Compositions comprising at least one multi-site fungicide; at least one acylalanine fungicide; and an excipient useful for controlling fungal diseases

Original Title: *Fungicidal composition*

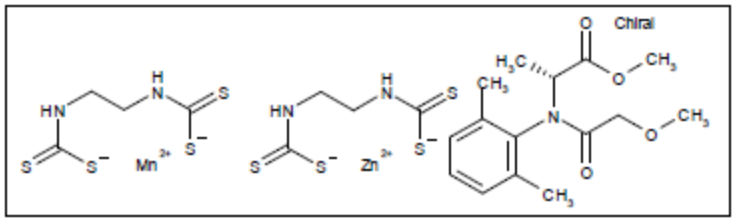
Action: Formulation, Fungicide
Target: Elsinoe ampelina, Plasmopara viticola
Class: Alkylene, Dithiocarbamate, Zinc, Acylalanine

Novelty: A fungicidal composition comprising at least one multi-site fungicide; at least one acylalanine fungicide; and at least an agrochemically acceptable excipient, useful for controlling fungal diseases, is claimed, wherein the composition is a water dispersible granule. A fungicidal composition comprising a dithiocarbamate fungicide; an acylalanine fungicide; a dispersant; an emulsifier; a wetting agent; and optionally an excipient, is further claimed. The composition exhibits good physicochemical stability.

Biology: The specified combination at a dose of 64% + 3.9% WG at 0.30% g/ha showed 71.82% reduction in Downy Mildew disease over control, and at 3000 g/ha showed 82.90% reduction of Anthracnose disease and at 0.30% g/ha applicatio showed 46.53% increase in fruit yield over control, in grape plants (example 3, pages 30-36; tables 4-7).

Chemistry: An exemplified compositin comprises (in % w/w) Mancozeb (64), Metalaxyl-M (3.9), sodium ligno sulphonate (9), Sodium Di isopropyl naphthalene sulphonate (1.5), Sulphated Polyarylphenol Ethoxylate, Ammonium salt (0.5), aqueous mulsion with Polysiloxane and Emulsifier (0.5) and aluminium silicate. Also in a physicochemical stability test, the content of Metalaxyl on days 0 and 30 months were 41.8 and 39.4 g/kg, respectively and Mancozeb ws 642.1 and 632.3 g/kg, respectively, with suspensibility of 93.6 and 84.4% w/w, respectively and maximum persistent foam (in mL after 1 min) were 4 and 15, respectively (example 2, page ; tables 2 and 3). The specified combination comprises mancozeb and metalaxyl-M (claim 22, page 40), which is one of two combinations specifically claimed for use in the composition.

Structure:



Inventors: Sapkale, Pradeep; Oltikar, Vikas

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 24-FEB-2023, IN 202321012658

Filing: 23-FEB-2024, 2024IN50198
Pages: 49
Language: English
IDdb Ref PA15289476

Composition comprising cyprodinil and a lactose-based filler useful for controlling or preventing phytopathogenic fungi

Original Title: *Composition comprising cyprodinil and lactose-based filler*

Action: Formulation, Fungicide
Target: Monilinia, Botrytis, Fungus
Class: Pyrimidine, Anilinopyrimidine, Amine

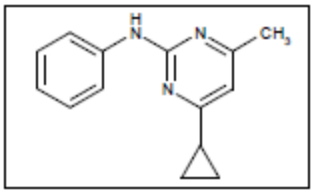
Novelty: A composition comprising cyprodinil and a lactose-based filler, a process for thier preparation, and their use for controlling or preventing phytopathogenic diseases, especially phytopathogenic fungi (eg *Botrytis* and *Monilinia*), on useful plants or on propagation material, are claimed, wherein the composition comprises no or substantially no microplastics and composition is in the form of water-dispersible granules (WG). The composition is further claimed to comprise fludioxinil and dispersants. The composition provides effective dispersibility upon mixing with water and good suspension stability in the medium term.

