290.	H	CN	2-Phenethyl	
1.291.	H	CN	1-Phenylpropyl	
1.292.	H	CN	2-Phenylpropyl	
1.293.	H	CN	3-Phenylpropyl	
1.294.	H	CN	2-Methyl-2-phenylpropyl	

29.04.83 30227:

O.Z. 0050/43197

32

No.	R ¹	R ²	R ³	phys. data
1.295.	H	CN	2-Methyl-3-phenylpropyl	
1.296.	H	CN	4-Phenylbutyl	
1.297.	H	CN	2-Phenyl-1-ethenyl	
1.298.	H	CN	1-Phenyl-1-ethenyl	
1.299.	H	CN	1-Phenyl-1-propenyl	
1.300.	H	CN	1-Phenyl-1-propen-2-yl	
1.301.	H	CN	2,2-Diphenylethenyl	
1.302.	H	CN	2-Pyridyl	
1.303.	H	CN	3-Pyridyl	
1.304.	H	CN	4-Pyridyl	
1.305.	H	CN	2,6-Pyrimidinyl	
1.306.	H	CN	1,5-Pyrimidinyl	
1.307.	H	CN	2-Thienyl	
1.308.	H	CN	3-Thienyl	
1.309.	H	CN	2-Furyl	
1.310.	H	CN	3-Furyl	
1.311.	H	CN	1-Pyrrolyl	
1.312.	H	CN	1-Imidazolyl	
1.313.	H	CN	1,2,4-Triazolyl	
1.314.	H	CN	1,3,4-Triazolyl	
1.315.	H	CN	4-Thiazolyl	
1.316.	H	CN	2-Benzothiazolyl	

29.04.93 30227.

O.Z. 0050/43197

33

No.	R ¹	R ²	R ³	phys. data
1.317.	H	CN	2-Pyridylmethyl	
1.318.	H	CN	3-Pyridylmethyl	
1.319.	H	CN	2'-Furyl-2-ethenyl	
1.320.	H	CN	2'-Thienyl-2-ethenyl	
1.321.	H	CN	3'-Pyridyl-2-ethenyl	
1.322.	H	CN	Oxiranyl	
1.323.	H	CN	1-Aziridinyl	
1.324.	H	CN	1-Azetidinyl	
1.325.	H	CN	1-Pyrrolidinyl	
1.326.	H	CN	2-Tetrahydrofuryl	
1.327.	H	CN	2-Tetrahydropyranyl	
1.328.	H	CN	3-Tetrahydropyranyl	
1.329.	H	CN	1-Piperidinyl	
1.330.	H	CN	1-Morpholinyl	
1.331.	H	CN	1-Piperazinyl	
1.332.	H	CN	1,3-Dioxan-2-yl	
1.333.	H	CN	4-Tetrahydrothiopyranyl	
1.334.	H	CN	4-Methylpent-3-en-1-yl	
1.335.	H	CN	2-Propenyl	
1.336.	H	CN	2-Butenyl	
1.337.	H	CN	1-Methyl-2-propenyl	
1.338.	H	CN	3-Methyl-2-butenyl	

29.04.93 20227:

O.Z. 0050/43197

34

No.	R ¹	R ²	R ³	phys. data
1.339.	H	CN	2,2-Difluorethenyl	
1.340.	H	CN	2,2-Dichloroethenyl	
1.341.	H	CN	3,3,3-Trifluoropropenyl	
1.342.	H	CN	3,3,3-Trichloropropenyl	
1.343.	H	CN	3-Chloro-2-propenyl	
1.344.	H	CN	Cyclopent-1-enyl	
1.345.	H	CN	Cyclopentadienyl	
1.346.	H	CN	Cyclohex-1-enyl	
1.347.	H	CN	Pentafluorocyclopentadienyl	
1.348.	H	CN	Pentachlorocyclopentadienyl	
1.349.	H	CN	Styryl	
1.350.	H	CO ₂ Me	Phenyl	126 - 130°C
1.351.	H	CO ₂ Me	2-Fluorophenyl	
1.352.	H	CO ₂ Me	3-Fluorophenyl	
1.353.	H	CO ₂ Me	4-Fluorophenyl	
1.354.	H	CO ₂ Me	2-Chlorophenyl	$\delta(\text{CH}_2) = 4.95$
1.355.	H	CO ₂ Me	3-Chlorophenyl	
1.356.	H	CO ₂ Me	4-Chlorophenyl	
1.357.	H	CO ₂ Me	2-Methylphenyl	
1.358.	H	CO ₂ Me	3-Methylphenyl	$\delta(\text{CH}_2) = 4.95$
1.359.	H	CO ₂ Me	4-Methylphenyl	
1.360.	H	CO ₂ Me	2-Cyanophenyl	

29 04 03 30227.

O.Z. 0050/43197

35

No.	R ¹	R ²	R ³	phys. data
1.361.	H	Me	3-Cyanophenyl	
1.362.	H	CO ₂ Me	4-Cyanophenyl	
1.363.	H	CO ₂ Me	2-Methoxyphenyl	
1.364.	H	CO ₂ Me	3-Methoxyphenyl	
1.365.	H	CO ₂ Me	4-Methoxyphenyl	
1.366.	H	CO ₂ Me	2-Nitrophenyl	
1.367.	H	CO ₂ Me	3-Nitrophenyl	
1.368.	H	CO ₂ Me	4-Nitrophenyl	
1.369.	H	P(O)(OMe) ₂	Phenyl	
1.370.	H	P(O)(OMe) ₂	2-Fluorophenyl	
1.371.	H	P(O)(OMe) ₂	3-Fluorophenyl	
1.372.	H	P(O)(OMe) ₂	4-Fluorophenyl	
1.373.	H	P(O)(OMe) ₂	2-Chlorophenyl	
1.374.	H	P(O)(OMe) ₂	3-Chlorophenyl	
1.375.	H	P(O)(OMe) ₂	4-Chlorophenyl	
1.376.	H	P(O)(OMe) ₂	2-Methylphenyl	
1.377.	H	P(O)(OMe) ₂	3-Methylphenyl	107°C
1.378.	H	P(O)(OMe) ₂	4-Methylphenyl	
1.379.	CH ₃	CN	Phenyl	
1.380.	Acetyl	H	2,6-Dichlorophenyl	
1.381.	Acetyl	H	2,4-Dichlorophenyl	
1.382.	CH ₃	CO ₂ Et	Benzoyl	

29 04 93 36227.

O.Z. 0050/43197

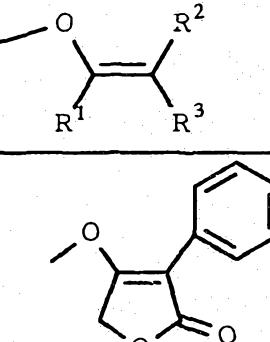
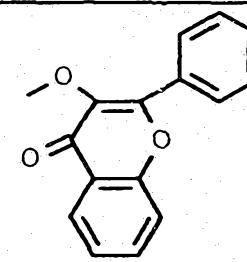
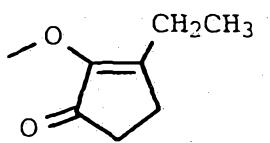
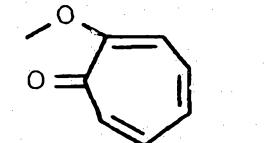
36

No.	R ¹	R ²	R ³	phys. data
1.383.	Methoxycarbonylmethyl	H	Acetyl	
1.404.	H	CO ₂ Me	2-Bromophenyl	97 - 102°C

29.06.93 36227.

O.Z. 0050/43197

3"

No.	Chemical Structure	phys. data
1.384		$\delta(\text{CH}_2) = 5.10$
1.385		$\delta(\text{CH}_2) = 5.06$
1.386		$\delta(\text{CH}_2) = 5.10$
1.387		146 - 148°C

29 04 93 38227:

O.Z. 0050/43197

38

No.	Chemical Structure	phys. data
1.388		
1.389		115 - 118°C
1.390		$\delta(\text{CH}_2) = 5.11$
1.391		$\delta(\text{CH}_2) = 4.92$

29.04.93 36227:

O.Z. 0050/43197

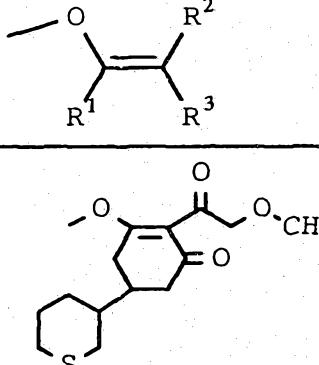
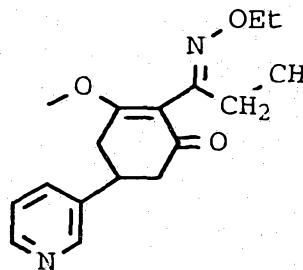
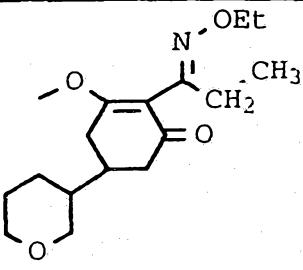
39

No.	Chemical Structure	phys. data
1.392		
1.393		
1.394		

29 06 93 30227.

O.Z. 0050/43197

40

No.	Chemical Structure	phys. data
1.395		
1.396		
1.397		

29.08.93 36227.

O.Z. 0050/43197

41

No.	Chemical Structure	phys. data
1.398		
1.399		
1.400		

29.06.93 38227.

O.Z. 0050/43197

42

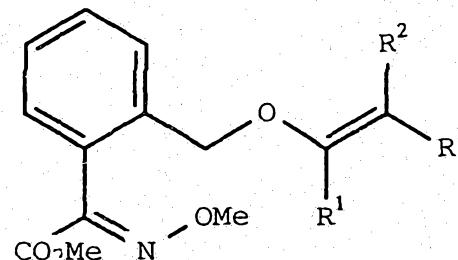
No.	Chemical Structure	phys. data
1.401		
1.402		154 - 155°C
1.403		149 - 150°C

29 09 93 30227:

O.Z. 0050/43197

43

Table 2



No.	R ¹	R ²	R ³	phys. data
2.1.	H	H	CF ₃	
2.2.	H	CF ₃	CF ₃	
2.3.	H	CF ₃	Phenyl	
2.4.	H	CN	Methyl	
2.5.	H	CN	Ethyl	
2.6.	H	CN	n-Propyl	
2.7.	H	CN	isopropyl	
2.8.	H	CN	n-Butyl	
2.9.	H	CN	sec.-Butyl	
2.10.	H	CN	tert.-Butyl	
2.11.	H	CN	Cyclopropyl	
2.12.	H	CN	Cyclohexyl	

20 06 93 38227:

O.Z. 0050/43197

44

No.	R ¹	R ²	R ³	phys. data
2.13.	H	CN	Methoxymethyl	
2.14.	H	CN	Ethoxymethyl	
2.15.	H	CN	Phenoxyethyl	
2.16.	H	CN	3-Chlorophenoxyethyl	
2.17.	H	CN	Benzylloxymethyl	
2.18.	H	CN	2-Methylbenzylloxymethyl	
2.19.	H	CN	Methylthiomethyl	
2.20.	H	CN	Phenylthiomethyl	
2.21.	H	CN	Ethyanyl	
2.22.	H	CN	Phenylethyanyl	
2.23.	H	CN	1-Propynyl	
2.24.	H	CN	CN	
2.25.	H	CN	Acetyl	
2.26.	H	CN	Propion-1-yl	
2.27.	H	CN	Butyr-1-yl	
2.28.	H	CN	isobutyr-1-yl	
2.29.	H	CN	Pivaloyl	
2.30.	H	CN	Benzoyl	
2.31.	H	CN	4-Chlorobenzoyl	
2.32.	H	CN	Benzylcarbonyl	
2.33.	H	CN	Methoxycarbonyl	
2.34.	H	CN	Ethoxycarbonyl	

29 04 93 30227

O.Z. 0050/43197

45

No.	R ¹	R-	R ³	phys. data
2.35.	H	CN	n-Propoxycarbonyl	
2.36.	H	CN	iso-Propoxycarbonyl	
2.37.	H	CN	n-Butoxycarbonyl	
2.38.	H	CN	isobutoxycarbonyl	
2.39.	H	CN	sec.-Butoxycarbonyl	
2.40.	H	CN	tert.-Butoxycarbonyl	
2.41.	H	CN	n-Hexoxycarbonyl	
2.42.	H	CN	Phenoxy carbonyl	
2.43.	H	CN	4-Chlorophenoxy carbonyl	
2.44.	H	CN	Benzylloxycarbonyl	
2.45.	H	CN	Aminocarbonyl	
2.46.	H	CN	Dimethylaminocarbonyl	
2.47.	H	CN	Diethylaminocarbonyl	
2.48.	H	CN	Di-isopropylaminocarbonyl	
2.49.	H	CN	Phenylaminocarbonyl	
2.50.	H	CN	N-Methyl-N-Phenylaminocarbonyl	
2.51.	H	CN	Phenyl	E/Z $\delta(\text{CH}_2)$ = 4.98 or 5.00
2.52.	H	CN	2-Fluorophenyl	107 - 108°C
2.53.	H	CN	3-Fluorophenyl	97 - 98°C
2.54.	H	CN	4-Fluorophenyl	128 - 131°C
2.55.	H	CN	Pentafluorophenyl	
2.56.	H	CN	2-Chlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.90 or 5.00

20 04 93 38227

O.Z. 0050/43197

46

NO.	R ¹	R ²	R ³	phys. data
2.57.	H	CN	3-Chlorophenyl	E/Z $\delta(\text{CH}_2)$ = 5.02 or 5.05
2.58.	H	CN	4-Chlorophenyl	$\delta(\text{CH}_2)$ = 5.02 or 5.03
2.59.	H	CN	Pentachlorophenyl	
2.60.	H	CN	2,3-Dichlorophenyl	
2.61.	H	CN	2,4-Dichlorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.93 or 5.03
2.62.	H	CN	2,5-Dichlorophenyl	
2.63.	H	CN	2,6-Dichlorophenyl	
2.64.	H	CN	3,4-Dichlorophenyl	121 - 122 C
2.65.	H	CN	3,5-Dichlorophenyl	
2.66.	H	CN	2,3,4-Trichlorophenyl	
2.67.	H	CN	2,3,5-Trichlorophenyl	
2.68.	H	CN	2,3,6-Trichlorophenyl	
2.69.	H	CN	2,4,5-Trichlorophenyl	
2.70.	H	CN	2,4,6-Trichlorophenyl	
2.71.	H	CN	3,4,5-Trichlorophenyl	
2.72.	H	CN	2,3,4,6-Tetrachlorophenyl	
2.73.	H	CN	2,3,5,6-Tetrachlorophenyl	
2.74.	H	CN	2-Bromophenyl	
2.75.	H	CN	3-Bromophenyl	
2.76.	H	CN	4-Bromophenyl	100 - 102 C
2.77.	H	CN	2,4-Dibromophenyl	

20 06 93 38227:

O.Z. 0050/43197

47

No.	R ¹	R ²	R ³	phys. data
2.78.	H	CN	3-Bromo-4-fluorophenyl	
2.79.	H	CN	3-Bromo-4-Methoxyphenyl	
2.80.	H	CN	2-Iodophenyl	
2.81.	H	CN	3-Iodophenyl	
2.82.	H	CN	4-Iodophenyl	
2.83.	H	CN	2-Chloro-4-fluorophenyl	
2.84.	H	CN	2-Chloro-5-fluorophenyl	
2.85.	H	CN	2-Chloro-6-fluorophenyl	E/Z $\delta(\text{CH}_2)$ = 4.94 or 5.04
2.86.	H	CN	2-Chloro-4-bromophenyl	
2.87.	H	CN	2-Bromo-4-chlorophenyl	
2.88.	H	CN	2-Bromo-4-fluorophenyl	
2.89.	H	CN	3-Bromo-4-fluorophenyl	
2.90.	H	CN	3-Chloro-4-fluorophenyl	
2.91.	H	CN	3-Fluoro-4-chlorophenyl	
2.92.	H	CN	2-Cyanophenyl	
2.93.	H	CN	3-Cyanophenyl	
2.94.	H	CN	4-Cyanophenyl	
2.95.	H	CN	2-Nitrophenyl	
2.96.	H	CN	3-Nitrophenyl	
2.97.	H	CN	4-Nitrophenyl	
2.98.	H	CN	2-Methylphenyl	106 - 107 C
2.99.	H	CN	3-Methylphenyl	129 - 130 C

29.06.93 20227

O.Z. 0050/43197

48

No.	R ¹	R	R ³	phys. data
2.100.	H	CN	4-Methylphenyl	93 - 95°C
2.101.	H	CN	2,4-Dimethylphenyl	
2.102.	H	CN	2,6-Dimethylphenyl	
2.103.	H	CN	3,4-Dimethylphenyl	
2.104.	H	CN	3,5-Dimethylphenyl	
2.105.	H	CN	2,3,4-Trimethylphenyl	
2.106.	H	CN	2,3,5-Trimethylphenyl	
2.107.	H	CN	2,3,6-Trimethylphenyl	
2.108.	H	CN	2,4,5-Trimethylphenyl	
2.109.	H	CN	2,4,6-Trimethylphenyl	
2.110.	H	CN	3,4,5-Trimethylphenyl	
2.111.	H	CN	Pentamethylphenyl	
2.112.	H	CN	2-Ethylphenyl	
2.113.	H	CN	3-Ethylphenyl	
2.114.	H	CN	4-Ethylphenyl	
2.115.	H	CN	3,5-Diethylphenyl	
2.116.	H	CN	2-n-Propylphenyl	
2.117.	H	CN	3-n-Propylphenyl	
2.118.	H	CN	4-n-Propylphenyl	
2.119.	H	CN	2-isopropylphenyl	
2.120.	H	CN	3-isopropylphenyl	
2.121.	H	CN	4-isopropylphenyl	

