Title (en)

ACTIVE INGREDIENT COMBINATIONS HAVING INSECTICIDAL AND ACARICIDAL PROPERTIES

Title (de)

WIRKSTOFFKOMBINATIONEN MIT INSEKTIZIDEN UND AKARIZIDEN EIGENSCHAFTEN

Title (fr)

ASSOCIATIONS DE PRINCIPES ACTIFS À PROPRIÉTÉS INSECTICIDES ET ACARICIDES

Publication

EP 2203062 A2 20100707 (DE)

Application

EP 08785847 A 20080909

Priority

- EP 2008007347 W 20080909
- EP 07116915 A 20070921
- EP 08785847 A 20080909

Abstract (en)

[origin: EP2039248A1] Active agent combination (A) comprises at least one 3-phenyl-1-aza-spiro[4.5]dec-3-en-2-one compound (I), and one or more insecticidal and/or acaricidal compounds (II), preferably e.g. acetyl cholinesterase inhibitor (preferably alanycarb or aldicarb); (b) gamma -aminobutyric acid controlled chloride channel antagonists (preferably camphechlor or chlordane); (c) sodium channel-modulator/voltage-dependent sodium channel blocker (preferably acrinathrin, or bifenthrin); (d) nicotine acetylcholine-receptor-agonist/-antagonist (preferably acetamiprid or clothianidin). Active agent combination (A) comprises at least one 3-phenyl-1-aza-spiro[4.5]dec-3-en-2-one compound of formula (I), and one or more insecticidal and/or acaricidal compounds (II), preferably (a) acetyl cholinesterase inhibitor (which is: carbamate, preferably e.g. alanycarb, aldicarb, aldoxycarb, allyxycarb, aminocarb, bendiocarb, bufencarb, butacarb, carbaryl, carbofuran or carbosulfan, or organophosphate, e.g. preferably acephate, butathiofos, cadusafos, chlorethoxyfos, chlormephos, dialifos, diazinon, formothion or iprobenfos); (b) gamma -aminobutyric acid controlled chloride channel antagonists (e.g. organochlorine, camphechlor, chlordane, endosulfan, gamma -hexachlorocyclohexane, fiprole, acetoprole, ethiprole, fipronil, pyrafluprole, pyriprole or vaniliprole); (c) sodium channel-modulator/voltage-dependent sodium channel blocker (which is pyrethroide, preferably e.g. acrinathrin, beta -cyfluthrin, bifenthrin, bioallethrin, bioresmethrin, chlovaporthrin, clocythrin, cycloprothrin or tralomethrin); (d) nicotine acetylcholine-receptor-agonist/-antagonist (preferably e.g. acetamiprid, clothianidin, dinotefuran, imidacloprid, imidaclothiz, nitenpyram, nithiazine, thiacloprid or nicotine); (e) allosteric acetylcholine-receptor-modulator (agonist) (preferably spinosad or spinetoram); (f) chloride channel activator (which is mectine/macrolide, preferably abamectin, emamectin, emamectin-benzoate, ivermectin, lepimectin, milbemectin, juvenile hormone analogue, hydroprene, kinoprene, methoprene, epofenonane, triprene, fenoxycarb, pyriproxifen or diofenolan); (g) active agents with unknown or non-specific active mechanisms (which are: gassing agent (preferably methyl bromide, chloropicrin, sulfuryl fluoride), selective grub inhibitor (preferably cyrolite, pymetrozine or flonicamid) or mite growth inhibitor (preferably clofentezine, hexythiazox or etoxazole), inhibitors of oxidative phosphorylation, or ATP-disruptor (preferably diafenthiuron, organotin compounds (which are azocyclotin, cyhexatin or fenbutatin-oxide), propargite or tetradifon); (h) decoupler of the oxidative phoshorylation through interruption of the H-proton gradient (which is binapacryl, dinobuton or dinocap); (i) microbial disruptors of insect intestinal membrane (preferably Bacillus thuringiensisphyla), (j) inhibitors of chitin biosynthesis (preferably e.g. benzoylurea, bistrifluron, chlorfluazuron, diflubenzuron or buprofezin); (k) skin troubling active agents (preferably cyromazine), ecdyson agonist/disruptors (preferably e.g. diacylhydrazine, chromafenozide, halofenozide, tebufenozide or azadirachtin); (l) octopaminergic agonist (preferably amitraz); (m) side-III-electron transport inhibitor/side-II-electron transport inhibitor (preferably hydramethylnon, acequinocyl, fluacrypyrim, cyflumetofen or cyenopyrafen); (n) electron transport inhibitor (preferably side-I electron transport inhibitor, preferably e.g. fenazaquin, fenpyroximate, pyrimidifen, tolfenpyrad or rotenone)); (o) voltage dependent sodium channel blocker (preferably indoxacarb or metaflumizone); (p) fatty acid biosynthesis inhibitor, tetronic acid derivative (preferably spirodiclofen or spiromesifen), tetramic acid derivative (preferably spirotetramate); (q) neuronal inhibitor with unknown active mechanisms (preferably bifenazate); (r) ryanodin receptor effectors (preferably e.g. fluben diamide or rynaxapyr); and (s) active agents with unknown active mechanisms (preferably e.g. benclothiaz, benzoximate, buprofezin or dicofol). W 1>H, alkyl, alkenyl, alkynyl, halo, alkoxy, haloalkyl, haloalkoxy or CN; X : halo, alkyl, alkenyl, alkynyl, alkoxy, haloalkyl, haloalkoxy, nitro or CN; Y 1>, Z : H, alkyl, alkenyl, alkynyl, alkoxy, halo, haloalkyl, haloalkoxy, CN or nitro; AB 1>C : 5 or 7 membered ketal, thioketal or dithioketal (all: optionally substituted by alkyl, haloalkyl, alkoxy, alkoxyalkyl or optionally substituted phenyl, and optionally interrupted by heteroatoms); G : H, -C(=O)-R 1>, -C(=L)-M-R 2>, -SO 2-R 3>, -P(=L)(R 4>)(R 5>), (E), -C(=L)-N(R 6>)(R 7>); E : metal ion or ammonium ion; R 1>alkyl, alkenyl, alkoxyalkyl or alkylthioalkyl (all optionally substituted by halo or CN), or alkyl, alkoxy or cycloalkyl (all optionally substituted by halo), phenyl, phenylalkyl, hetaryl, phenoxyalkyl or hetaryloxyalkyl (all optionally substituted) or polyalkoxyalkyl; R 2>alkyl, alkenyl, alkoxyalkyl or polyalkoxyalkyl (all optionally substituted by halo or CN), cycloalkyl (optionally substituted), phenyl or benzyl; R 3>-R 5>alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio or cycloalkylthio (all optionally by halo), phenyl, benzyl, phenoxy or phenylthio (all optionally substituted); either R 6>, R 7>alkyl, cycloalkyl, alkenyl, alkoxy or alkoxyalkyl (all optionally substituted by halo or CN), phenyl or benzyl (both optionally substituted) or H; or NR 6>R 7>cycle (optionally substituted by O or S); and L, M : O or S. [Image] ACTIVITY : Antiparasitic; Insecticide; Arthropodicide; Nematocide; Antimicrobial; Pesticide; Acaricide; Fungicide; Antibacterial; Virucide. MECHANISM OF ACTION : None given.