Biology: No biological data are presented.

Chemistry: A specified composition comprises the specified compound (50), naphthalenesulfonic acid, sodium salt condensed with formaldehyde (5), sodium lignosulfonate (2), silicone antifoam powder water dispersible (2) and lactose cryst. monohydrate (41). The composition showed Wet sieve residue in initial and after storage to be both of 0.01%, suspensibility in initial and after storage to be 98 and 94%, respectively, with no leaf residue in the initial stage (composition 1, pages 16 and 17; table 1). The specified compound, cyprodinil (claim 1, page 22) is the only compound specifically claimed for use in the composition.

Comment: *The second applicant is Syngenta Crop Protection AG.*

Structure:



Inventors: Tsoutsoura, Aikaterini; Goekcinar, Yavuz; De Monaco, Gaetano

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 22-AUG-2024
Priority: 14-FEB-2023, GR 2023100116

Filing: 07-FEB-2024, 2024EP52980
Pages: 27
Language: English
IDdb Ref PA15272937

Stable agrochemical composition comprising isoxazoline herbicides, triazinone herbicides and anionic surfactants useful for controlling weeds

Original Title: *Stable agrochemical composition*

Action: Formulation, Herbicide
Target: Phalaris minor
Class: Triazinone, Isoxazoline

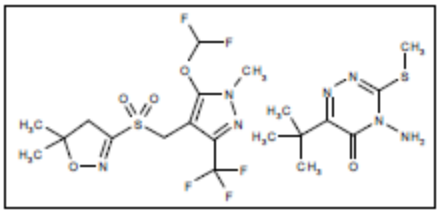
Novelty: A herbicidal composition comprising isoxazoline herbicides, triazinone herbicides, at least two anionic surfactants and an excipient is claimed. Also claimed is a water-dispersible granular (WG) composition comprising pyroxasulfone, metribuzin, two anionic surfactants, one disintegrating agent, and excipient. Further claimed is a process for their preparation and their use for controlling weeds. The composition is disclosed to exhibit good stability.

Biology: The specified combination in the form of 33.75% WG applied at the AI rate of 337.5 and 405 g/ha showed 88 and 92% control of *Phalaris minor*, respectively, both 30 and 45 days after application (example 5, pages 37 and 38; table 3).

Chemistry: The specified composition comprises (in % w/v) the specified combination (13.2 + 22), sodium diisopropylene naphthalene sulfonate (3), naphthalene-formaldehyde condensate sodium (6), sodium lignosulfonate (3) and ammonium sulfate (QS). The composition remained as brown colored granules and showed good stability even after storing at accelerated conditions ie at 54 °C for about 2 weeks (example 4, pages 36 and 37; table 2). The specified combination comprises pyroxasulfone (claim 2, page 39), which is one of two isoxazoline herbicides, and metribuzin (claim 3, page 39), which is one of seven triazinone herbicides specifically claimed for use in the composition.

Comment: *Also see WO2024134674.*

Structure:



Inventors: Saini, Anil; Mukherjee, Dev Varta; Shirsat, Rajan Ramakant

Coverage: ***156 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Filing: 19-DEC-2023, 2023IB62909
Pages: 46
Language: English
IDdb Ref PA15135988

Synergistic combination comprising of metsulfuron methyl, fluroxypyr meptyl, and pinoxaden useful as herbicides

Original Title: *Novel herbicidal combination*

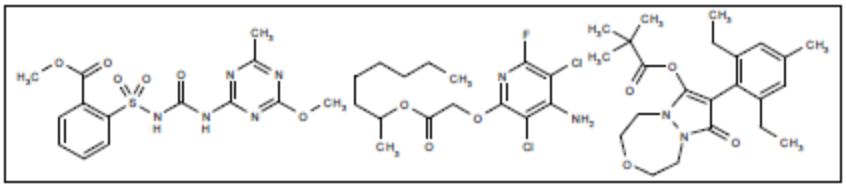
Action: Formulation, Herbicide, Synergist
Target: Phalaris minor, Malva parviflora, Rumex dentatus, Melilotus alba
Class: Carboxylic acid, Pyridine, Sulfonyl urea, Triazine, Benzoic acid