20 06 93 30227:

O.Z. 0050/43197

49

No.	R ¹	R-	R ³	phys. data
2.122.	H	CN	2,4-Di-isopropylphenyl	
2.123.	H	CN	3,5-Di-isopropylphenyl	
2.124.	H	CN	4-n-Butyphenyl	
2.125.	H	CN	4-sec.-Butylphenyl	
2.126.	H	CN	4-isobutylphenyl	
2.127.	H	CN	4-tert.-Butylphenyl	
2.128.	H	CN	3-tert.-Butylphenyl	
2.129.	H	CN	2-tert.-Butylphenyl	
2.130.	H	CN	2,4-Di-tert.-Butylphenyl	
2.131.	H	CN	3,5-Di-tert.-Butylphenyl	
2.132.	H	CN	4-n-Hexylphenyl	
2.133.	H	CN	4-n-Dodecylphenyl	
2.134.	H	CN	2-Methyl-4-tert.-butylphenyl	
2.135.	H	CN	2-Methyl-6-tert.-butylphenyl	
2.136.	H	CN	2-Methyl-4-isopropylphenyl	
2.137.	H	CN	2-Methyl-4-cyclohexylphenyl	
2.138.	H	CN	2-Methyl-4-phenylphenyl	
2.139.	H	CN	2-Methyl-4-benzylphenyl	
2.140.	H	CN	2-Methyl-4-phenoxyphenyl	
2.141.	H	CN	2-Methyl-4-benzyl oxyphenyl	
2.142.	H	CN	2-Methyl-3-chlorophenyl	
2.143.	H	CN	2-Methyl-4-chlorophenyl	

30 08 93 36227:

O.Z. 0050/43197

50

No.	R ¹	R'	R ³	phys. data
2.144.	H	CN	2-Methyl-5-chlorophenyl	
2.145.	H	CN	2-Methyl-6-chlorophenyl	
2.146.	H	CN	2-Methyl-4-fluorophenyl	
2.147.	H	CN	2-Methyl-3-bromophenyl	
2.148.	H	CN	2-Methyl-4-bromophenyl	
2.149.	H	CN	2-Methyl-3-methoxyphenyl	
2.150.	H	CN	2-Methyl-4-methoxyphenyl	
2.151.	H	CN	2-Methyl-5-methoxyphenyl	
2.152.	H	CN	2-Methyl-6-methoxyphenyl	
2.153.	H	CN	2-Methyl-4-isopropoxyphenyl	
2.154.	H	CN	2-Methyl-2,5-dimethoxyphenyl	
2.155.	H	CN	2-Methoxyphenyl	
2.156.	H	CN	3-Methoxyphenyl	
2.157.	H	CN	4-Methoxyphenyl	
2.158.	H	CN	2,3-Dimethoxyphenyl	
2.159.	H	CN	2,4-Dimethoxyphenyl	
2.160.	H	CN	2,5-Dimethoxyphenyl	
2.161.	H	CN	2,6-Dimethoxyphenyl	
2.162.	H	CN	3,4-Dimethoxyphenyl	
2.163.	H	CN	3,5-Dimethoxyphenyl	
2.164.	H	CN	3,6-Dimethoxyphenyl	
2.165.	H	CN	2,3,4-Trimethoxyphenyl	

29.06.93 38227:

O.Z. 0050/43197

51

No.	R ¹	R ²	R ³	phys. data
2.166.	H	CN	2,3,5-Trimethoxyphenyl	
2.167.	H	CN	2,3,6-Trimethoxyphenyl	
2.168.	H	CN	2,4,5-Trimethoxyphenyl	
2.169.	H	CN	2,4,6-Trimethoxyphenyl	
2.170.	H	CN	3,4,5-Trimethoxyphenyl	
2.171.	H	CN	2-Ethoxyphenyl	
2.172.	H	CN	3-Ethoxyphenyl	
2.173.	H	CN	4-Ethoxyphenyl	
2.174.	H	CN	2-isopropoxyphenyl	
2.175.	H	CN	3-isopropoxyphenyl	
2.176.	H	CN	4-isopropoxyphenyl	
2.177.	H	CN	3-tert.-Butoxyphenyl	
2.178.	H	CN	4-tert.-Butoxyphenyl	
2.179.	H	CN	2-Trifluoromethoxyphenyl	
2.180.	H	CN	3-Trifluoromethoxyphenyl	
2.181.	H	CN	4-Trifluoromethoxyphenyl	
2.182.	H	CN	3-(1',1',2',2'-Tetrafluoro)ethoxyphenyl	
2.183.	H	CN	4-(1',1',2',2'-Tetrafluoro)ethoxyphenyl	
2.184.	H	CN	2-Chloromethylphenyl	
2.185.	H	CN	3-Chloromethylphenyl	

29 04 93 36227

O.Z. 0050/43197

52

No.	R ¹	R ²	R ³	phys. data
2.186.	H	CN	4-Chloromethylphenyl	
2.187.	H	CN	2-Trifluoromethylphenyl	
2.188.	H	CN	3-Trifluoromethylphenyl	
2.189.	H	CN	4-Trifluoromethylphenyl	
2.190.	H	CN	2-(Methoxyiminomethyl)phenyl	
2.191.	H	CN	3-(Methoxyiminomethyl)phenyl	
2.192.	H	CN	4-(Methoxyiminomethyl)phenyl	
2.193.	H	CN	2-(Ethoxyiminomethyl)phenyl	
2.194.	H	CN	3-(Ethoxyiminomethyl)phenyl	
2.195.	H	CN	4-(Ethoxyiminomethyl)phenyl	
2.196.	H	CN	2-(n-Propoxyiminomethyl)phenyl	
2.197.	H	CN	3-(n-Propoxyiminomethyl)phenyl	
2.198.	H	CN	4-(n-Propoxyiminomethyl)phenyl	
2.199.	H	CN	2-(isopropoxyiminomethyl)phenyl	
2.200.	H	CN	3-(isopropoxyiminomethyl)phenyl	
2.201.	H	CN	4-(isopropoxyiminomethyl)phenyl	
2.202.	H	CN	2-(n-Butoxyimino-methyl)phenyl	
2.203.	H	CN	3-(n-Butoxyimino-methyl)phenyl	
2.204.	H	CN	4-(n-Butoxyimino-methyl)phenyl	
2.205.	H	CN	2-(iso-Butoxyimino-methyl)phenyl	
2.206.	H	CN	3-(iso-Butoxyimino-methyl)phenyl	
2.207.	H	CN	4-(iso-Butoxyimino-methyl)phenyl	

29 06 93 30227:

O.Z. 0050/43197

53

No.	R ¹	R ²	R ³	phys. data
2.208.	H	CN	2-(tert.-Butoxyimino-methyl)phenyl	
2.209.	H	CN	3-(tert.-Butoxyimino-methyl)phenyl	
2.210.	H	CN	4-(tert.-Butoxyimino-methyl)phenyl	
2.211.	H	CN	2-(n-Pentoxyiminomethyl)-phenyl	
2.212.	H	CN	3-(n-Pentoxyiminomethyl)-phenyl	
2.213.	H	CN	4-(n-Pentoxyiminomethyl)-phenyl	
2.214.	H	CN	2-(n-Hexaoxyiminomethyl)-phenyl	
2.215.	H	CN	3-(n-Hexaoxyiminomethyl)-phenyl	
2.216.	H	CN	4-(n-Hexaoxyiminomethyl)-phenyl	
2.217.	H	CN	2-(Allyloxyiminomethyl)-phenyl	
2.218.	H	CN	3-(Allyloxyiminomethyl)-phenyl	
2.219.	H	CN	4-(Allyloxyiminomethyl)-phenyl	
2.220.	H	CN	2-(Benzylxyiminomethyl)-phenyl	
2.221.	H	CN	3-(Benzylxyiminomethyl)-phenyl	
2.222.	H	CN	4-(Benzylxyiminomethyl)-phenyl	
2.223.	H	CN	2-(Methoxyimino-1'-ethyl)-phenyl	
2.224.	H	CN	3-(Methoxyimino-1'-ethyl)-phenyl	
2.225.	H	CN	4-(Methoxyimino-1'-ethyl)-phenyl	
2.226.	H	CN	2-(Ethoxyimino-1'-ethyl)-phenyl	
2.227.	H	CN	3-(Ethoxyimino-1'-ethyl)-phenyl	
2.228.	H	CN	4-(Ethoxyimino-1'-ethyl)-phenyl	
2.229.	H	CN	2-(n-Propoxyimino-1'-ethyl)phenyl	

29 04 93 36227:

O.Z. 0050/43197

54

No.	R ¹	R ²	R ³	phys. data
2.230.	H	CN	3-(n-Propoxyimino-1'-ethyl)phenyl	
2.231.	H	CN	4-(n-Propoxyimino-1'-ethyl)phenyl	
2.232.	H	CN	2-(n-Butoxyamino-1'-ethyl)phenyl	
2.233.	H	CN	3-(n-Butoxyamino-1'-ethyl)phenyl	
2.234.	H	CN	4-(n-Butoxyamino-1'-ethyl)phenyl	
2.235.	H	CN	2-(n-Pentoxyimino-1'-ethyl)phenyl	
2.236.	H	CN	3-(n-Pentoxyimino-1'-ethyl)phenyl	
2.237.	H	CN	4-(n-Pentoxyimino-1'-ethyl)phenyl	
2.238.	H	CN	2-(n-Hexaoxyimino-1'-ethyl)phenyl	
2.239.	H	CN	3-(n-Hexaoxyimino-1'-ethyl)phenyl	
2.240.	H	CN	4-(n-Hexaoxyimino-1'-ethyl)phenyl	
2.241.	H	CN	2-(Allyloxyimino-1'-ethyl)-phenyl	
2.242.	H	CN	3-(Allyloxyimino-1'-ethyl)-phenyl	
2.243.	H	CN	4-(Allyloxyimino-1'-ethyl)-phenyl	
2.244.	H	CN	2-(Benzylloxyimino-1'-ethyl)phenyl	
2.245.	H	CN	3-(Benzylloxyimino-1'-ethyl)phenyl	
2.246.	H	CN	4-(Benzylloxyimino-1'-ethyl)phenyl	
2.247.	H	CN	2-Phenylphenyl	
2.248.	H	CN	3-Phenylphenyl	
2.249.	H	CN	4-Phenylphenyl	
2.250.	H	CN	2-Phenoxyphenyl	
2.251.	H	CN	3-Phenoxyphenyl	96 - 97°C

29 06 93 36227.

O.Z. 0050/43197

55

No.	R ¹	R ²	R ³	phys. data
2.252.	H	CN	4-Phenoxyphenyl	
2.253.	H	CN	2-Benzylxyphenyl	
2.254.	H	CN	3-Benzylxyphenyl	
2.255.	H	CN	4-Benzylxyphenyl	
2.256.	H	CN	4-(Imidazol-1'-yl)phenyl	
2.257.	H	CN	4-(Piperazin-1'-yl)phenyl	
2.258.	H	CN	4-(Morpholin-1'-yl)phenyl	
2.259.	H	CN	4-(Piperidin-1'-yl)phenyl	
2.260.	H	CN	4-(Pyridyl-2'-oxy)phenyl	
2.261.	H	CN	2-Cyclopropylphenyl	
2.262.	H	CN	3-Cyclopropylphenyl	
2.263.	H	CN	4-Cyclopropylphenyl	
2.264.	H	CN	3-Cyclohexylphenyl	
2.265.	H	CN	4-Cyclohexylphenyl	
2.266.	H	CN	4-Oxiranylphenyl	
2.267.	H	CN	4-(1',3'-Dioxan-2'-yl)-phenyl	
2.268.	H	CN	4-(Tetrahydropyran-2-yloxy)-phenyl	
2.269.	H	CN	1-Naphthyl	
2.270.	H	CN	2-Naphthyl	
2.271.	H	CN	Benzyl	
2.272.	H	CN	2-Methylbenzyl	
2.273.	H	CN	3-Methylbenzyl	

29 06 83 36227:

O.Z. 0050/43197

56

No.	R ¹	R ²	R ³	phys. data
2.274.	H	CN	4-Methylbenzyl	
2.275.	H	CN	4-tert.-Butylbenzyl	
2.276.	H	CN	2-Chlorobenzyl	
2.277.	H	CN	3-Chlorobenzyl	
2.278.	H	CN	4-Chlorobenzyl	
2.279.	H	CN	2,4-Dichlorobenzyl	
2.280.	H	CN	2,6-Dichlorobenzyl	
2.281.	H	CN	2,4,6-Trichlorobenzyl	
2.282.	H	CN	2-Trifluoromethylbenzyl	
2.283.	H	CN	3-Trifluoromethylbenzyl	
2.284.	H	CN	4-trifluoromethylbenzyl	
2.285.	H	CN	2-Methoxybenzyl	
2.286.	H	CN	4-Methoxybenzyl	
2.287.	H	CN	4-tert.-Butoxybenzyl	
2.288.	H	CN	4-Phenoxybenzyl	
2.289.	H	CN	1-Phenethyl	
2.290.	H	CN	2-Phenethyl	
2.291.	H	CN	1-Phenylpropyl	
2.292.	H	CN	2-Phenylpropyl	
2.293.	H	CN	3-Phenylpropyl	
2.294.	H	CN	2-Methyl-2-phenylpropyl	
2.295.	H	CN	2-Methyl-3-phenylpropyl	

29 04 83 38227:

O.Z. 0050/43197

57

No.	R ¹	R ²	R ³	phys. data
2.296.	H	CN	4-Phenylbutyl	
2.297.	H	CN	2-Phenyl-1-ethenyl	
2.298.	H	CN	1-Phenyl-1-ethenyl	
2.299.	H	CN	1-Phenyl-1-propenyl	
2.300.	H	CN	1-Phenyl-1-propen-2-yl	
2.301.	H	CN	2,2-Diphenylethenyl	
2.302.	H	CN	2-Pyridyl	
2.303.	H	CN	3-Pyridyl	
2.304.	H	CN	4-Pyridyl	
2.305.	H	CN	2,6-Pyrimidinyl	
2.306.	H	CN	1,5-Pyrimidinyl	
2.307.	H	CN	2-Thienyl	
2.308.	H	CN	3-Thienyl	
2.309.	H	CN	2-Furyl	
2.310.	H	CN	3-Furyl	
2.311.	H	CN	1-Pyrrolyl	
2.312.	H	CN	1-Imidazolyl	
2.313.	H	CN	1,2,4-Triazolyl	
2.314.	H	CN	1,3,4-Triazolyl	
2.315.	H	CN	4-Thiazolyl	
2.316.	H	CN	2-Benzothiazolyl	
2.317.	H	CN	2-Pyridylmethyl	

29 04 93 36227:

O.Z. 0050/43197

58

No.	R ¹	R ²	R ³	phys. data
2.318.	H	CN	3-Pyridylmethyl	
2.319.	H	CN	2'-Furyl-2-ethenyl	
2.320.	H	CN	2'-Thienyl-2-ethenyl	
2.321.	H	CN	3'-Pyridyl-2-ethenyl	
2.322.	H	CN	Oxiranyl	
2.323.	H	CN	1-Aziridinyl	
2.324.	H	CN	1-Azetidinyl	
2.325.	H	CN	1-Pyrrolidinyl	
2.326.	H	CN	2-Tetrahydrofuryl	
2.327.	H	CN	2-Tetrahydropyranyl	
2.328.	H	CN	3-Tetrahydropyranyl	
2.329.	H	CN	1-Piperidinyl	
2.330.	H	CN	1-Morpholinyl	
2.331.	H	CN	1-Piperazinyl	
2.332.	H	CN	1,3-Dioxan-2-yl	
2.333.	H	CN	4-Tetrahydrothiopyranyl	
2.334.	H	CN	4-Methylpent-3-en-1-yl	
2.335.	H	CN	2-Propenyl	
2.336.	H	CN	2-Butenyl	
2.337.	H	CN	1-Methyl-2-propenyl	
2.338.	H	CN	3-Methyl-2-butenyl	
2.339.	H	CN	2,2-Difluoroethenyl	

29.04.93 36227:

O.Z. 0050/43197

59

No.	R ¹	R ²	R ³	phys. data
2.340.	H	CN	2,2-Dichloroethenyl	
2.341.	H	CN	3,3,3-Trifluoropropenyl	
2.342.	H	CN	3,3,3-Trichloropropenyl	
2.343.	H	CN	3-Chloro-2-propenyl	
2.344.	H	CN	Cyclopent-1-enyl	
2.345.	H	CN	Cyclopentadienyl	
2.346.	H	CN	Cyclohex-1-enyl	
2.347.	H	CN	Pentafluorocyclopentadienyl	
2.348.	H	CN	Pentachlorocyclopentadienyl	
2.349.	H	CN	Styryl	
2.350.	H	CO ₂ Me	Phenyl	124 - 128°C
2.351.	H	CO ₂ Me	2-Fluorophenyl	
2.352.	H	CO ₂ Me	3-Fluorophenyl	
2.353.	H	CO ₂ Me	4-Fluorophenyl	
2.354.	H	CO ₂ Me	2-Chlorophenyl	$\delta(\text{CH}_2) = 4.90$
2.355.	H	CO ₂ Me	3-Chlorophenyl	
2.356.	H	CO ₂ Me	4-Chlorophenyl	
2.357.	H	CO ₂ Me	2-Methylphenyl	
2.358.	H	CO ₂ Me	3-Methylphenyl	$\delta(\text{CH}_2) = 4.87$
2.359.	H	CO ₂ Me	4-Methylphenyl	
2.360.	H	CO ₂ Me	2-Cyanophenyl	
2.361.	H	CO ₂ Me	3-Cyanophenyl	