IPC 8 full level

A01N 43/90 (2006.01); **A01N 37/40** (2006.01); **A01N 37/42** (2006.01); **A01N 37/52** (2006.01); **A01N 41/10** (2006.01); **A01N 43/22** (2006.01); **A01N 43/36** (2006.01); **A01N 43/38** (2006.01); **A01N 43/58** (2006.01); **A01N 43/68** (2006.01); **A01N 43/707** (2006.01); **A01N 47/02** (2006.01); **A01N 47/38** (2006.01); **A01N 47/40** (2006.01); **A01N 51/00** (2006.01); **A01N 53/00** (2006.01); **A01N 61/00** (2006.01); **A01P 7/02** (2006.01); **A01P 7/04** (2006.01)

CPC (source: EP US)

A01N 43/38 (2013.01 - EP US); **A01N 43/90** (2013.01 - EP US)

Citation (search report)

See references of WO 2009039951A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2039248 A1 20090325; AR 068624 A1 20091125; AU 2008303913 A1 20090402; BR PI0814851 A2 20140930; BR PI0814851 B1 20180410; CA 2700036 A1 20090402; CL 2008002694 A1 20100212; CN 101801196 A 20100811; CO 6260018 A2 20110322; EP 2203062 A2 20100707;

JP 2010539203 A 20101216; KR 20100069682 A 20100624; MA 31708 B1 20100901; MX 2010002285 A 20100322; PE 20091189 A1 20090802; TW 200922471 A 20090601; US 2010311677 A1 20101209; WO 2009039951 A2 20090402; WO 2009039951 A3 20091223

DOCDB simple family (application)

EP 07116915 A 20070921; AR P080104018 A 20080916; AU 2008303913 A 20080909; BR PI0814851 A 20080909; CA 2700036 A 20080909; CL 2008002694 A 20080910; CN 200880108080 A 20080909; CO 10023428 A 20100226; EP 08785847 A 20080909; EP 2008007347 W 20080909; JP 2010525232 A 20080909; KR 20107008117 A 20080909; MA 32706 A 20100319; MX 2010002285 A 20080909; PE 2008001587 A 20080911; TW 97135914 A 20080919; US 67924208 A 20080909