

Title (en)
CIS-ALKOXYSPIROCYCLIC BIPHENYL-SUBSTITUTED TETRAMIC ACID DERIVATIVES

Title (de)
CIS-ALKOXYSPIROCYCLISCHE BIPHENYLSUBSTITUIERTE TETRAMSÄURE-DERIVATE

Title (fr)
DÉRIVÉS D'ACIDE TÉTRAMIQUE CIS-ALCOXYSPIROCYCLIQUES SUBSTITUÉS PAR LE BIPHÉNYLE

Publication
EP 2114880 A1 20091111 (DE)

Application
EP 07856208 A 20071122

Priority
• EP 2007010102 W 20071122
• DE 102006057037 A 20061204

Abstract (en)

[origin: DE102006057037A1] Cis-alkoxy Spirocyclic biphenyl-substituted acid derivatives (I), are new. Cis-alkoxy Spirocyclic biphenyl-substituted acid derivatives of formula (I), are new. X : halo, (halo)alkyl or (halo)alkoxy; Z : optionally substituted fluorophenyl; W 1>, Y 1> : X or H; A : alkyl; G : H, -CO=R 1>, -C(=L)-M-R 2>, -SO 2-R 3>, -P(=L)(R 4>)(R 5>), E or -C(=L)-N(R 6>)(R 7>); E : a metal ion or an ammonium ion; L, M : O or S; R 1> : optionally halo substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, polyalkoxyalkyl or optionally halo, alkyl or alkoxy substituted cycloalkyl, which is interrupted by at least a heteroatom, optionally substituted phenyl(alkyl), hetaryl, phenoxyalkyl or hetarylalkyl; R 2> : optionally halo substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl or optionally substituted cycloalkyl, phenyl or benzyl; R 3>-R 5> : optionally halo substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio, cycloalkylthio or optionally substituted phenyl, benzyl, phenoxy or phenylthio; and either R 6>, R 7> : H, optionally halo substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, optionally substituted phenyl or benzyl; or NR 6>R 7> : a ring (optionally interrupted by O or S). Independent claims are included for: (1) the preparation of (I); (2) an agent containing (I) and at least a compound for improving the compatibility of the culture plants, comprising e.g. 4-dichloroacetyl-1-oxa-4-aza-spiro[4.5]-decane, 1-dichloroacetyl-hexahydro-3,3,8a-trimethylpyrrolo[1,2-a]-pyrimidin-6(2H)-one, 4-dichloroacetyl-3,4-dihydro-3-methyl-2H-1,4-benzoxazine, 3-(2-chloro-benzyl)-1-(1-methyl-1-phenyl-ethyl)-urea, ~a-(cyanomethoximino)-phenylacetone nitrile, 2,4-dichloro-phenoxy acetic acid, 4-(2,4-dichloro-phenoxy)-butyric acid, 1-(1-methyl-1-phenyl-ethyl)-3-(4-methyl-phenyl)-urea, 3,6-dichloro-2-methoxy-benzoic acid, 2,2-dichloro-N,N-di-2-propenyl-acetamide, 4,6-dichloro-2-phenyl-pyrimidine, 4-chloro-N-(1,3-dioxolan-2-yl-methoxy)-~a-trifluoro-acetophenoxime, ethyl-4,5-dihydro-5,5-diphenyl-3-isoxazolcarboxylate, 1-(ethoxycarbonyl)-ethyl-3,6-dichloro-2-methoxybenzoate, (4-chloro-o-tolylloxy)-acetic acid, 2-(4-chloro-o-tolylloxy) -propionic acid, 5-chloro-quinoxalin-8-oxy-acetic acid-allylester, 5-chloro-quinolin-8-oxy-acetic acid, compounds of formula (IIa) or (IIb), 1-[4-(N-2-methoxybenzoylsulfamoyl)-phenyl]-3-methyl-urea, keto-amine compound of formula (R 16>-CO-N(R 17>)(R 18>)) or a phenyl-sulfur dioxide compound of formulae (IIc) or (IId); (3) a composition comprising (I) and at least a salt of formula ([R 29>-D +>)(R 26>)(R 27>)(R 28>)] nR 30>(n-) (IIIa); (4) a procedure for the manufacture of