29 04 93 36227:

O.Z. 0050/43197

60

No.	R ¹	R ²	R ³	phys. data
2.362.	H	CO ₂ Me	4-Cyanophenyl	
2.363.	H	CO ₂ Me	2-Methoxyphenyl	
2.364.	H	CO ₂ Me	3-Methoxyphenyl	
2.365.	H	CO ₂ Me	4-Methoxyphenyl	
2.366.	H	CO ₂ Me	2-Nitrophenyl	
2.367.	H	CO ₂ Me	3-Nitrophenyl	
2.368.	H	CO ₂ Me	4-Nitrophenyl	
2.369.	H	P(O)(OMe) ₂	Phenyl	
2.370.	H	P(O)(OMe) ₂	2-Fluorophenyl	
2.371.	H	P(O)(OMe) ₂	3-Fluorophenyl	
2.372.	H	P(O)(OMe) ₂	4-Fluorophenyl	
2.373.	H	P(O)(OMe) ₂	2-Chlorophenyl	
2.374.	H	P(O)(OMe) ₂	3-Chlorophenyl	
2.375.	H	P(O)(OMe) ₂	4-Chlorophenyl	
2.376.	H	P(O)(OMe) ₂	2-Methylphenyl	
2.377.	H	P(O)(OMe) ₂	3-Methylphenyl	135 - 137°C
2.378.	H	P(O)(OMe) ₂	4-Methylphenyl	
2.379.	CH ₃	CN	Phenyl	$\delta(\text{CH}_2) = 5.00$
2.380.	Acetyl	H	2,6-Dichlorophenyl	
2.381.	Acetyl	H	2,4-Dichlorophenyl	
2.382.	CH ₃	CO-Et	Benzoyl	

29.04.93 30227:

O.Z. 0050/43197

61

No.	R ¹	R ²	R ³	phys. data
2.383.	Methoxycarbonylmethyl	H	Acetyl	
2.404.	H	CO ₂ Me	2-Bromophenyl	92 - 93°C

29.04.93 38227:

O.Z. 0050/43197

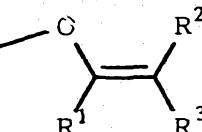
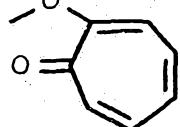
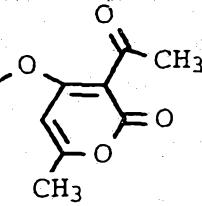
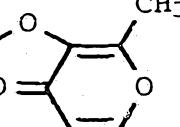
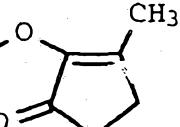
62

No.	Chemical Structure	phys. data
2.384		146 - 152°C
2.385		122 - 123°C
2.386		52 - 54°C

29.04.93 38227:

O.Z. 0050/43197

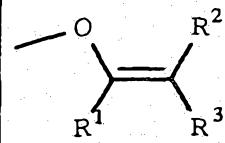
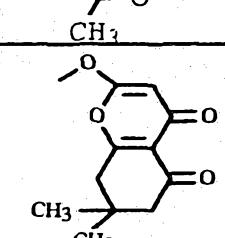
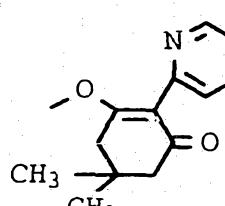
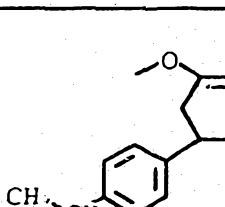
63

No.		phys. data
2.387		151 - 155°C
2.388		
2.389		87 - 89°C
2.390		100 - 101°C

29.04.93 38227:

O.Z. 0050/43197

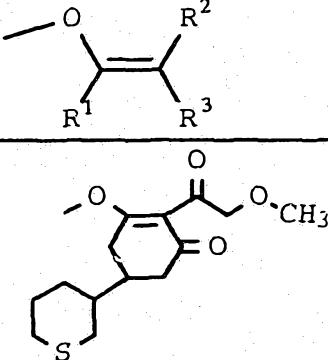
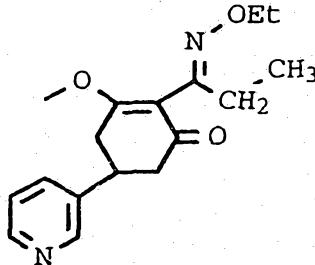
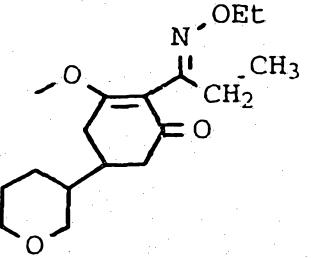
64

No.	Chemical Structure	phys. data
2.391		$\delta(\text{CH}_2) = 4.91$
2.392		
2.393		
2.394		

29.04.93 36227.

O.Z. 0050/43197

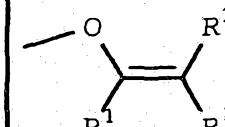
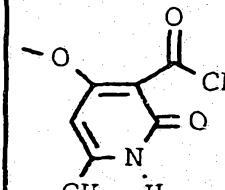
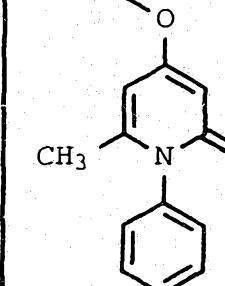
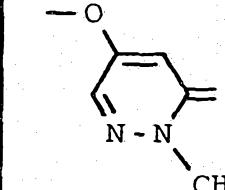
65

No.	Chemical Structure	phys. data
2.395		
2.396		
2.397		

29 04 83 38227:

O.Z. 0050/43197

66

No.		phys. data
2.398		
2.399		
2.400		

29.04.83 36227.

O.Z. 0050/43197

67

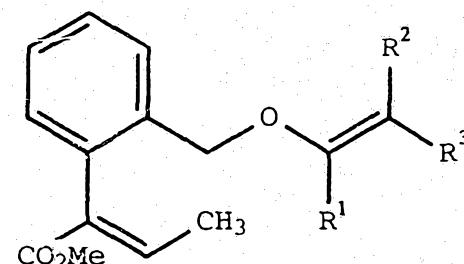
No.	Chemical Structure	phys. data
2.401		
2.402		161 - 162°C
2.403		171 - 172°C

29 09 93 38227:

O.Z. 0050/43197

68

Table 3



No.	R¹	R²	R³	phys. data
3.1.	H	H	CF ₃	
3.2.	H	CF ₃	CF ₃	
3.3.	H	CF ₃	Phenyl	
3.4.	H	CN	Methyl	
3.5.	H	CN	Ethyl	
3.6.	H	CN	n-Propyl	
3.7.	H	CN	isopropyl	
3.8.	H	CN	n-Butyl	
3.9.	H	CN	sec.-Butyl	
3.10.	H	CN	tert.-Butyl	
3.11.	H	CN	Cyclopropyl	
3.12.	H	CN	Cyclohexyl	

29 06 93 38227:

O.Z. 0050/43197

69

No.	R ¹	R ²	R ³	phys. data
3.13.	H	CN	Methoxymethyl	
3.14.	H	CN	Ethoxymethyl	
3.15.	H	CN	Phenoxyethyl	
3.16.	H	CN	3-Chlorophenoxyethyl	
3.17.	H	CN	Benzylloxymethyl	
3.18.	H	CN	2-Methylbenzylloxymethyl	
3.19.	H	CN	Methylthiomethyl	
3.20.	H	CN	Phenylthiomethyl	
3.21.	H	CN	Ethynyl	
3.22.	H	CN	Phenylethynyl	
3.23.	H	CN	1-Propynyl	
3.24.	H	CN	CN	
3.25.	H	CN	Acetyl	
3.26.	H	CN	Propion-1-yl	
3.27.	H	CN	Butyr-1-yl	
3.28.	H	CN	isobutyr-1-yl	
3.29.	H	CN	Pivaloyl	
3.30.	H	CN	Benzoyl	
3.31.	H	CN	4-Chlorobenzoyl	
3.32.	H	CN	Benzylcarbonyl	
3.33.	H	CN	Methoxycarbonyl	
3.34.	H	CN	Ethoxycarbonyl	

29.04.93 36227:

O.Z. 0050/43197

70

No.	R ¹	R ²	R ³	phys. data
3.35.	H	CN	n-Propoxycarbonyl	
3.36.	H	CN	isopropoxycarbonyl	
3.37.	H	CN	n-Butoxycarbonyl	
3.38.	H	CN	isobutoxycarbonyl	
3.39.	H	CN	sec.-Butoxycarbonyl	
3.40.	H	CN	tert.-Butoxycarbonyl	
3.41.	H	CN	n-Hexoxycarbonyl	
3.42.	H	CN	Phenoxy carbonyl	
3.43.	H	CN	4-Chlorophenoxy carbonyl	
3.44.	H	CN	Benzylloxycarbonyl	
3.45.	H	CN	Aminocarbonyl	
3.46.	H	CN	Dimethylaminocarbonyl	
3.47.	H	CN	Diethylaminocarbonyl	
3.48.	H	CN	Di-isopropylaminocarbonyl	
3.49.	H	CN	Phenylaminocarbonyl	
3.50.	H	CN	N-Methyl-N-phenylaminocarbonyl	
3.51.	H	CN	Phenyl	
3.52.	H	CN	2-Fluorophenyl	
3.53.	H	CN	3-Fluorophenyl	
3.54.	H	CN	4-Fluorophenyl	
3.55.	H	CN	Pentafluorophenyl	
3.56.	H	CN	2-Chlorophenyl	

20 04 90 36227.

O.Z. 0050/43197

71

No.	R ¹	R ²	R ³	phys. data
3.57.	H	CN	3-Chlorophenyl	
3.58.	H	CN	4-Chlorophenyl	
3.59.	H	CN	Pentachlorophenyl	
3.60.	H	CN	2,3-Dichlorophenyl	
3.61.	H	CN	2,4-Dichlorophenyl	
3.62.	H	CN	2,5-Dichlorophenyl	
3.63.	H	CN	2,6-Dichlorophenyl	
3.64.	H	CN	3,4-Dichlorophenyl	
3.65.	H	CN	3,5-Dichlorophenyl	
3.66.	H	CN	2,3,4-Trichlorophenyl	
3.67.	H	CN	2,3,5-Trichlorophenyl	
3.68.	H	CN	2,3,6-Trichlorophenyl	
3.69.	H	CN	2,4,5-Trichlorophenyl	
3.70.	H	CN	2,4,6-Trichlorophenyl	
3.71.	H	CN	3,4,5-Trichlorophenyl	
3.72.	H	CN	2,3,4,6-Tetrachlorophenyl	
3.73.	H	CN	2,3,5,6-Tetrachlorophenyl	
3.74.	H	CN	2-Bromophenyl	
3.75.	H	CN	3-Bromophenyl	
3.76.	H	CN	4-Bromophenyl	
3.77.	H	CN	2,4-Dibromophenyl	
3.78.	H	CN	3-Bromo-4-fluorophenyl	

29 06 93 38227:

O.Z. 0050/43197

72

No.	R ¹	R ²	R ³	phys. data
3.79.	H	CN	3-Bromo-4-methoxyphenyl	
3.80.	H	CN	2-Iodophenyl	
3.81.	H	CN	3-Iodophenyl	
3.82.	H	CN	4-Iodophenyl	
3.83.	H	CN	2-Chloro-4-fluorophenyl	
3.84.	H	CN	2-Chloro-5-fluorophenyl	
3.85.	H	CN	2-Chloro-6-fluorophenyl	
3.86.	H	CN	2-Chloro-4-bromophenyl	
3.87.	H	CN	2-Bromo-4-chlorophenyl	
3.88.	H	CN	2-Bromo-4-fluorophenyl	
3.89.	H	CN	3-Bromo-4-fluorophenyl	
3.90.	H	CN	3-Chloro-4-fluorophenyl	
3.91.	H	CN	3-Fluoro-4-chlorophenyl	
3.92.	H	CN	2-Cyanophenyl	
3.93.	H	CN	3-Cyanophenyl	
3.94.	H	CN	4-Cyanophenyl	
3.95.	H	CN	2-Nitrophenyl	
3.96.	H	CN	3-Nitrophenyl	
3.97.	H	CN	4-Nitrophenyl	
3.98.	H	CN	2-Methylphenyl	
3.99.	H	CN	3-Methylphenyl	
3.100.	H	CN	4-Methylphenyl	

29 06 93 38227:

O.Z. 0050/43197

73

No.	R ¹	R ²	R ³	phys. data
3.101.	H	CN	2,4-Dimethylphenyl	
3.102.	H	CN	2,6-Dimethylphenyl	
3.103.	H	CN	3,4-Dimethylphenyl	
3.104.	H	CN	3,5-Dimethylphenyl	
3.105.	H	CN	2,3,4-Trimethylphenyl	
3.106.	H	CN	2,3,5-Trimethylphenyl	
3.107.	H	CN	2,3,6-Trimethylphenyl	
3.108.	H	CN	2,4,5-Trimethylphenyl	
3.109.	H	CN	2,4,6-Trimethylphenyl	
3.110.	H	CN	3,4,5-Trimethylphenyl	
3.111.	H	CN	Pentamethylphenyl	
3.112.	H	CN	2-Ethylphenyl	
3.113.	H	CN	3-Ethylphenyl	
3.114.	H	CN	4-Ethylphenyl	
3.115.	H	CN	3,5-Diethylphenyl	
3.116.	H	CN	2-n-Propylphenyl	
3.117.	H	CN	3-n-Propylphenyl	
3.118.	H	CN	4-n-Propylphenyl	
3.119.	H	CN	2-isopropylphenyl	
3.120.	H	CN	3-isopropylphenyl	
3.121.	H	CN	4-isopropylphenyl	
3.122.	H	CN	2,4-Di-isopropylphenyl	

29 04 93 36227:

O.Z. 0050/43197

74

No.	R ¹	R ²	R ³	phys. data
3.123.	H	CN	3,5-Di-isopropylphenyl	
3.124.	H	CN	4-n-Butyphenyl	
3.125.	H	CN	4-sec.-Butylphenyl	
3.126.	H	CN	4-iso-Butylphenyl	
3.127.	H	CN	4-tert.-Butylphenyl	
3.128.	H	CN	3-tert.-Butylphenyl	
3.129.	H	CN	2-tert.-Butylphenyl	
3.130.	H	CN	2,4-Di-tert.-Butylphenyl	
3.131.	H	CN	3,5-Di-tert.-Butylphenyl	
3.132.	H	CN	4-n-Hexylphenyl	
3.133.	H	CN	4-n-Dodecylphenyl	
3.134.	H	CN	2-Methyl-4-tert.-Butylphenyl	
3.135.	H	CN	2-Methyl-6-tert.-Butylphenyl	
3.136.	H	CN	2-Methyl-4-iso-Propylphenyl	
3.137.	H	CN	2-Methyl-4-Cyclohexylphenyl	
3.138.	H	CN	2-Methyl-4-Phenylphenyl	
3.139.	H	CN	2-Methyl-4-Benzylphenyl	
3.140.	H	CN	2-Methyl-4-Phenoxyphenyl	
3.141.	H	CN	2-Methyl-4-Benzylxyphenyl	
3.142.	H	CN	2-Methyl-3-Chlorophenyl	
3.143.	H	CN	2-Methyl-4-Chlorophenyl	
3.144.	H	CN	2-Methyl-5-Chlorophenyl	

29.04.93 38227:

O.Z. 0050/43197

75

No.	R ¹	R ²	R ³	phys. data
3.145.	H	CN	2-Methyl-6-Chlorophenyl	
3.146.	H	CN	2-Methyl-4-Fluorophenyl	
3.147.	H	CN	2-Methyl-3-Bromophenyl	
3.148.	H	CN	2-Methyl-4-Bromophenyl	
3.149.	H	CN	2-Methyl-3-Methoxyphenyl	
3.150.	H	CN	2-Methyl-4-Methoxyphenyl	
3.151.	H	CN	2-Methyl-5-Methoxyphenyl	
3.152.	H	CN	2-Methyl-6-Methoxyphenyl	
3.153.	H	CN	2-Methyl-4-iso-Propoxyphenyl	
3.154.	H	CN	2-Methyl-2,5-Dimethoxyphenyl	
3.155.	H	CN	2-Methoxyphenyl	
3.156.	H	CN	3-Methoxyphenyl	
3.157.	H	CN	4-Methoxyphenyl	
3.158.	H	CN	2,3-Dimethoxyphenyl	
3.159.	H	CN	2,4-Dimethoxyphenyl	
3.160.	H	CN	2,5-Dimethoxyphenyl	
3.161.	H	CN	2,6-Dimethoxyphenyl	
3.162.	H	CN	3,4-Dimethoxyphenyl	
3.163.	H	CN	3,5-Dimethoxyphenyl	
3.164.	H	CN	3,6-Dimethoxyphenyl	
3.165.	H	CN	2,3,4-Trimethoxyphenyl	
3.166.	H	CN	2,3,5-Trimethoxyphenyl	