Novelty: A synergistic herbicidal composition comprising of metsulfuron methyl, fluroxypyr meptyl, and pinoxaden, is claimed, wherein the composition is formulated as water dispersible granules (WDG) form. The composition is further claimed to comprise agrochemical additives, eg wetting agent, a dispersing agent, a defoamer, an anti-caking agent, a co-filler, and a filler. The combination exhibits a synergistic effect, with an improved stability and ready to use composition, having superior bioefficacy compared to the individual formulations. The composition is disclosed to be useful for controlling undesired plants or inhibiting their growth.

Biology: The specified combination (0.5 + 15 + 5% WDG) (164 gah) showed expected/observed control of 81.93/85, 89.2/95, 97/100 and 95.72/100% against *Phalaris minor*, *Malva parviflora*, *Melilotus alba* and *Rumex dentatus*, respectively (example 2, pages 16-20; tables 6 and 7).

Chemistry: An exemplified composition comprises the specified combiantion (0.5 + 15 + 5), alkyl naphthalene sulfonate (5), sodium salt of naphthalene sulfonate condensate (2), silicone antifoam emulsion (0.5), silicon dioxide (1), ammonium sulphate (15) and china clay (example 1, pages 12 and 13; table 1). The specified compounds, metsulfuron methyl, fluroxypyr meptyl, and pinoxaden (claim 1, page 21) are the three compounds specifically claimed for use in the combination.

Structure:



Inventors: Islam, Aminul; Bhavani, Balram; Pawar, Kiran; Nikumbhe, Sagar; Edoliya, Rajul; Trivedi, Rajan Kumar; Patil, Sanket

Coverage: ***156 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 01-DEC-2022, IN 202241069429

Filing: 29-NOV-2023, 2023IB61998
Pages: 25
Language: English
ID*db* Ref PA15079590

Synergistic composition comprising picoxystrobin and thiophanate methyl useful as fungicides

Original Title: *Synergistic fungicidal composition comprising picoxystrobin and thiophanate methyl and method related thereto*

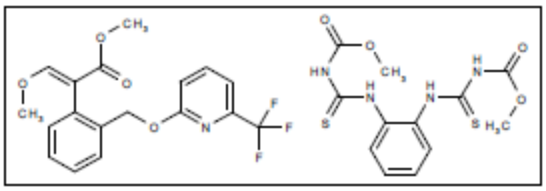
Action: Formulation, Fungicide, Synergist
Target: Rice blast, Rice sheath blight, Rhizoctonia solani
Class: Pyridine, Strobilurin, Methoxyacrylate, Thiophanate

Novelty: A synergistic fungicidal composition including picoxystrobin, thiophanate methyl, a non-ionic silicone surfactant, an agriculturally accepted excipient/acceptable carrier, is claimed, wherein the composition formulated as a dry flowable (DF) or a wettable powder (WP) or Water Dispersible Granule (WG) or Suspension Concentrate (SC) or Suspo Emulsion. The composition is further claimed to comprise a dispersant, wetting agent, thickener, anti-foaming agent and/or a suspending agent. A method for preparation of the synergistic water dispersible granule pesticidal composition, is also claimed. The combination exhibits a synergistic effect and provide increased storage stability; improved stability to light; good degradability; good crop yields, increase in plant height, bigger leaf blade, less dead basal leaves, stronger tillers, greener leaf color, less fertilizers needed, more productive tillers, earlier flowering, less plant pour (lodging), increased shoot growth and improved plant vigor.