pesticides and/or herbicides comprising mixing (I) with a diluting agent and/or surface active materials; and (5) a procedure for increasing the effect of pesticide and/or herbicide containing an active agent of (I) comprising preparing an used agent (syringe broth) using (IIIa). R 16> : F, Cl and/or Br substituted 1-4C alkyl; either R 17> : H, optionally F, Cl and/or Br substituted 1-6C alkyl, 2-4C alkenyl or 2-4C alkynyl, 1-4C alkoxy-1-4C alkyl, dioxolanyl-1-4C alkyl, furyl, furyl-1-4C alkyl, thienyl, thiazolyl, piperidinyl, or optionally F, Cl and/or Br or 1-4C alkyl substituted phenyl; and R 18> : H, optionally F, Cl and/or Br substituted 1-6C alkyl, 2-6C alkenyl or 2-6C alkynyl, 1-4C alkoxy-1-4C alkyl, dioxolanyl-1-4C alkyl, furyl, furyl-1-4C alkyl, thienyl, thiazolyl, piperidinyl, or optionally F, Cl and/or Br or 1-4C alkyl substituted phenyl; or R 17>R 18> : at least two substituents of 1-4C alkyl, phenyl, furyl or annealed benzene ring; or CR 17>R 18> : 5-6-membered ring or 2-5C oxaalkandiyl; R 22>, R 23> : H or 1-4C alkyl; R 24> : H, optionally cyano, halo or 1-4C alkoxy substituted 1-6C alkyl, 1-6C alkoxy, 1-6C alkylthio, 1-5C alkylamino or di-(1-4C alkyl)-amino, or optionally cyano, halogen or 1-4C alkyl substituted 3-6C cycloalkyl, 3-6C cycloalkyloxy, 3-6C cycloalkylthio or 3-6C cycloalkylamino; R 25> : H, 1-6C alkyl (optionally substituted by CN, OH, halo or 1-4C alkoxy), 3-6C alkenyl or 3-6C alkynyl (both optionally substituted by CN or halo), or 3-6C cycloalkyl (optionally substituted by CN, halo or 1-4C alkyl); X 4>, X 5> : NO 2, cyano, carboxy, carbamoyl, formyl, sulfamoyl, OH, amino, halo, 1-4C alkyl, 1-4C haloalkyl, 1-4C alkoxy or 1-4C haloalkoxy; R 26>-R 29> : H or optionally substituted 1-8C alkyl or unsaturated, optionally substituted 1-8C alkylene, where the substituents are halo, nitro or cyano; R 30> : an inorganic or organic anion; n : 1-4; v, t : 0-5; m : 0-5; A 1> : a group of formula (i)-iv); n1 : 0-5; A 2> : 1 or 2 C alkanediyl (optionally substituted by 1-4C alkyl, 1-4C alkoxy, carbonyl or 1-4C alkenyloxy); R 14> : OH, SH, amino, 1-6C alkoxy, 1-6C alkylthio, 1-6C alkylamino or di-(1-4C alkyl)amino; R 15> : OH, SH, amino, 1-7C alkoxy, 1-6C alkenyloxy, 1-6C alkenyloxy-1-6C alkoxy, 1-6C alkylthio, 1-6C alkylamino or di-(1-4C alkyl)amino; R 19> : H, CN, halo or 1-4C alkyl, 3-6C cycloalkyl or phenyl (all optionally substituted by OH, CN, halo or 1-4C alkoxy); R 20> : H or 1-6C alkyl, 3-6C cycloalkyl or tri(1-4C alkyl)silyl (all optionally substituted by OH, CN, halo or 1-4C alkoxy); R 21> : H, CN, halo or 1-4C alkyl, 3-6C cycloalkyl or phenyl (all optionally substituted by F, Cl or Br); X 1> : NO 2, CN, halo, 1-4C alkyl, 1-4C haloalkyl, 1-4C alkoxy or 1-4C haloalkoxy, and X 2>, X 3> : H, CN, NO 2, halo, 1-4C alkyl, 1-4C haloalkyl, 1-4C alkoxy or 1-4C haloalkoxy. [Image] [Image] ACTIVITY : Herbicide; Pesticide; Antiparasitic; Insecticide; Plant Protectant. MECHANISM OF ACTION : None given.

IPC 8 full level
C07D 209/54 (2006.01); **A01N 43/36** (2006.01)

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