29 04 93 36227:

O.Z. 0050/43197

76

No.	R ¹	R ²	R ³	phys. data
3.167.	H	CN	2,3,6-Trimethoxyphenyl	
3.168.	H	CN	2,4,5-Trimethoxyphenyl	
3.169.	H	CN	2,4,6-Trimethoxyphenyl	
3.170.	H	CN	3,4,5-Trimethoxyphenyl	
3.171.	H	CN	2-Ethoxyphenyl	
3.172.	H	CN	3-Ethoxyphenyl	
3.173.	H	CN	4-Ethoxyphenyl	
3.174.	H	CN	2-iso-Propoxyphenyl	
3.175.	H	CN	3-iso-Propoxyphenyl	
3.176.	H	CN	4-iso-Propoxyphenyl	
3.177.	H	CN	3-tert.-Butoxyphenyl	
3.178.	H	CN	4-tert.-Butoxyphenyl	
3.179.	H	CN	2-Trifluoromethoxyphenyl	
3.180.	H	CN	3-Trifluoromethoxyphenyl	
3.181.	H	CN	4-Trifluoromethoxyphenyl	
3.182.	H	CN	3-(1',1',2',2'-Tetrafluoro)ethoxy-phenyl	
3.183.	H	CN	4-(1',1',2',2'-Tetra-fluoro)ethoxy-phenyl	
3.184.	H	CN	2-Chloromethylphenyl	
3.185.	H	CN	3-Chloromethylphenyl	
3.186.	H	CN	4-Chloromethylphenyl	

29.06.93 30227:

O.Z. 0050/43197

77

No.	R ¹	R ²	R ³	phys. data
3.187.	H	CN	2-Trifluoromethylphenyl	
3.188.	H	CN	3-Trifluoromethylphenyl	
3.189.	H	CN	4-Trifluoromethylphenyl	
3.190.	H	CN	2-(Methoxyiminomethyl)-phenyl	
3.191.	H	CN	3-(Methoxyiminomethyl)-phenyl	
3.192.	H	CN	4-(Methoxyiminomethyl)-phenyl	
3.193.	H	CN	2-(Ethoxyiminomethyl)-phenyl	
3.194.	H	CN	3-(Ethoxyiminomethyl)-phenyl	
3.195.	H	CN	4-(Ethoxyiminomethyl)-phenyl	
3.196.	H	CN	2-(n-Propoxyiminomethyl)phenyl	
3.197.	H	CN	3-(n-Propoxyiminomethyl)phenyl	
3.198.	H	CN	4-(n-Propoxyiminomethyl)phenyl	
3.199.	H	CN	2-(iso-Propoxyiminomethyl)phenyl	
3.200.	H	CN	3-(iso-Propoxyiminomethyl)phenyl	
3.201.	H	CN	4-(iso-Propoxyiminomethyl)phenyl	
3.202.	H	CN	2-(n-Butoxyiminomethyl)phenyl	
3.203.	H	CN	3-(n-Butoxyiminomethyl)phenyl	
3.204.	H	CN	4-(n-Butoxyiminomethyl)phenyl	
3.205.	H	CN	2-(iso-Butoxyiminomethyl)phenyl	
3.206.	H	CN	3-(iso-Butoxyiminomethyl)phenyl	
3.207.	H	CN	4-(iso-Butoxyiminomethyl)phenyl	
3.208.	H	CN	2-(tert.-Butoxyiminomethyl)phenyl	

29.04.93 36227:

O.Z. 0050/43197

78

No.	R ¹	R ²	R ³	phys. data
3.209.	H	CN	3-(tert.-Butoxyiminomethyl)phenyl	
3.210.	H	CN	4-(tert.-Butoxyiminomethyl)phenyl	
3.211.	H	CN	2-(n-Pentoxymethoxyiminomethyl)-phenyl	
3.212.	H	CN	3-(n-Pentoxymethoxyiminomethyl)-phenyl	
3.213.	H	CN	4-(n-Pentoxymethoxyiminomethyl)-phenyl	
3.214.	H	CN	2-(n-Hexoxymethoxyiminomethyl)-phenyl	
3.215.	H	CN	3-(n-Hexoxymethoxyiminomethyl)-phenyl	
3.216.	H	CN	4-(n-Hexoxymethoxyiminomethyl)-phenyl	
3.217.	H	CN	2-(Allyloxymethoxyiminomethyl)-phenyl	
3.218.	H	CN	3-(Allyloxymethoxyiminomethyl)-phenyl	
3.219.	H	CN	4-(Allyloxymethoxyiminomethyl)-phenyl	
3.220.	H	CN	2-(Benzylloxymethoxyiminomethyl)-phenyl	
3.221.	H	CN	3-(Benzylloxymethoxyiminomethyl)-phenyl	
3.222.	H	CN	4-(Benzylloxymethoxyiminomethyl)-phenyl	
3.223.	H	CN	2-(Methoxyimino-1'-ethyl)-phenyl	
3.224.	H	CN	3-(Methoxyimino-1'-ethyl)-phenyl	
3.225.	H	CN	4-(Methoxyimino-1'-ethyl)-phenyl	
3.226.	H	CN	2-(Ethoxyimino-1'-ethyl)-phenyl	
3.227.	H	CN	3-(Ethoxyimino-1'-ethyl)-phenyl	
3.228.	H	CN	4-(Ethoxyimino-1'-ethyl)-phenyl	
3.229.	H	CN	2-(n-Propoxyimino-1'-ethyl)phenyl	
3.230.	H	CN	3-(n-Propoxyimino-1'-ethyl)phenyl	

29 06 93 30227:

O.Z. 0050/43197

79

No.	R ¹	R ²	R ³	phys. data
3.231.	H	CN	4-(n-Propoxyimino-1'-ethyl)phenyl	
3.232.	H	CN	2-(n-Butoxyamino-1'-ethyl)phenyl	
3.233.	H	CN	3-(n-Butoxyamino-1'-ethyl)phenyl	
3.234.	H	CN	4-(n-Butoxyamino-1'-ethyl)phenyl	
3.235.	H	CN	2-(n-Pentoxyimino-1'-ethyl)phenyl	
3.236.	H	CN	3-(n-Pentoxyimino-1'-ethyl)phenyl	
3.237.	H	CN	4-(n-Pentoxyimino-1'-ethyl)phenyl	
3.238.	H	CN	2-(n-Hexoxyimino-1'-ethyl)phenyl	
3.239.	H	CN	3-(n-Hexoxyimino-1'-ethyl)phenyl	
3.240.	H	CN	4-(n-Hexoxyimino-1'-ethyl)phenyl	
3.241.	H	CN	2-(Allyloxyimino-1'-ethyl)-phenyl	
3.242.	H	CN	3-(Allyloxyimino-1'-ethyl)-phenyl	
3.243.	H	CN	4-(Allyloxyimino-1'-ethyl)-phenyl	
3.244.	H	CN	2-(Benzylloxyimino-1'-ethyl)phenyl	
3.245.	H	CN	3-(Benzylloxyimino-1'-ethyl)phenyl	
3.246.	H	CN	4-(Benzylloxyimino-1'-ethyl)phenyl	
3.247.	H	CN	2-Phenylphenyl	
3.248.	H	CN	3-Phenylphenyl	
3.249.	H	CN	4-Phenylphenyl	
3.250.	H	CN	2-Phenoxyphenyl	
3.251.	H	CN	3-Phenoxyphenyl	
3.252.	H	CN	4-Phenoxyphenyl	

29 06 93 36227:

O.Z. 0050/43197

80

No.	R ¹	R ²	R ³	phys. data
3.253.	H	CN	2-Benzylxyphenyl	
3.254.	H	CN	3-Benzylxyphenyl	
3.255.	H	CN	4-Benzylxyphenyl	
3.256.	H	CN	4-(Imidazol-1'-yl)phenyl	
3.257.	H	CN	4-(Piperazin-1'-yl)phenyl	
3.258.	H	CN	4-(Morpholin-1'-yl)phenyl	
3.259.	H	CN	4-(Piperidin-1'-yl)phenyl	
3.260.	H	CN	4-(Pyridyl-2'-oxy)phenyl	
3.261.	H	CN	2-Cyclopropylphenyl	
3.262.	H	CN	3-Cyclopropylphenyl	
3.263.	H	CN	4-Cyclopropylphenyl	
3.264.	H	CN	3-Cyclohexylphenyl	
3.265.	H	CN	4-Cyclohexylphenyl	
3.266.	H	CN	4-Oxiranylphenyl	
3.267.	H	CN	4-(1',3'-Dioxan-2'-yl)-phenyl	
3.268.	H	CN	4-(Tetrahydropyran-2-yloxy)-phenyl	
3.269.	H	CN	1-Naphthyl	
3.270.	H	CN	2-Naphthyl	
3.271.	H	CN	Benzyl	
3.272.	H	CN	2-Methylbenzyl	
3.273.	H	CN	3-Methylbenzyl	
3.274.	H	CN	4-Methylbenzyl	

29.06.93 30227:

O.Z. 0050/43197

81

No.	R ¹	R ²	R ³	phys. data
3.275.	H	CN	4-tert.-Butylbenzyl	
3.276.	H	CN	2-Chlorobenzyl	
3.277.	H	CN	3-Chlorobenzyl	
3.278.	H	CN	4-Chlorobenzyl	
3.279.	H	CN	2,4-Dichlorobenzyl	
3.280.	H	CN	2,6-Dichlorobenzyl	
3.281.	H	CN	2,4,6-Trichlorobenzyl	
3.282.	H	CN	2-Trifluoromethylbenzyl	
3.283.	H	CN	3-Trifluoromethylbenzyl	
3.284.	H	CN	4-trifluoromethylbenzyl	
3.285.	H	CN	2-Methoxybenzyl	
3.286.	H	CN	4-Methoxybenzyl	
3.287.	H	CN	4-tert.-Butoxybenzyl	
3.288.	H	CN	4-Phenoxybenzyl	
3.289.	H	CN	1-Phenethyl	
3.290.	H	CN	2-Phenethyl	
3.291.	H	CN	1-Phenylpropyl	
3.292.	H	CN	2-Phenylpropyl	
3.293.	H	CN	3-Phenylpropyl	
3.294.	H	CN	2-Methyl-2-phenylpropyl	
3.295.	H	CN	2-Methyl-3-phenylpropyl	
3.296.	H	CN	4-Phenylbutyl	

29.04.93 38227:

O.Z. 0050/43197

82

No.	R ¹	R ²	R ³	phys. data
3.297.	H	CN	2-Phenyl-1-ethenyl	
3.298.	H	CN	1-Phenyl-1-ethenyl	
3.299.	H	CN	1-Phenyl-1-propenyl	
3.300.	H	CN	1-Phenyl-1-propen-2-yl	
3.301.	H	CN	2,2-Diphenylethene	
3.302.	H	CN	2-Pyridyl	
3.303.	H	CN	3-Pyridyl	
3.304.	H	CN	4-Pyridyl	
3.305.	H	CN	2,6-Pyrimidinyl	
3.306.	H	CN	1,5-Pyrimidinyl	
3.307.	H	CN	2-Thienyl	
3.308.	H	CN	3-Thienyl	
3.309.	H	CN	2-Furyl	
3.310.	H	CN	3-Furyl	
3.311.	H	CN	1-Pyrrolyl	
3.312.	H	CN	1-Imidazolyl	
3.313.	H	CN	1,2,4-Triazolyl	
3.314.	H	CN	1,3,4-Triazolyl	
3.315.	H	CN	4-Thiazolyl	
3.316.	H	CN	2-Benzothiazolyl	
3.317.	H	CN	2-Pyridylmethyl	
3.318.	H	CN	3-Pyridylmethyl	

29 06 93 36227:

O.Z. 0050/43197

83

No.	R ¹	R ²	R ³	phys. data
3.319.	H	CN	2'-Furyl-2-ethenyl	
3.320.	H	CN	2'-Thienyl-2-ethenyl	
3.321.	H	CN	3'-Pyridyl-2-ethenyl	
3.322.	H	CN	Oxiranyl	
3.323.	H	CN	1-Aziridinyl	
3.324.	H	CN	1-Azetidinyl	
3.325.	H	CN	1-Pyrrolidinyl	
3.326.	H	CN	2-Tetrahydrofuryl	
3.327.	H	CN	2-Tetrahydropyranyl	
3.328.	H	CN	3-Tetrahydropyranyl	
3.329.	H	CN	1-Piperidinyl	
3.330.	H	CN	1-Morpholinyl	
3.331.	H	CN	1-Piperazinyl	
3.332.	H	CN	1,3-Dioxan-2-yl	
3.333.	H	CN	4-Tetrahydrothiopyranyl	
3.334.	H	CN	4-Methylpent-3-en-1-yl	
3.335.	H	CN	2-Propenyl	
3.336.	H	CN	2-Butenyl	
3.337.	H	CN	1-Methyl-2-propenyl	
3.338.	H	CN	3-Methyl-2-butenyl	
3.339.	H	CN	2,2-Difluoroethenyl	
3.340.	H	CN	2,2-Dichloroethenyl	

29 04 93 36227.

O.Z. 0050/43197

84

No.	R ¹	R ²	R ³	phys. data
3.341.	H	CN	3,3,3-Trifluoropropenyl	
3.342.	H	CN	3,3,3-Trichloropropenyl	
3.343.	H	CN	3-Chloro-2-propenyl	
3.344.	H	CN	Cyclopent-1-enyl	
3.345.	H	CN	Cyclopentadienyl	
3.346.	H	CN	Cyclohex-1-enyl	
3.347.	H	CN	Pentafluorocyclopentadienyl	
3.348.	H	CN	Pentachlorocyclopentadienyl	
3.349.	H	CN	Styryl	
3.350.	H	CO ₂ Me	Phenyl	
3.351.	H	CO ₂ Me	2-Fluorophenyl	
3.352.	H	CO ₂ Me	3-Fluorophenyl	
3.353.	H	CO ₂ Me	4-Fluorophenyl	
3.354.	H	CO ₂ Me	2-Chlorophenyl	
3.355.	H	CO ₂ Me	3-Chlorophenyl	
3.356.	H	CO ₂ Me	4-Chlorophenyl	
3.357.	H	CO ₂ Me	2-Methylphenyl	
3.358.	H	CO ₂ Me	3-Methylphenyl	
3.359.	H	CO ₂ Me	4-Methylphenyl	
3.360.	H	CO ₂ Me	2-Cyanophenyl	
3.361.	H	CO ₂ Me	3-Cyanophenyl	
3.362.	H	CO ₂ Me	4-Cyanophenyl	

29 04 93 36227.

O.Z. 0050/43197

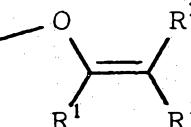
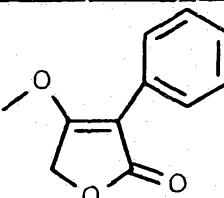
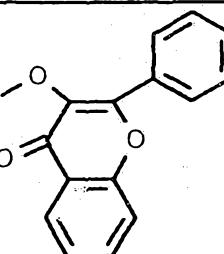
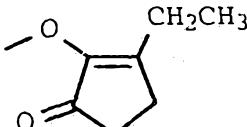
85

No.	R ¹	R ²	R ³	phys. data
3.363.	H	CO ₂ Me	2-Methoxyphenyl	
3.364.	H	CO ₂ Me	3-Methoxyphenyl	
3.365.	H	CO ₂ Me	4-Methoxyphenyl	
3.366.	H	CO ₂ Me	2-Nitrophenyl	
3.367.	H	CO ₂ Me	3-Nitrophenyl	
3.368.	H	CO ₂ Me	4-Nitrophenyl	
3.369.	H	P(O)(OMe) ₂	Phenyl	
3.370.	H	P(O)(OMe) ₂	2-Fluorophenyl	
3.371.	H	P(O)(OMe) ₂	3-Fluorophenyl	
3.372.	H	P(O)(OMe) ₂	4-Fluorophenyl	
3.373.	H	P(O)(OMe) ₂	2-Chlorophenyl	
3.374.	H	P(O)(OMe) ₂	3-Chlorophenyl	
3.375.	H	P(O)(OMe) ₂	4-Chlorophenyl	
3.376.	H	P(O)(OMe) ₂	2-Methylphenyl	
3.377.	H	P(O)(OMe) ₂	3-Methylphenyl	
3.378.	H	P(O)(OMe) ₂	4-Methylphenyl	
3.379.	CH ₃	CN	Phenyl	
3.380.	Acetyl	H	2,6-Dichlorophenyl	
3.381.	Acetyl	H	2,4-Dichlorophenyl	
3.382.	CH ₃	CO ₂ Et	Benzoyl	
3.383.	Methoxycarbonylphenyl	H	Acetyl	

29.04.93 38227:

O.Z. 0050/43197

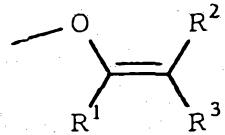
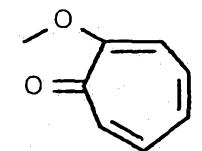
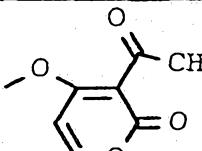
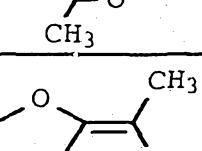
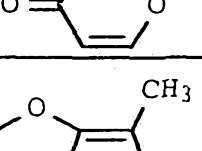
86

No.		phys. data
3.384		
3.385		
3.386		

29.01.93 38227.