Biology: The specified combination (500 + 150 gai/ha) showed observed/expected control on Paddy blast, sheath blight and grain discoloration to be 77.06/74.28%, 66.20/58.42% and 80.09/72.44%, respectively; also, the specified compostion showed values of 79.46/66.86, 74.66/54.53 and 83.31/69.18%, respectively (pages 24-27; tables 2 and 3).

Chemistry: A specified composition comprises the specified combination (50 + 10 gai/ha), sodium naphthalene sulfonate (2), lauryl alcohol sulfate (2), naphthalene sulfonate condensate sodium salt (8), polydimethyl siloxane (3), Siloxane Polyalkyeneoxide Copolymer and Polyalkyleneoxide (2), and lavigated micronized china clay (QS to make 100%) (example 1, pages 22-24; table 1). The specified combination comprises picoxystrobin, thiophanate methyl (claim 1, page 29), which is the only combination specifically claimed for use.

Structure:



Inventors: Nath, Navin; Sarkar, Aniruddha

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 23-MAY-2024
Priority: 17-NOV-2022, IN 202211065880

Filing: 17-NOV-2023, 2023IB61628
Pages: 34
Language: English
IDdb Ref PA15038846

Water dispersible granule compositions comprising a benzohydrazide compound and other acrive agents useful for controlling or preventing fungal growth

Original Title: *Water dispersible granule acylhydrazone apyrase inhibitor formulation*

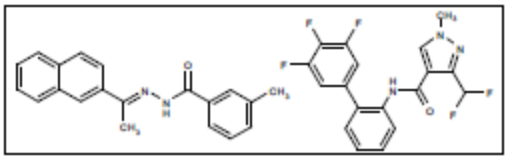
Action: Formulation, Fungicide, Synergist
Target: Zymoseptoria tritici, Botrytis cinerea, Phakopsora pachyrhizi, Puccinia triticina
Class: Hydrazide, Naphthalene

Novelty: A water-dispersible granule, comprising particles of a first agriculturally active compound, a dispersant, a dust suppressant, binding agent and an emulsion of silicone oil is claimed, wherein the particles of the first active compound have a volume-weighted median particle size ranging from greater than 0.01 microns to 20 microns. A composition comprising the water-dispersible granule and an active agent is also claimed. Methods for controlling or preventing fungal growth by using the composition are also claimed. A method for making a dispersion comprising the water-dispersible granule is further claimed. It is stated that the compositions provide synergistic fungicidal activity against plant pathogenic fungi.

Biology: A test was performed to investigate the influence of particle size on the efficacy of specified aqueous suspension concentrates containing NGXT-1915 in combination with commercial fungicides against four pathogenic fungi, such as *Zymoseptoria tritici*, *Phakopsora pachyrhizi*, *Puccinia triticina* and *Botrytis cinerea*. Across pathogens, synergy levels varied with Imtrex when combined with different particle sizes: A1 (1.0 microns), B7 (7.0 microns), and C15 (15 microns). A1 For *Z tritici* and *B cinerea*, A1 showed a synergy of 28% and 18% respectively. Against *P pachyrhizi*, A1 exhibited a synergy of 30%, and against *P triticina,* it showed a synergy of 29% (example 4, pages 30-32). No biological data are presented for specifically claimed combination.

Chemistry: The preparation of the specified composition comprising the specified compound having a particle size below 1 .5 microns median diameter is described. Subsamples undergo storage at varied temperatures and periodic evaluation for pH, appearance, dispersibility, and suspension stability, aiming for a formulation with excellent handling, physical stability, and biological efficacy akin to aqueous suspensions featuring similarly sized particles (example 1, page 29). The specified compounds (E)-3-methyl-N'-(1-(naphthalen-2-yl)ethylidene)benzohydrazide (page 7; claim 1, page 71) which is the only first active compound and fluxapyroxad (claim 43, page 76) which is one of several fungicides specifically claimed for use in the combination.