O.Z. 0050/43197

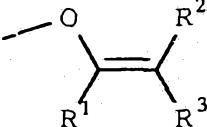
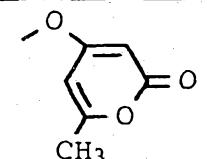
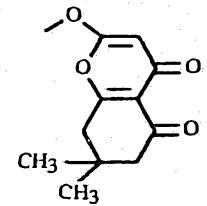
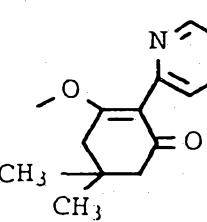
87

No.		phys. data
3.387		
3.388		
3.389		
3.390		

29.06.93 26227.

O.Z. 0050/43197

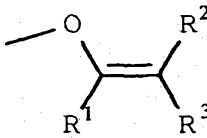
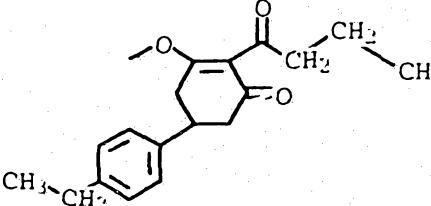
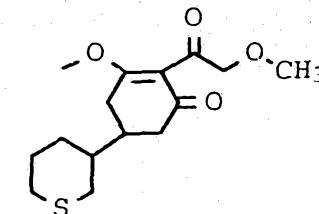
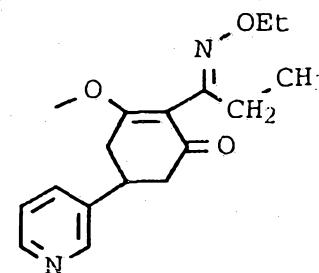
88

No.		phys. data
3.391		
3.392		
3.393		

29 04 93 36227:

O.Z. 0050/43197

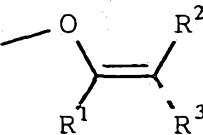
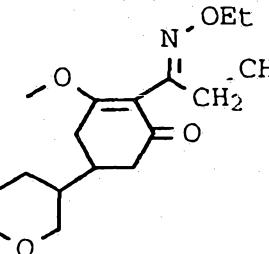
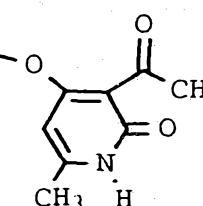
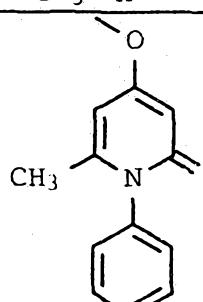
89

No.		phys. data
3.394		
3.395		
3.396		

20 04 93 36227:

O.Z. 0050/43197

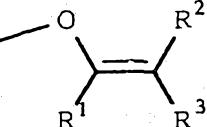
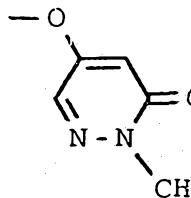
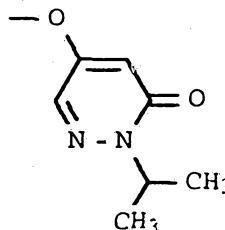
90

No.		phys. data
3.397		
3.398		
3.399		

29 04 93 36227.

O.Z. 0050/43197

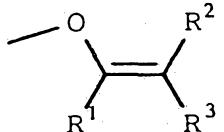
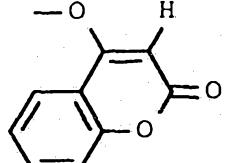
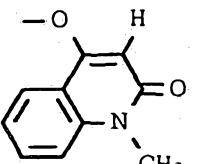
91

No.		phys. data
3.400		
3.401		

29.04.93 36227.

O.Z. 0050/43197

92

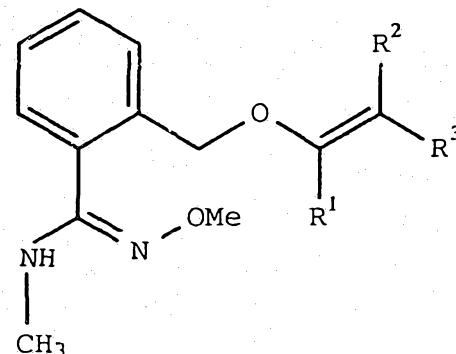
No.		phys. data
3.402		
3.403		

29.04.93 20227.

O.Z. 0050/43197

93

Table 4



No.	R ¹	R ²	R ³	phys. data
4.1.	H	H	C ₂ F ₅	
4.2.	H	C ₂ F ₅	C ₂ F ₅	
4.3.	H	C ₂ F ₅	Phenyl	
4.4.	H	CN	Methyl	
4.5.	H	CN	Ethyl	
4.6.	H	CN	n-Propyl	
4.7.	H	CN	iso-Propyl	
4.8.	H	CN	n-Butyl	
4.9.	H	CN	sec.-Butyl	
4.10.	H	CN	tert.-Butyl	

29 04 83 38227.

O.Z. 0050/43197

94

NO.	R ¹	R ²	R ³	phys. data
4.11.	H	CN	Cyclopropyl	
4.12.	H	CN	Cyclohexyl	
4.13.	H	CN	Methoxymethyl	
4.14.	H	CN	Ethoxymethyl	
4.15.	H	CN	Phenoxyethyl	
4.16.	H	CN	3-Chlorophenoxyethyl	
4.17.	H	CN	Benzylloxymethyl	
4.18.	H	CN	2-Methylbenzylloxymethyl	
4.19.	H	CN	Methylthiomethyl	
4.20.	H	CN	Phenylthiomethyl	
4.21.	H	CN	Ethyanyl	
4.22.	H	CN	Phenylethyanyl	
4.23.	H	CN	1-Propynyl	
4.24.	H	CN	CN	
4.25.	H	CN	Acetyl	
4.26.	H	CN	Propion-1-yl	
4.27.	H	CN	Butyr-1-yl	
4.28.	H	CN	iso-Butyr-1-yl	
4.29.	H	CN	Pivaloyl	
4.30.	H	CN	Benzoyl	
4.31.	H	CN	4-Chlorobenzoyl	
4.32.	H	CN	Benzylcarbonyl	

29.04.83 30227.

O.Z. 0050/43197

95

No.	R ¹	R ²	R ³	phys. data
4.33.	H	CN	Methoxycarbonyl	
4.34.	H	CN	Ethoxycarbonyl	
4.35.	H	CN	n-Propoxycarbonyl	
4.36.	H	CN	iso-Propoxycarbonyl	
4.37.	H	CN	n-Butoxycarbonyl	
4.38.	H	CN	iso-Butoxycarbonyl	
4.39.	H	CN	sec.-Butoxycarbonyl	
4.40.	H	CN	tert.-Butoxycarbonyl	
4.41.	H	CN	n-Hexoxycarbonyl	
4.42.	H	CN	Phenoxy carbonyl	
4.43.	H	CN	4-Chlorophenoxy carbonyl	
4.44.	H	CN	Benzylloxycarbonyl	
4.45.	H	CN	Aminocarbonyl	
4.46.	H	CN	Dimethylaminocarbonyl	
4.47.	H	CN	Diethylaminocarbonyl	
4.48.	H	CN	Di-iso-Propylaminocarbonyl	
4.49.	H	CN	Phenylaminocarbonyl	
4.50.	H	CN	N-Methyl-N-Phenylaminocarbonyl	
4.51.	H	CN	Phenyl	
4.52.	H	CN	2-Fluorphenyl	
4.53.	H	CN	3-Fluorphenyl	
4.54.	H	CN	4-Fluorphenyl	

29 06 93 36227:

O.Z. 0050/43197

96

No.	R ¹	R ²	R ³	phys. data
4.55.	H	CN	Pentafluorophenyl	
4.56.	H	CN	2-Chlorophenyl	
4.57.	H	CN	3-Chlorophenyl	
4.58.	H	CN	4-Chlorophenyl	
4.59.	H	CN	Pentachlorophenyl	
4.60.	H	CN	2,3-Dichlorophenyl	
4.61.	H	CN	2,4-Dichlorophenyl	
4.62.	H	CN	2,5-Dichlorophenyl	
4.63.	H	CN	2,6-Dichlorophenyl	
4.64.	H	CN	3,4-Dichlorophenyl	
4.65.	H	CN	3,5-Dichlorophenyl	
4.66.	H	CN	2,3,4-Trichlorophenyl	
4.67.	H	CN	2,3,5-Trichlorophenyl	
4.68.	H	CN	2,3,6-Trichlorophenyl	
4.69.	H	CN	2,4,5-Trichlorophenyl	
4.70.	H	CN	2,4,6-Trichlorophenyl	
4.71.	H	CN	3,4,5-Trichlorophenyl	
4.72.	H	CN	2,3,4,6-Tetrachlorophenyl	
4.73.	H	CN	2,3,5,6-Tetrachlorophenyl	
4.74.	H	CN	2-Bromophenyl	
4.75.	H	CN	3-Bromophenyl	
4.76.	H	CN	4-Bromophenyl	

20 04 93 38227:

O.Z. 0050/43197

97

No.	R ¹	R ²	R ³	phys. data
4.77.	H	CN	2,4-Dibromophenyl	
4.78.	H	CN	3-Bromo-4-Fluorophenyl	
4.79.	H	CN	3-Bromo-4-Methoxyphenyl	
4.80.	H	CN	2-Iodophenyl	
4.81.	H	CN	3-Iodophenyl	
4.82.	H	CN	4-Iodophenyl	
4.83.	H	CN	2-Chloro-4-Fluorophenyl	
4.84.	H	CN	2-Chloro-5-Fluorophenyl	
4.85.	H	CN	2-Chloro-6-Fluorophenyl	
4.86.	H	CN	2-Chloro-4-Bromophenyl	
4.87.	H	CN	2-Bromo-4-Chlorophenyl	
4.88.	H	CN	2-Bromo-4-Fluorophenyl	
4.89.	H	CN	3-Bromo-4-Fluorophenyl	
4.90.	H	CN	3-Chloro-4-Fluorophenyl	
4.91.	H	CN	3-Fluoro-4-Chlorophenyl	
4.92.	H	CN	2-Cyanophenyl	
4.93.	H	CN	3-Cyanophenyl	
4.94.	H	CN	4-Cyanophenyl	
4.95.	H	CN	2-Nitrophenyl	
4.96.	H	CN	3-Nitrophenyl	
4.97.	H	CN	4-Nitrophenyl	
4.98.	H	CN	2-Methylphenyl	

29 04 93 38227.

O.Z. 0050/43197

98

No.	R ¹	R ²	R ³	phys. data
4.99.	H	CN	3-Methylphenyl	
4.100.	H	CN	4-Methylphenyl	
4.101.	H	CN	2,4-Dimethylphenyl	
4.102.	H	CN	2,6-Dimethylphenyl	
4.103.	H	CN	3,4-Dimethylphenyl	
4.104.	H	CN	3,5-Dimethylphenyl	
4.105.	H	CN	2,3,4-Trimethylphenyl	
4.106.	H	CN	2,3,5-Trimethylphenyl	
4.107.	H	CN	2,3,6-Trimethylphenyl	
4.108.	H	CN	2,4,5-Trimethylphenyl	
4.109.	H	CN	2,4,6-Trimethylphenyl	
4.110.	H	CN	3,4,5-Trimethylphenyl	
4.111.	H	CN	Pentamethylphenyl	
4.112.	H	CN	2-Ethylphenyl	
4.113.	H	CN	3-Ethylphenyl	
4.114.	H	CN	4-Ethylphenyl	
4.115.	H	CN	3,5-Diethylphenyl	
4.116.	H	CN	2-n-Propylphenyl	
4.117.	H	CN	3-n-Propylphenyl	
4.118.	H	CN	4-n-Propylphenyl	
4.119.	H	CN	2-iso-Propylphenyl	
4.120.	H	CN	3-iso-Propylphenyl	

29.06.93 20227

O.Z. 0050/43197

99

No.	R ¹	R ²	R ³	phys. data
4.121.	H	CN	4-iso-Propylphenyl	
4.122.	H	CN	2,4-Di-iso-Propylphenyl	
4.123.	H	CN	3,5-Di-iso-Propylphenyl	
4.124.	H	CN	4-n-Butyphenyl	
4.125.	H	CN	4-sec.-Butylphenyl	
4.126.	H	CN	4-iso-Butylphenyl	
4.127.	H	CN	4-tert.-Butylphenyl	
4.128.	H	CN	3-tert.-Butylphenyl	
4.129.	H	CN	2-tert.-Butylphenyl	
4.130.	H	CN	2,4-Di-tert.-Butylphenyl	
4.131.	H	CN	3,5-Di-tert.-Butylphenyl	
4.132.	H	CN	4-n-Hexylphenyl	
4.133.	H	CN	4-n-Dodecylphenyl	
4.134.	H	CN	2-Methyl-4-tert.-Butylphenyl	
4.135.	H	CN	2-Methyl-6-tert.-Butylphenyl	
4.136.	H	CN	2-Methyl-4-iso-Propylphenyl	
4.137.	H	CN	2-Methyl-4-Cyclohexylphenyl	
4.138.	H	CN	2-Methyl-4-Phenylphenyl	
4.139.	H	CN	2-Methyl-4-Benzylphenyl	
4.140.	H	CN	2-Methyl-4-Phenoxyphenyl	
4.141.	H	CN	2-Methyl-4-Benzylloxyphenyl	
4.142.	H	CN	2-Methyl-3-Chlorophenyl	

29.04.93 36227.

O.Z. 0050/43197

100

No.	R ¹	R ²	R ³	phys. data
4.143.	H	CN	2-Methyl-4-Chlorophenyl	
4.144.	H	CN	2-Methyl-5-Chlorophenyl	
4.145.	H	CN	2-Methyl-6-Chlorophenyl	
4.146.	H	CN	2-Methyl-4-Fluorophenyl	
4.147.	H	CN	2-Methyl-3-Bromophenyl	
4.148.	H	CN	2-Methyl-4-Bromophenyl	
4.149.	H	CN	2-Methyl-3-Methoxyphenyl	
4.150.	H	CN	2-Methyl-4-Methoxyphenyl	
4.151.	H	CN	2-Methyl-5-Methoxyphenyl	
4.152.	H	CN	2-Methyl-6-Methoxyphenyl	
4.153.	H	CN	2-Methyl-4-iso-Propoxyphenyl	
4.154.	H	CN	2-Methyl-2,5-Dimethoxyphenyl	
4.155.	H	CN	2-Methoxyphenyl	
4.156.	H	CN	3-Methoxyphenyl	
4.157.	H	CN	4-Methoxyphenyl	
4.158.	H	CN	2,3-Dimethoxyphenyl	
4.159.	H	CN	2,4-Dimethoxyphenyl	
4.160.	H	CN	2,5-Dimethoxyphenyl	
4.161.	H	CN	2,6-Dimethoxyphenyl	
4.162.	H	CN	3,4-Dimethoxyphenyl	
4.163.	H	CN	3,5-Dimethoxyphenyl	
4.164.	H	CN	3,6-Dimethoxyphenyl	

20 06 93 36227.