Structure:



Inventors: Fowler, Jeffrey D.; Hiebert, Simon

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Filing: 26-OCT-2023, 2023US36032
Pages: 82
Language: English
IDdb Ref PA15001075

Water dispersible granule composition comprising bixlozone; a wetting agent; a dispersant; and a carrier useful for controlling undesirable vegetation

Original Title: *Bixlozone water dispersible granule compositions*

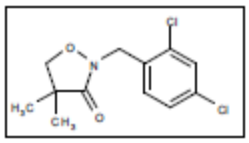
Action: Formulation, Herbicide
Target: Anagallis arvensis, Alopecurus myosuroides, Amaranthus retroflexus, Ambrosia artemisiifolia, Abutilon theophrasti, Apera spica-venti
Class: Oxazoline, Isoxazolidinone

Novelty: A water dispersible granule composition comprising bixlozone; a wetting agent; a dispersant; and a carrier, is claimed. The composition is further claimed to comprise a defoamer and flow aid. Also claims a process for preparing the composition. A method for controlling undesirable vegetation, eg *Abutilon theophrasti*, *Alopecurus myosuroides*, *Amaranthus retroflexus*, *Ambrosia artemisiifolia*, *Anagallis arvensis*, and *Apera spica-venti*, using the composition, is also claimed.

Biology: No biological data are presented.

Chemistry: An exemplified composition comprises (in wt%) the specified compound (75), benzenesulfonic acid, dodecyl-branched, sodium salt (1), copolymer of maleic anhydride and diisobutylene, sodium salt and 5-10% sodium dodecylbenzenesulfonate (7), sulfonated aromatic condensate, sodium salt (5), sodium tallowate (1), amorphous silica (2) and kaolin clay (9) (example 2, table 1, page 29). The specified compound, bixlozone (claim 1, page 30) is the only compound specifically claimed for use in the composition.

Comment: *Also see WO2024073018, WO2024073019, WO2024073020 and WO2024073023.*
Structure:



Inventors: Marshall, Luann Rue; Shimp, Jeffrey Wayne; Nicholson, Paul

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 04-APR-2024
Priority: 30-SEP-2022, US 2022412059

Filing: 29-SEP-2023, 2023US34071
Pages: 39
Language: English
IDdb Ref PA14929545

Stable compositions comprising a biodegradable polyester as dispersant and an active agent to control the weeds

Original Title: *Biodegradable polyester used as dispersant and the agricultural composition comprising the same*

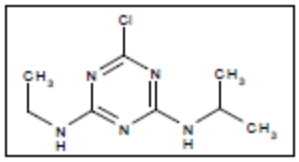
Action: Formulation, Herbicide, Slow release polymer
Target: Weed
Class: Triazine

Novelty: A biodegradable polyester, serving as a dispersant for agricultural compositions is crafted from a blend of specific monomers comprising a sulphonated dicarboxylic acid monomer, a polyhydric polyol and a dihydroxyl compound is claimed, wherein the monomer composition further comprises an diacidic component (an unsulphonated dicarboxylic acid monomer and a polyester prepolymer). A biodegradable polyester used as dispersant for agricultural formulations is further claimed. An agricultural composition comprising an agricultural material; and the biodegradable polyester is further claimed. The use of biodegradable polyester as dispersant for agricultural formulations is also claimed. The use of agricultural compositions for the treatment of soils, plants and/or seeds to control pests and/or to regulate the growth of plants is finally claimed. It is stated that the composition ensures consistent performance even in high-loading formulations, maintains excellent suspensibility of agricultural materials upon dilution, exhibit remarkable storage stability over time, provides assurance of quality and effectiveness throughout storage and handling, demonstrates favorable viscosity properties and effective dispersion of agricultural materials.

Biology: No biological data are presented.