O.Z. 0050/43197

101

No.	R ¹	R ²	R ³	phys. data
4.165.	H	CN	2,3,4-Trimethoxyphenyl	
4.166.	H	CN	2,3,5-Trimethoxyphenyl	
4.167.	H	CN	2,3,6-Trimethoxyphenyl	
4.168.	H	CN	2,4,5-Trimethoxyphenyl	
4.169.	H	CN	2,4,6-Trimethoxyphenyl	
4.170.	H	CN	3,4,5-Trimethoxyphenyl	
4.171.	H	CN	2-Ethoxyphenyl	
4.172.	H	CN	3-Ethoxyphenyl	
4.173.	H	CN	4-Ethoxyphenyl	
4.174.	H	CN	2-iso-Propoxyphenyl	
4.175.	H	CN	3-iso-Propoxyphenyl	
4.176.	H	CN	4-iso-Propoxyphenyl	
4.177.	H	CN	3-tert.-Butoxyphenyl	
4.178.	H	CN	4-tert.-Butoxyphenyl	
4.179.	H	CN	2-Trifluoromethoxyphenyl	
4.180.	H	CN	3-Trifluoromethoxyphenyl	
4.181.	H	CN	4-Trifluoromethoxyphenyl	
4.182.	H	CN	3-(1',1',2',2'-Tetrafluoro)ethoxyphenyl	
4.183.	H	CN	4-(1',1',2',2'-Tetrafluoro)ethoxyphenyl	
4.184.	H	CN	2-Chloromethylphenyl	
4.185.	H	CN	3-Chloromethylphenyl	
4.186.	H	CN	4-Chloromethylphenyl	

29.04.93 30227:

O.Z. 0050/43197

102

No.	R ¹	R ²	R ³	phys. data
4.187.	H	CN	2-Trifluoromethylphenyl	
4.188.	H	CN	3-Trifluoromethylphenyl	
4.189.	H	CN	4-Trifluoromethylphenyl	
4.190.	H	CN	2-(Methoxyiminomethyl)-phenyl	
4.191.	H	CN	3-(Methoxyiminomethyl)-phenyl	
4.192.	H	CN	4-(Methoxyiminomethyl)-phenyl	
4.193.	H	CN	2-(Ethoxyiminomethyl)-phenyl	
4.194.	H	CN	3-(Ethoxyiminomethyl)-phenyl	
4.195.	H	CN	4-(Ethoxyiminomethyl)-phenyl	
4.196.	H	CN	2-(n-Propoxyiminomethyl)phenyl	
4.197.	H	CN	3-(n-Propoxyiminomethyl)phenyl	
4.198.	H	CN	4-(n-Propoxyiminomethyl)phenyl	
4.199.	H	CN	2-(iso-Propoxyiminomethyl)phenyl	
4.200.	H	CN	3-(iso-Propoxyiminomethyl)phenyl	
4.201.	H	CN	4-(iso-Propoxyiminomethyl)phenyl	
4.202.	H	CN	2-(n-Butoxyiminomethyl)phenyl	
4.203.	H	CN	3-(n-Butoxyiminomethyl)phenyl	
4.204.	H	CN	4-(n-Butoxyiminomethyl)phenyl	
4.205.	H	CN	2-(iso-Butoxyiminomethyl)phenyl	
4.206.	H	CN	3-(iso-Butoxyiminomethyl)phenyl	
4.207.	H	CN	4-(iso-Butoxyiminomethyl)phenyl	
4.208.	H	CN	2-(tert.-Butoxyiminomethyl)phenyl	

29.04.93 36227:

O.Z. 0050/43197

103

No.	R ¹	R ²	R ³	phys. data
4.209.	H	CN	3-(tert.-Butoxyiminomethyl)phenyl	
4.210.	H	CN	4-(tert.-Butoxyiminomethyl)phenyl	
4.211.	H	CN	2-(n-Pentoxyiminomethyl)phenyl	
4.212.	H	CN	3-(n-Pentoxyiminomethyl)phenyl	
4.213.	H	CN	4-(n-Pentoxyiminomethyl)phenyl	
4.214.	H	CN	2-(n-Hexaoxyiminomethyl)-phenyl	
4.215.	H	CN	3-(n-Hexaoxyiminomethyl)-phenyl	
4.216.	H	CN	4-(n-Hexaoxyiminomethyl)-phenyl	
4.217.	H	CN	2-(Allyloxyiminomethyl)-phenyl	
4.218.	H	CN	3-(Allyloxyiminomethyl)-phenyl	
4.219.	H	CN	4-(Allyloxyiminomethyl)-phenyl	
4.220.	H	CN	2-(Benzylxyiminomethyl)-phenyl	
4.221.	H	CN	3-(Benzylxyiminomethyl)-phenyl	
4.222.	H	CN	4-(Benzylxyiminomethyl)-phenyl	
4.223.	H	CN	2-(Methoxyimino-1'-ethyl)-phenyl	
4.224.	H	CN	3-(Methoxyimino-1'-ethyl)-phenyl	
4.225.	H	CN	4-(Methoxyimino-1'-ethyl)-phenyl	
4.226.	H	CN	2-(Ethoxyimino-1'-ethyl)-phenyl	
4.227.	H	CN	3-(Ethoxyimino-1'-ethyl)-phenyl	
4.228.	H	CN	4-(Ethoxyimino-1'-ethyl)-phenyl	
4.229.	H	CN	2-(n-Propoxyimino-1'-ethyl)phenyl	
4.230.	H	CN	3-(n-Propoxyimino-1'-ethyl)phenyl	

29 04 93 36227:

O.Z. 0050/43197

104

No.	R ¹	R ²	R ³	phys. data
4.231.	H	CN	1-(n-Propoxyimino-1'-ethyl)phenyl	
4.232.	H	CN	2-(n-Butoxyamino-1'-ethyl)phenyl	
4.233.	H	CN	3-(n-Butoxyamino-1'-ethyl)phenyl	
4.234.	H	CN	4-(n-Butoxyamino-1'-ethyl)phenyl	
4.235.	H	CN	2-(n-Pentoxymino-1'-ethyl)phenyl	
4.236.	H	CN	3-(n-Pentoxymino-1'-ethyl)phenyl	
4.237.	H	CN	4-(n-Pentoxymino-1'-ethyl)phenyl	
4.238.	H	CN	2-(n-Hexaoxyimino-1'-ethyl)phenyl	
4.239.	H	CN	3-(n-Hexaoxyimino-1'-ethyl)phenyl	
4.240.	H	CN	4-(n-Hexaoxyimino-1'-ethyl)phenyl	
4.241.	H	CN	2-(Allyloxyimino-1'-ethyl)-phenyl	
4.242.	H	CN	3-(Allyloxyimino-1'-ethyl)-phenyl	
4.243.	H	CN	4-(Allyloxyimino-1'-ethyl)-phenyl	
4.244.	H	CN	2-(Benzloxyimino-1'-ethyl)phenyl	
4.245.	H	CN	3-(Benzloxyimino-1'-ethyl)phenyl	
4.246.	H	CN	4-(Benzxyimino-1'-ethyl)phenyl	
4.247.	H	CN	2-Phenylphenyl	
4.248.	H	CN	3-Phenylphenyl	
4.249.	H	CN	4-Phenylphenyl	
4.250.	H	CN	2-Phenoxyphenyl	
4.251.	H	CN	3-Phenoxyphenyl	
4.252.	H	CN	4-Phenoxyphenyl	

29.04.93 30227.

O.Z. 0050/43197

105

No.	R ¹	R ²	R ³	phys. data
4.253.	H	CN	2-Benzylxyloxyphenyl	
4.254.	H	CN	3-Benzylxyloxyphenyl	
4.255.	H	CN	4-Benzylxyloxyphenyl	
4.256.	H	CN	4-(Imidazol-1'-yl)phenyl	
4.257.	H	CN	4-(Piperazin-1'-yl)phenyl	
4.258.	H	CN	4-(Morpholin-1'-yl)phenyl	
4.259.	H	CN	4-(Piperidin-1'-yl)phenyl	
4.260.	H	CN	4-(Pyridyl-2'-oxy)phenyl	
4.261.	H	CN	2-Cyclopropylphenyl	
4.262.	H	CN	3-Cyclopropylphenyl	
4.263.	H	CN	4-Cyclopropylphenyl	
4.264.	H	CN	3-Cyclohexylphenyl	
4.265.	H	CN	4-Cyclohexylphenyl	
4.266.	H	CN	4-Oxiranylphenyl	
4.267.	H	CN	4-(1',3'-Dioxan-2'-yl)-phenyl	
4.268.	H	CN	4-(Tetrahydropyran-2-yloxy)-phenyl	
4.269.	H	CN	1-Naphthyl	
4.270.	H	CN	2-Naphthyl	
4.271.	H	CN	Benzyl	
4.272.	H	CN	2-Methylbenzyl	
4.273.	H	CN	3-Methylbenzyl	
4.274.	H	CN	4-Methylbenzyl	

29.04.93 36227.

O.Z. 0050/43197

106

No.	R ¹	R ²	R ³	phys. data
4.275.	H	CN	4-tert.-Butylbenzyl	
4.276.	H	CN	2-Chlorobenzyl	
4.277.	H	CN	3-Chlorobenzyl	
4.278.	H	CN	4-Chlorobenzyl	
4.279.	H	CN	2,4-Dichlorobenzyl	
4.280.	H	CN	2,6-Dichlorobenzyl	
4.281.	H	CN	2,4,6-Trichlorobenzyl	
4.282.	H	CN	2-Trifluoromethylbenzyl	
4.283.	H	CN	3-Trifluoromethylbenzyl	
4.284.	H	CN	4-trifluoromethylbenzyl	
4.285.	H	CN	2-Methoxybenzyl	
4.286.	H	CN	4-Methoxybenzyl	
4.287.	H	CN	4-tert.-Butoxybenzyl	
4.288.	H	CN	4-Phenoxybenzyl	
4.289.	H	CN	1-Phenethyl	
4.290.	H	CN	2-Phenethyl	
4.291.	H	CN	1-Phenylpropyl	
4.292.	H	CN	2-Phenylpropyl	
4.293.	H	CN	3-Phenylpropyl	
4.294.	H	CN	2-Methyl-2-phenylpropyl	
4.295.	H	CN	2-Methyl-3-phenylpropyl	
4.296.	H	CN	4-Phenylbutyl	

29.04.93 36227:

O.Z. 0050/43197

107

No.	R ¹	R ²	R ³	phys. data
4.297.	H	CN	2-Phenyl-1-ethenyl	
4.298.	H	CN	1-Phenyl-1-ethenyl	
4.299.	H	CN	1-Phenyl-1-propenyl	
4.300.	H	CN	1-Phenyl-1-propen-2-yl	
4.301.	H	CN	2,2-Diphenylethenyl	
4.302.	H	CN	2-Pyridyl	
4.303.	H	CN	3-Pyridyl	
4.304.	H	CN	4-Pyridyl	
4.305.	H	CN	2,6-Pyrimidinyl	
4.306.	H	CN	1,5-Pyrimidinyl	
4.307.	H	CN	2-Thienyl	
4.308.	H	CN	3-Thienyl	
4.309.	H	CN	2-Furyl	
4.310.	H	CN	3-Furyl	
4.311.	H	CN	1-Pyrrolyl	
4.312.	H	CN	1-Imidazolyl	
4.313.	H	CN	1,2,4-Triazolyl	
4.314.	H	CN	1,3,4-Triazolyl	
4.315.	H	CN	4-Thiazolyl	
4.316.	H	CN	2-Benzothiazolyl	
4.317.	H	CN	2-Pyridylmethyl	
4.318.	H	CN	3-Pyridylmethyl	

29 04 93 36227:

O.Z. 0050/43197

108

No.	R ¹	R ²	R ³	phys. data
4.319.	H	CN	2'-Furyl-2-ethenyl	
4.320.	H	CN	2'-Thienyl-2-ethenyl	
4.321.	H	CN	3'-Pyridyl-2-ethenyl	
4.322.	H	CN	Oxiranyl	
4.323.	H	CN	1-Aziridinyl	
4.324.	H	CN	1-Azetidinyl	
4.325.	H	CN	1-Pyrrolidinyl	
4.326.	H	CN	2-Tetrahydrofuryl	
4.327.	H	CN	2-Tetrahydropyranyl	
4.328.	H	CN	3-Tetrahydropyranyl	
4.329.	H	CN	1-Piperidinyl	
4.330.	H	CN	1-Morpholinyl	
4.331.	H	CN	1-Piperazinyl	
4.332.	H	CN	1,3-Dioxan-2-yl	
4.333.	H	CN	4-Tetrahydrothiopyranyl	
4.334.	H	CN	4-Methylpent-3-en-1-yl	
4.335.	H	CN	2-Propenyl	
4.336.	H	CN	2-Butenyl	
4.337.	H	CN	1-Methyl-2-propenyl	
4.338.	H	CN	3-Methyl-2-butenyl	
4.339.	H	CN	2,2-Difluoroethenyl	
4.340.	H	CN	2,2-Dichloroethenyl	

29.04.93 36227.

O.Z. 0050/43197

109

No.	R ¹	R ²	R ³	phys. data
4.341.	H	CN	3,3,3-Trifluoropropenyl	
4.342.	H	CN	3,3,3-Trichloropropenyl	
4.343.	H	CN	3-Chloro-2-propenyl	
4.344.	H	CN	Cyclopent-1-enyl	
4.345.	H	CN	Cyclopentadienyl	
4.346.	H	CN	Cyclohex-1-enyl	
4.347.	H	CN	Pentafluorocyclopentadienyl	
4.348.	H	CN	Pentachlorocyclopentadienyl	
4.349.	H	CN	Styryl	
4.350.	H	CO ₂ Me	Phenyl	
4.351.	H	CO ₂ Me	2-Fluorophenyl	
4.352.	H	CO ₂ Me	3-Fluorophenyl	
4.353.	H	CO ₂ Me	4-Fluorophenyl	
4.354.	H	CO ₂ Me	2-Chlorophenyl	
4.355.	H	CO ₂ Me	3-Chlorophenyl	
4.356.	H	CO ₂ Me	4-Chlorophenyl	
4.357.	H	CO ₂ Me	2-Methylphenyl	
4.358.	H	CO ₂ Me	3-Methylphenyl	
4.359.	H	CO ₂ Me	4-Methylphenyl	
4.360.	H	CO ₂ Me	2-Cyanophenyl	
4.361.	H	CO ₂ Me	3-Cyanophenyl	
4.362.	H	CO ₂ Me	4-Cyanophenyl	

29 04 83 30227.

O.Z. 0050/43197

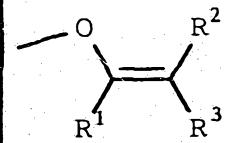
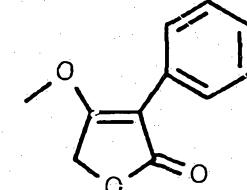
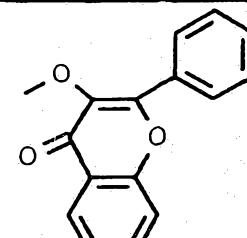
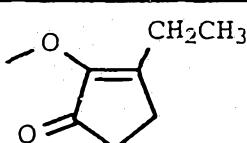
110

No.	R ¹	R ²	R ³	phys. data
4.363.	H	CO ₂ Me	2-Methoxyphenyl	
4.364.	H	CO ₂ Me	3-Methoxyphenyl	
4.365.	H	CO ₂ Me	4-Methoxyphenyl	
4.366.	H	CO ₂ Me	2-Nitrophenyl	
4.367.	H	CO ₂ Me	3-Nitrophenyl	
4.368.	H	CO ₂ Me	4-Nitrophenyl	
4.369.	H	P(O)(OMe) ₂	Phenyl	
4.370.	H	P(O)(OMe) ₂	2-Fluorophenyl	
4.371.	H	P(O)(OMe) ₂	3-Fluorophenyl	
4.372.	H	P(O)(OMe) ₂	4-Fluorophenyl	
4.373.	H	P(O)(OMe) ₂	2-Chlorophenyl	
4.374.	H	P(O)(OMe) ₂	3-Chlorophenyl	
4.375.	H	P(O)(OMe) ₂	4-Chlorophenyl	
4.376.	H	P(O)(OMe) ₂	2-Methylphenyl	
4.377.	H	P(O)(OMe) ₂	3-Methylphenyl	
4.378.	H	P(O)(OMe) ₂	4-Methylphenyl	
4.379.	CH ₃	CN	Phenyl	
4.380.	Acetyl	H	2,6-Dichlorophenyl	
4.381.	Acetyl	H	2,4-Dichlorophenyl	
4.382.	CH ₃	CO ₂ Et	Benzoyl	
4.383.	Methoxycarbonylmethyl	H	Acetyl	

29.04.93 36227.

O.Z. 0050/43197

111

No.		phys. data
4.384		
4.385		
4.386		

29.06.93 36227.

O.Z. 0050/43197

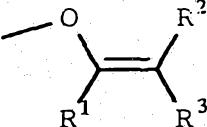
112

No.	Chemical Structure	phys. data
4.387		
4.388		
4.389		
4.390		

29.04.93 36227.

O.Z. 0050/43197

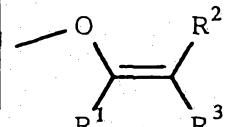
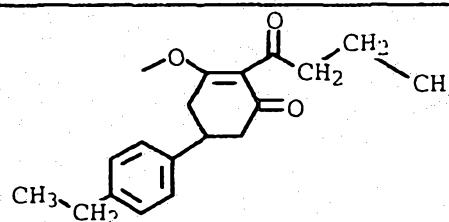
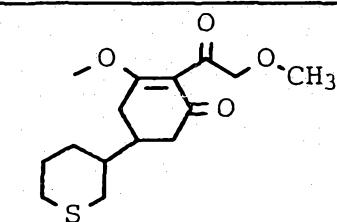
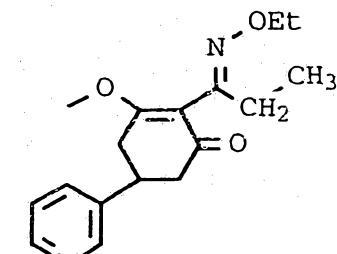
113

No.		phys. data
4.391		
4.392		
4.393		

29.04.93 30227.

O.Z. 0050/43197

114

No.		phys. data
4.394		
4.395		
4.396		

29 04 93 30227.

O.Z. 0050/43197

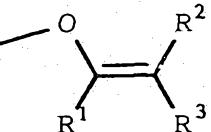
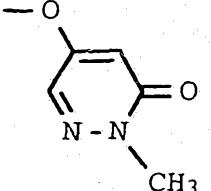
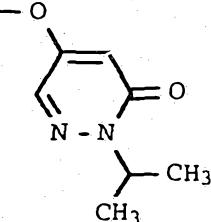
115

No.	Chemical Structure	phys. data
4.397		
4.398		
4.399		

29 04 90 36227.

O.Z. 0050/43197

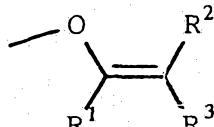
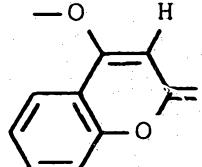
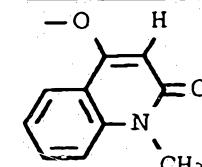
116

No.		phys. data
4.400		
4.401		

29 06 93 36227:

O.Z. 0050/43197

117

No.		phys. data
4.402		
4.403		

The novel compounds are suitable as fungicides and insecticides.

- 5 The fungicidal and insecticidal compounds according to the invention, or agents containing them, may be applied for instance in the form of directly sprayable solutions, powders, suspensions (including high-percentage aqueous, oily or other suspensions), dispersions, emulsions, oil dispersions, pastes, dusts, broadcasting agents, or granules by spraying, atomizing, dusting, broadcasting or watering. The forms of application depend entirely on the purpose for which the agents are being used, but they must ensure as fine a distribution of the active ingredients according to
- 10 15 the invention as possible.

Normally, the plants are sprayed or dusted with the active ingredients, or the seeds of the plants are treated with the active ingredients.

- 20 The formulations are produced in known manner, for example by extending the active ingredient with solvents and/or carriers, with or without the use of emulsifiers and dispersants; if water is used as solvent, it is also possible to
- 25 employ other organic solvents as auxiliary solvents. Suitable auxiliaries for this purpose are solvents such as aromatics (e.g., xylene), chlorinated aromatics (e.g., chlorobenzenes), paraffins (e.g., crude oil fractions), alcohols (e.g., methanol, butanol), ketones (e.g., cyclohexanone), amines (e.g., ethanalamine, dimethylformamide), and water; carriers such as ground natural minerals (e.g., kaolins, aluminas, talc and chalk) and ground synthetic minerals (e.g., highly disperse silica and silicates); emulsifiers such as nonionic and anionic emulsifiers (e.g.,
- 30 35 polyoxyethylene fatty alcohol ethers, alkyl sulfonates and aryl sulfonates); and dispersants such as lignin-sulfite waste liquors and methylcellulose.

- 40 Examples of surfactants are: alkali metal, alkaline earth metal and ammonium salts of aromatic sulfonic acids, e.g., ligninsulfonic acid, phenolsulfonic acid, naphthalenesulfonic acid and dibutynaphthalenesulfonic acid, and of fatty acids, alkyl and alkylaryl sulfonates, and alkyl, lauryl

ether and fatty alcohol sulfates, and salts of sulfated hexadecanols, heptadecanols, and octadecanols, salts of fatty alcohol glycol ethers, condensation products of sulfonated naphthalene and naphthalene derivatives with

- 5 formaldehyde, condensation products of naphthalene or naphthalenesulfonic acids with phenol and formaldehyde, polyoxyethylene octylphenol ethers, ethoxylated isooctylphenol, ethoxylated octylphenol and ethoxylated nonylphenol, alkylphenol polyglycol ethers, tributylphenyl polyglycol ethers, alkylaryl polyether alcohols, isotridecyl alcohol, fatty alcohol ethylene oxide condensates, ethoxylated castor oil, polyoxyethylene alkyl ethers, ethoxylated polyoxypropylene, lauryl alcohol polyglycol ether acetal, sorbitol esters, lignin-sulfite waste liquors and methyl cellulose.
- 10

- 15 Powders, dusts and broadcasting agents may be prepared by mixing or grinding the active ingredients with a solid carrier.

- 20 Granules, e.g., coated, impregnated or homogeneous granules, may be prepared by bonding the active ingredients to solid carriers. Examples of solid carriers are mineral earths such as silicic acids, silica gels, silicates, talc, kaolin, attapulgus clay, limestone, lime, chalk, bole, loess, clay, dolomite, diatomaceous earth, calcium sulfate, magnesium sulfate, magnesium oxide, ground plastics, fertilizers such as ammonium sulfate, ammonium phosphate, ammonium nitrate, and ureas, and vegetable products such as grain meals, bark meal, wood meal, and nutshell meal, cellulosic powders, etc.
- 25

- 30 Examples of formulations are as follows:

- I. A solution of 90 parts by weight of compound no. 1.52 and 10 parts by weight of N-methyl- α -pyrrolidone, which is suitable for application in the form of very fine drops.

- II. A mixture of 20 parts by weight of compound no. 1.56, 80 parts by weight of xylene, 10 parts by weight of the adduct of 8 to 10 moles of ethylene oxide and 1 mole of oleic acid-N-monoethanolamide, 5 parts by weight of the calcium salt of dodecylbenzenesulfonic acid, and 5 parts by weight of the adduct of 40 moles of ethylene oxide and
- 40

1 mole of castor oil. By finely dispersing the mixture in water, an aqueous dispersion is obtained.

III. An aqueous dispersion of 20 parts by weight of compound no. 1.98, 40 parts by weight of cyclohexanone, 30 parts by weight of isobutanol, 20 parts by weight of the adduct of 40 moles of ethylene oxide and 1 mole of castor oil.

IV. An aqueous dispersion of 20 parts by weight of compound no. 1.100, 25 parts by weight of cyclohexanol, 65 parts by weight of a mineral oil fraction having a boiling point between 210 and 280°C, and 10 parts by weight of the adduct of 40 moles of ethylene oxide and 1 mole of castor oil.

V. A hammer-milled mixture of 80 parts by weight of compound no. 2.52, 3 parts by weight of the sodium salt of diisobutyl naphthalene- α -sulfonic acid, 10 parts by weight of the sodium salt of a lignin-sulfonic acid obtained from a sulfite waste liquor, and 7 parts by weight of powdered silica gel. By finely dispersing the mixture in water, a spray liquor is obtained.

VI. An intimate mixture of 3 parts by weight of compound no. 2.100 and 97 parts by weight of particulate kaolin. The dust contains 3wt% of the active ingredient.

VII. An intimate mixture of 30 parts by weight of compound no. 1.52, 92 parts by weight of powdered silica gel and 8 parts by weight of paraffin oil sprayed onto the surface of this silica gel. This formulation of the active ingredient exhibits good adherence.

VIII. A stable aqueous dispersion of 40 parts by weight of compound no. 1.56, 10 parts of the sodium salt of a phenol-sulfonic acid-urea-formaldehyde condensate, 2 parts of silica gel and 48 parts of water, which dispersion can be further diluted.

IX. A stable oily dispersion of 20 parts by weight of compound no. 1.98, 2 parts by weight of the calcium salt of dodecylbenzenesulfonic acid, 8 parts by weight of a fatty alcohol polyglycol ether, 2 parts by weight of the sodium

salt of a phenolsulfonic acid-urea-formaldehyde condensate and 68 parts by weight of a paraffinic mineral oil.

The compounds are extremely effective on a broad spectrum of

5 phytopathogenic fungi, in particular those from the class consisting of the Ascomycetes and Basidiomycetes. Some of them have a systemic action and can be used as foliar and soil fungicides.

10 The fungicidal compounds are of particular interest for controlling a large number of fungi in various crops or their seeds, especially wheat, rye, barley, oats, rice, Indian corn, lawns, cotton, soybeans, coffee, sugar cane, fruit and ornamentals in horticulture and viticulture, and

15 in vegetables such as cucumbers, beans and cucurbits.

The compounds are applied by treating the fungi, or the seeds, plants, materials or the soil to be protected against fungus attack, with a fungicidally effective amount of the

20 active ingredients.

Application may be effected before or after infection of the materials, plants or seed by the fungi.

25 The compounds I are particularly useful for controlling the following plant diseases:

Erysiphe graminis in cereals,
Erysiphe cichoracearum and Sphaerotheca fuliginea in cucur-
30 bits,
Podosphaera leucotricha in apples,
Uncinula necator in vines,
Puccinia species in cereals,
Rhizoctonia solani in cotton,
35 Ustilago species in cereals and sugar cane,
Venturia inaequalis (scab) in apples,
Helminthosporium species in cereals,
Septoria nodorum in wheat,
Botrytis cinerea (gray mold) in strawberries and grapes,
40 Cercospora arachidicola in groundnuts,
Pseudocercospora herpotrichoides in wheat and barley,
Pyricularia oryzae in rice,
Phytophthora infestans in potatoes and tomatoes,

Fusarium and Verticillium species in various plants,
 Plasmopara viticola in grapes,
 Alternaria species in fruit and vegetables.

5 The novel compounds may also be used for protecting materials (timber), for example against Paecilomyces variotii.

The fungicidal agents generally contain from 0.1 to 95, and preferably from 0.5 to 90, wt% of active ingredient.

10 When the active ingredients are used for treating seed, rates of from 0.001 to 50, and preferably from 0.01 to 10, g per kg of seed are generally required.

15 When the agents according to the invention are used as fungicides, they may be applied together with other active ingredients, for example herbicides, insecticides, growth regulators, other fungicides and fertilizers.

20 When mixed with other fungicides, the spectrum of fungicidal action is frequently increased.

Use examples

25 The active ingredients used for comparison purposes were methyl 2-[2-(phenyloxymethylene)-phenyl]-3-methoxyacrylate (A) - disclosed in EP 178 826 - and 2-[2-(phenyloxymethylene)-phenyl]-glyoxylic acid methyl ester-O-methyloxime ether (B) - disclosed in EP 253 213.

30 Use Example

Action on Plasmopara viticola

35 Leaves of potted vines of the Müller-Thurgau variety were sprayed with aqueous suspensions containing (dry basis) 80% of active ingredient and 20% of emulsifier. To assess the duration of action, the plants were set up, after the sprayed-on layer had dried, for 8 days in the greenhouse. Then the leaves were infected with a zoospore suspension of

40 Plasmopara viticola. The plants were first placed for 48 hours in a water vapor-saturated chamber at 24°C and then in a greenhouse for 5 days at from 20 to 30°C. To accelerate and intensify the sporangiophore discharge, the plants were

then again placed in the moist chamber for 16 hours. The extent of fungus attack was then assessed on the undersides of the leaves.

5 The results show that active ingredients 1,52, 1.56, 1.98, 1.100, 2,52 and 2.100, applied as spray liquors containing 15 ppm of active ingredient, have a better fungicidal action (95%) than prior art comparative agents A (30%) and B (65%).

10

15

20

25

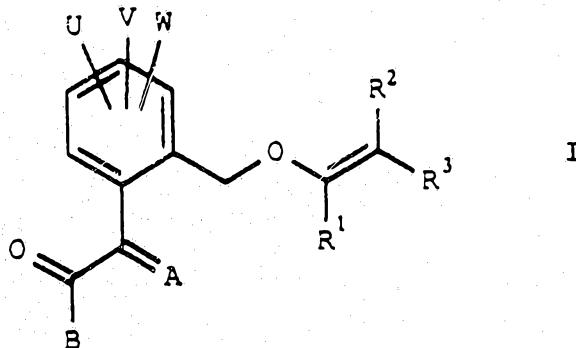
30

35

40

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:
~~WXXX&YXXX~~

1. A benzyl enol ether derivative of the general formula I



5 where

A is

CH₂, CHCl, CH-C₁-C₄-alkyl, CH-O-C₁-C₄-alkyl, CH-S-C₁-C₄-alkyl, N-O-C₁-C₄-alkyl,

.. B is

10 OH, C₁-C₄-alkoxy, C₁-C₄-alkylthio and C₁-C₄-alkylamino,

U, V and W

are identical or different and are hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy,

R¹, R² and R³

15 are identical or different and are hydrogen, cyano, halogen, NR⁴R⁵, CO₂R⁴, CONR⁴R⁵, COR⁴, S(O)_nR⁴ where n = 0, 1 or 2, PO(OR⁴)₂, unbranched or branched C₁-C₁₀-alkyl, C₁-C₄-haloalkyl,

C₃-C₆-cycloalkyl, C₃-C₆-halocycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄-

20 alkylthio-C₁-C₄-alkyl, arylthio-C₁-C₄-alkyl, C₂-C₆-alkenyl, C₂-C₆-haloalkenyl, C₃-C₆-cycloalkenyl, C₃-C₆-halocyclo-

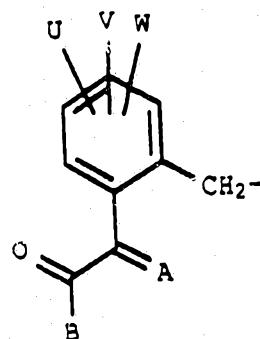
alkenyl, C₂-C₆-alkynyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₄-alkylthio, benzylthio, C₁-C₄-alkylcarbonyl,

unsubstituted or substituted phenylcarbonyl, 25 unsubstituted or substituted benzylcarbonyl, C₁-C₄-alkoxycarbonyl, unsubstituted or substituted phenoxy carbonyl, unsubstituted or substituted

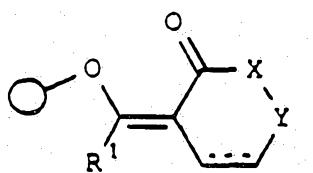
benzyloxycarbonyl, unsubstituted or substituted aryl, unsubstituted or substituted aryloxy, unsubstituted or substituted arylthio, unsubstituted or substituted aryl-C₁-C₄-alkyl, unsubstituted or substituted aryl-C₂-C₄-alkenyl, unsubstituted or substituted aryloxy-C₁-C₄-alkyl, unsubstituted or substituted arylthio-C₁-C₄-alkyl, unsubstituted or substituted hetaryl, unsubstituted or substituted hetarylthio, unsubstituted or substituted hetaryl-C₁-C₄-alkyl, 10 unsubstituted or substituted hetaryl-C₂-C₄-alkenyl, unsubstituted or substituted hetarylthio-C₁-C₄-alkyl, unsubstituted or substituted heterocyclyl, unsubstituted or substituted heterocyclyloxy, where unsubstituted or substituted, in addition to 15 hydrogen, includes the radicals halogen, cyano, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkyl, C₁-C₄-haloalkoxy, C₁-C₁₀-alkoximino-C₁-C₂-alkyl, aryl, aryloxy, benzyloxy, hetaryl, hetarylthio, C₃-C₆-cycloalkyl, heterocyclyl, heterocyclyloxy, .. 20 and the radicals R⁴ and R⁵ are identical or different and are hydrogen or C₁-C₄-alkyl, R¹ and R³ together, and also R² and R³ together, in each 25 case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - F are possible:

30 the symbol 

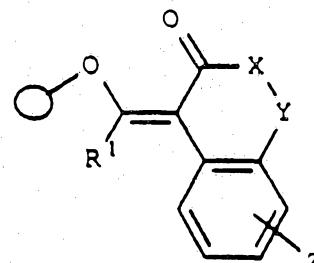
is the group



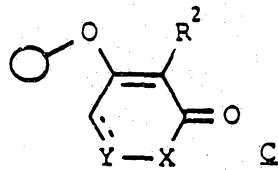
in the following



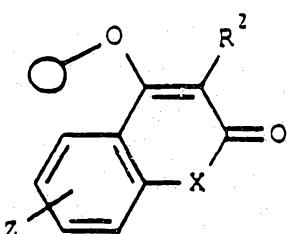
or



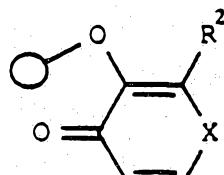
B



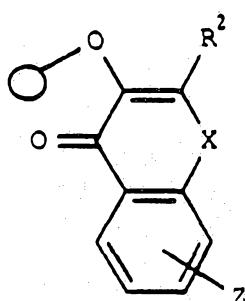
or



D



or



F

5 where

X is

CH₂, O, NR⁴,

Y is

CH, (CH₂)_n, where n = 0, 1 or 2,

10 Z is

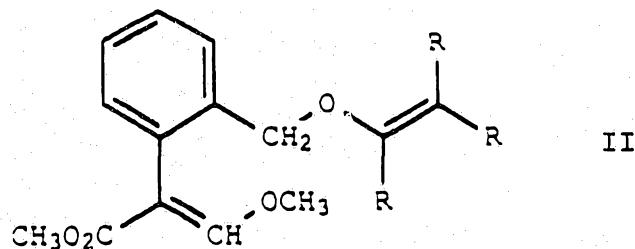
hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy and

R⁴ is

hydrogen or C₁-C₄-alkyl and is a single bond or a double bond.

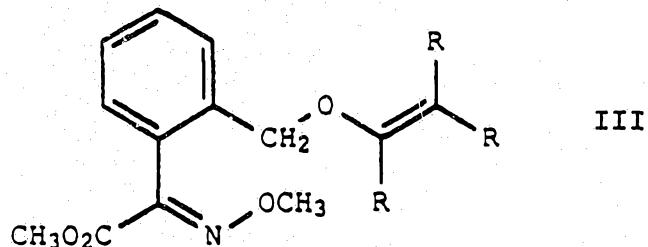
15

2. A benzyl enol ether of the formula II



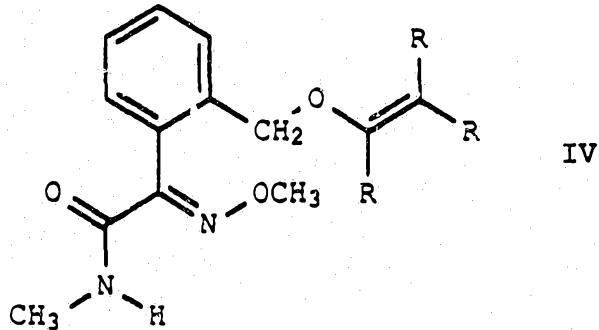
where R^1 , R^2 and R^3 are the radicals mentioned in claim 1.

3. A benzyl enol ether of the formula III



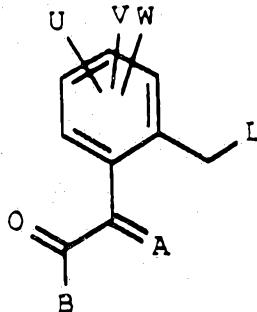
5 where R^1 , R^2 and R^3 are the radicals mentioned in claim 1.

4. A benzyl enol ether of the formula IV



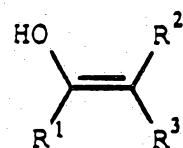
where R^1 , R^2 and R^3 are the radicals mentioned in claim 1.

5. A process for preparing a benzyl enol ether of
10 the formula I as claimed in claim 1, which comprises
reacting a benzyl derivative of the formula



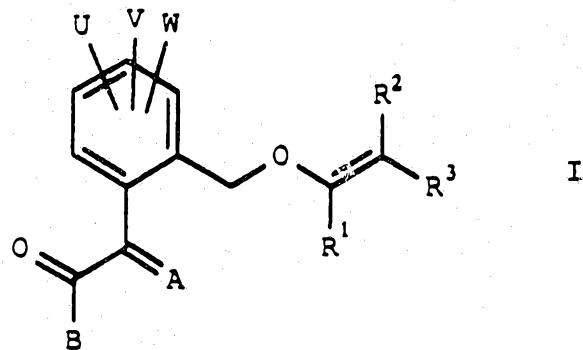
in which U, V, W, A and B have the meaning mentioned in claim 1 and L is a leaving group, with an enol of the formula

5



in which R¹, R² and R³ have the meaning mentioned in claim 1.

6. A fungicide containing an inert carrier and a fungicidally active amount of a benzyl enol ether of the formula I



where

A is

CH₂, CHCl, CH-C₁-C₄-alkyl, CH-O-C₁-C₄-alkyl, CH-S-C₁-C₄-

alkyl, $N-O-C_1-C_4$ -alkyl,
B is
 OH , C_1-C_4 -alkoxy, C_1-C_4 -alkylthio and C_1-C_4 -alkylamino,
U, V and W
5 are identical or different and are hydrogen, halogen,
 C_1-C_4 -alkyl or C_1-C_4 -alkoxy,
 R^1 , R^2 and R^3
are identical or different and are hydrogen, cyano,
halogen, NR^4R^5 , CO_2R^4 , $CONR^4R^5$, COR^4 , $S(O)_nR^4$ where $n = 0, 1$
10 or 2, $PO(OR^4)_2$, unbranched or branched C_1-C_{10} -alkyl, C_1-C_4 -
haloalkyl, C_3-C_6 -cycloalkyl, C_3-C_6 -halocycloalkyl, C_3-C_6 -
cycloalkyl- C_1-C_4 -alkyl, C_1-C_4 -alkoxy- C_1-C_4 -alkyl, C_1-C_4 -
alkylthio- C_1-C_4 -alkyl, arylthio- C_1-C_4 -alkyl, C_2-C_6 -alkenyl,
 C_2-C_5 -haloalkenyl, C_3-C_6 -cycloalkenyl, C_3-C_6 -halocyclo-
15 alkenyl, C_2-C_6 -alkynyl, C_1-C_6 -alkoxy, C_1-C_6 -haloalkoxy,
 C_1-C_4 -alkylthio, benzylthio, C_1-C_4 -alkylcarbonyl,
unsubstituted or substituted phenylcarbonyl,
unsubstituted or substituted benzylcarbonyl, C_1-C_4 -
alkoxycarbonyl, unsubstituted or substituted
20 phenoxy carbonyl, unsubstituted or substituted benzylcarbonyl, unsubstituted or substituted aryl,
unsubstituted or substituted aryloxy, unsubstituted or substituted aryl-
substituted arylthio, unsubstituted or substituted aryl-
 C_1-C_4 -alkyl, unsubstituted or substituted aryl- C_2-C_4 -
25 alkenyl, unsubstituted or substituted aryloxy- C_1-C_4 -alkyl, unsub-
stituted or substituted hetaryl, unsubstituted or substi-
tuted hetaryloxy, unsubstituted or substituted hetaryl-
thio, unsubstituted or substituted heteroaryl- C_1-C_4 -alkyl,
30 unsubstituted or substituted hetaryl- C_2-C_4 -alkenyl,
unsubstituted or substituted hetaryl- C_1-C_4 -alkyl,
unsubstituted or substituted heterocyclyl, unsubstituted
or substituted heterocyclyloxy,
where unsubstituted or substituted, in addition to
35 hydrogen, includes the radicals halogen, cyano, nitro,
 C_1-C_4 -alkyl, C_1-C_4 -alkoxy, C_1-C_4 -haloalkyl, C_1-C_4 -halo-
alkoxy, C_1-C_{10} -alkoximino- C_1-C_2 -alkyl, aryl, aryloxy,

benzloxy, hetaryl, hetaryloxy, C_1 - C_6 -cycloalkyl, heterocyclyl, heterocycloxy, and the radicals

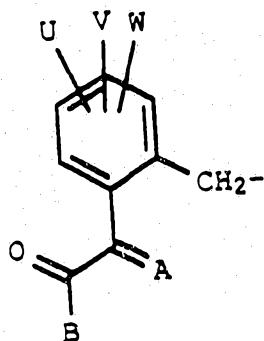
R^4 and R^5

5 are identical or different and are hydrogen or C_1 - C_4 -alkyl,

R^1 and R^3 together, and also R^2 and R^4 together, in each case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the 10 radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - F are possible:

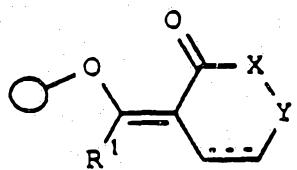
the symbol 

is the group

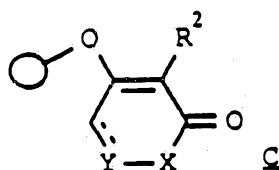
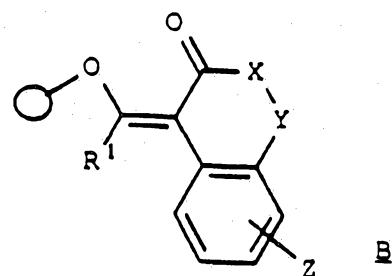


15

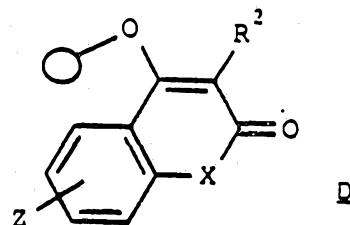
in the following

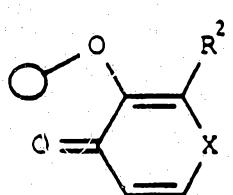


or



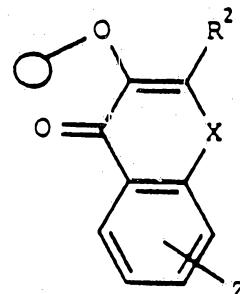
or





E

or



E

where

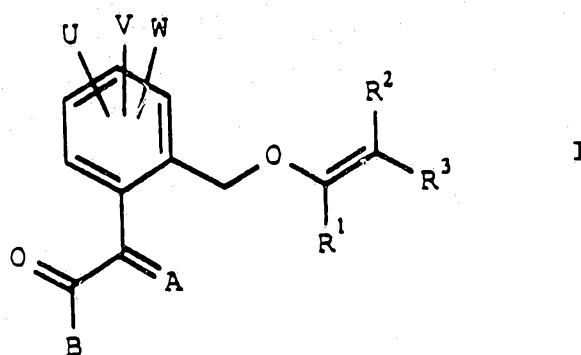
X is

CH₂, O, NR⁴,

5 Y is

CH₃, (CH₂)_n, where n = 0, 1 or 2,

Z is

hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy andR⁴ is10 hydrogen or C₁-C₄-alkyl and is a single bond or a double bond.7. A method for controlling fungi, which comprises
treating the fungi or the materials, plants, seeds or the
ground threatened by fungal attack with a fungicidally
active amount of a compound of the formula I

where

A is

CH₂, CHCl, CH-C₁-C₄-alkyl, CH-O-C₁-C₄-alkyl, CH-S-C₁-C₄-alkyl, N-O-C₁-C₄-alkyl,

B is

5 OH, C₁-C₄-alkoxy, C₁-C₄-alkylthio and C₁-C₄-alkylamino,
U, V and W

are identical or different and are hydrogen, halogen,
C₁-C₄-alkyl or C₁-C₄-alkoxy,

R¹, R² and R³

10 are identical or different and are hydrogen, cyano,
halogen, NR⁴R⁵, CO₂R⁴, CONR⁴R⁵, COR⁴, S(O)_nR⁴ where n = 0, 1
or 2, PO(OR⁴)₂, unbranched or branched C₁-C₁₀-alkyl, C₁-C₄-
haloalkyl, C₁-C₆-cycloalkyl, C₁-C₆-halocycloalkyl, C₁-C₆-
cycloalkyl-C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄-

15 alkylthio-C₁-C₄-alkyl, arylthio-C₁-C₄-alkyl, C₂-C₆-alkenyl,
C₂-C₆-haloalkenyl, C₃-C₆-cycloalkenyl, C₃-C₆-halocyclo-
alkenyl, C₂-C₆-alkynyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy,
C₁-C₄-alkylthio, benzylthio, C₁-C₄-alkylcarbonyl,

unsubstituted or substituted phenylcarbonyl,

20 unsubstituted or substituted benzylcarbonyl, C₁-C₄-
alkoxycarbonyl, unsubstituted or substituted
phenoxy carbonyl, unsubstituted or substituted
benzyloxycarbonyl, unsubstituted or substituted aryl,
unsubstituted or substituted aryloxy, unsubstituted or
substituted arylthio, unsubstituted or substituted aryl-

25 C₁-C₄-alkyl, unsubstituted or substituted aryl-C₂-C₄-
alkenyl, unsubstituted or substituted aryloxy-C₁-C₄-alkyl,
unsubstituted or substituted arylthio-C₁-C₄-alkyl, unsub-

30 stituted or substituted hetaryl, unsubstituted or substi-
tuted hetaryl, unsubstituted or substituted hetaryl-
thio, unsubstituted or substituted heteroaryl-C₁-C₄-alkyl,

unsubstituted or substituted hetaryl-C₂-C₄-alkenyl,
unsubstituted or substituted hetaryl, unsubstituted or substi-

35 tuted heterocyclyloxy,
where unsubstituted or substituted, in addition to
hydrogen, includes the radicals halogen, cyano, nitro,

C_1-C_4 -alkyl, C_1-C_4 -alkoxy, C_1-C_4 -haloalkyl, C_1-C_4 -haloalkoxy, C_1-C_{10} -alkoximino- C_1-C_2 -alkyl, aryl, aryloxy, benzyloxy, hetaryl, hetaryloxy, C_3-C_6 -cycloalkyl, heterocyclyl, heterocyclxyloxy,

5 and the radicals

R^4 and R^5

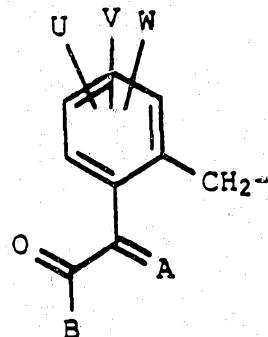
are identical or different and are hydrogen or C_1-C_4 -alkyl,

10 R^1 and R^3 together, and also R^2 and R^3 together, in each case can form a carbocyclic or a heterocyclic ring which can in turn be benzo-fused and can be substituted by the radical mentioned under unsubstituted or substituted, where, inter alia, the following ring systems A - F are possible:

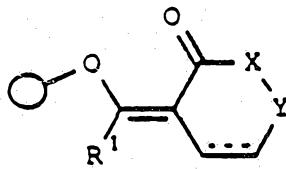
15 the symbol



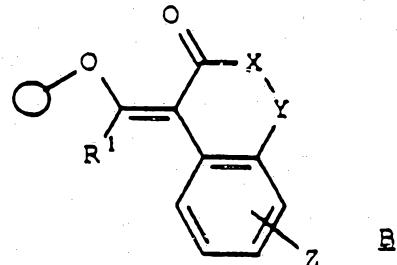
is the group

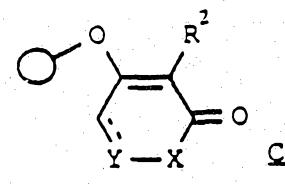


in the following

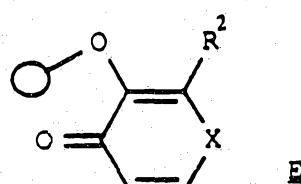
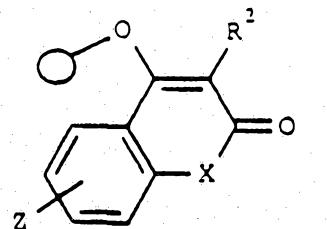


or

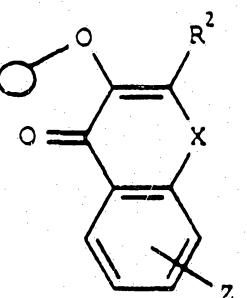




or



or



where

X is

5 CH₂, O, NR⁴,

Y is

CH, (CH₂)_n, where n = 0, 1 or 2,

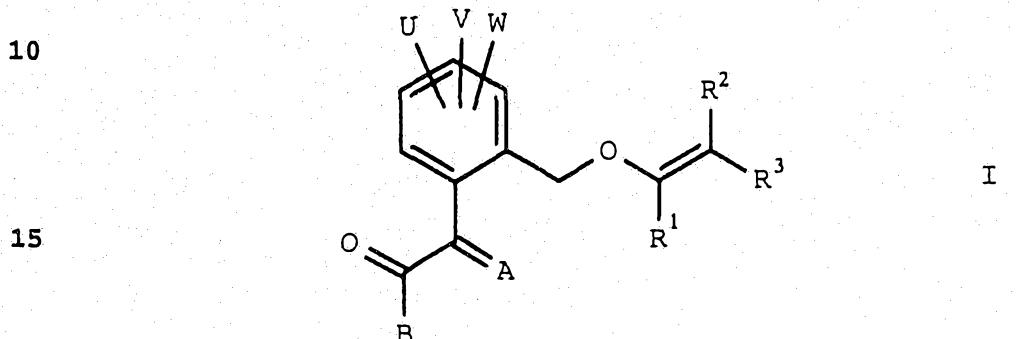
Z is

hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-alkoxy and10 R⁴ ishydrogen or C₁-C₄-alkyl and is a single bond or a double bond.8. A compound of the formula I as claimed in claim 1, wherein A is CHOCH₃, B is OCH₃, U, V, W and R¹ are hydrogen, R² is cyano and R³ is 2-fluorophenyl.9. A compound of the formula I as claimed in claim 1, wherein A is CHOCH₃, B is OCH₃, U, V, W and R¹ are hydrogen, R² is cyano and R³ is 4-methylphenyl.10. A compound of the formula I as claimed in claim 1, wherein A is NOCH₃, B is OCH₃, U, V, W and R¹ are hydrogen, R² is cyano and R³ is 2-fluorophenyl.DATED this 28th day of April 1993.
BASF AKTIENGESELLSCHAFT

Novel benzyl enol ethers and their use as crop protection agents

5 ABSTRACT OF THE DISCLOSURE:

Benzyl enol ether derivatives of the general formula I



20 where

A

is CH_2 , CHCl , CH-alkyl , CH-O-alkyl , CH-S-alkyl or N-O-alkyl ,

25 B

is OH , alkoxy , alkylthio and alkylamino ,

U, V and W

are identical or different and each is hydrogen, halogen,

30 alkyl or alkoxy,

R^1 , R^2 and R^3

are identical or different and each is hydrogen, cyano, halogen, amino, ester, amide, acyl, $\text{S}(\text{O})_n\text{R}^4$, $\text{PO}(\text{OR}^4)_2$, alkyl,

35 haloalkyl, cycloalkyl, halocycloalkyl, cycloalkyl-alkyl, alkoxy-alkyl, alkylthio-alkyl, arylthio-alkyl, alkenyl, haloalkenyl, cycloalkenyl, halocycloalkenyl, alkynyl, alkoxy, haloalkoxy, alkylthio, benzylthio, alkylcarbonyl, substituted or unsubstituted phenylcarbonyl, substituted or unsubstituted benzylcarbonyl, alkoxy carbonyl, substituted or unsubstituted phenoxy carbonyl, substituted or unsubstituted benzyloxycarbonyl, substituted or unsubstituted aryl, substituted or unsubstituted aryloxy, substituted or unsubstituted

tuted arylthio, substituted or unsubstituted arylalkyl, substituted or unsubstituted arylalkenyl, substituted or unsubstituted aryloxyalkyl, substituted or unsubstituted arylthioalkyl, substituted or unsubstituted hetaryl, substituted 5 or unsubstituted hetaryloxy, substituted or unsubstituted hetarylthio, substituted or unsubstituted heteroarylalkyl, substituted or unsubstituted hetarylalkenyl, substituted or unsubstituted hetaryloxyalkyl, substituted or unsubstituted heterocyclyl or substituted or unsubstituted heterocycl-
10 loxy,

and

R^4

15 is hydrogen or C_1-C_4 -alkyl,

R^1 and R^3 together, and R^2 and R^3 together, may form a carbocyclic or heterocyclic ring which in turn can be benzo-fused and can be substituted, and fungicides containing these com-
20 pounds.

25

30

35

40