Chemistry: The specified water dispersible granule composition comprises specified compound (87%), dispersant (S4, which contains cyclohexyl dicarboxylic acid (20%), 5-sulfoisophthalic acid sodium salt (10%), terphthalic acid (20%) and Ethylene glycol (50%)), wetting agent (GEROPON L- WET F) and filler (EDTA-2Na). The biodegradability of the dispersant after 28 days was found to be 97%. The composition appeared as white granules with strong suspension properties and a pH of 6 initially and after 14 days at 54°C, maintaining high suspensibility at 86.3% and 85.3%, respectively. Additionally, it showed consistent disintegration times of 30 seconds initially and 32 seconds after storage, highlighting its stability and reliability (table 5, pages 29, 30, 32 and 33). The specified compound atrazine is one of several compounds exemplified for use in the composition (page 14). No compounds are specifically claimed.

Structure:



Inventors: Ahuja, Ritu; Thakur, Sandeep

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 15-FEB-2024
Priority: 08-AUG-2022, WO 2022EP72231

Filing: 03-AUG-2023, 2023EP71619
Pages: 43
Language: English
IDdb Ref PA14822550

Solid compositions comprising cyantraniliprole and acetamiprid useful for controlling insects

Original Title: *Solid composition of cyantraniliprole and acetamiprid*

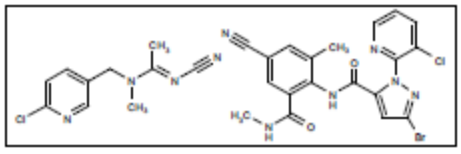
Action: Surfactant, Formulation, Insecticide
Target: Insecta
Class: Pyridine, Pyrazole, Cyano imidamide, Carboxamide

Novelty: A solid composition comprising acetamiprid, particulate cyantraniliprole, surfactant and/or dispersant, agriculturally acceptable carrier, and water is claimed. A granular water-dispersible composition, comprising acetamiprid, particulate cyantraniliprole, surfactant/dispersant, agriculturally acceptable solid carrier, and water is also claimed. The composition is claimed to be in the form of wettable dispersible granules. A composition consists of a solid water-dispersible composition with particulate acetamiprid, cyantraniliprole, and a carrier, alongside an organosilicone-based surfactant and water for application is further claimed. A method for preparing the composition characterized by improved wettability and suspensibility is also claimed. A method for controlling unwanted insects by applying an the combination and the composition is also claimed. An insecticidal tank-mix comprising the composition is further claimed. It is stated that the composition maintains optimal dispersion characteristics during storage, while minimizing moisture content and preventing chemical degradation or interaction between active agents, and avoids agglomeration or particle size increase and ensures effective availability upon dilution or dispersion.

Biology: No biological data are presented.

Chemistry: The specified water dispersible composition after drying comprises (in %w/w) acetamiprid (40), cyantraniliprole (29), Aerosol OT-B (2), lactose (10), corn starch (5), Silfoam SP150 (0.5), Borresperse CA (5), Atlox Metasperse 550 S (5), Silwet L-77 (0.2) and water (3). The composition underwent physicochemical testing, revealing suspensibility rates for acetamiprid and cyantraniliprole of 90% and 87.5% initially, and 89% and 87% after storage, dispersibility remained high, with rates of 71.5% initially and 70.8% after storage at 54°C for two weeks, while the composition showed no residual presence, respectively (example A, pages 66-69; table 2). The specified compounds acetamiprid and cyantraniliprole are the only two compounds specifically claimed for use in the composition (claim 1, page 76).

Comment: *Also see WO2024018453.*
Structure:



Inventors: Amar-Lewis, Eliz; Dayagi, Yohai

Coverage: ***156 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 25-JAN-2024
Priority: 18-JUL-2022, US 2022389961

Filing: 16-JUL-2023, 2023IL50742
Pages: 92
Language: English
IDdb Ref PA14774150

Solid compositions comprising tetramic acid derivatives and other active agents useful to combat insects

Original Title: *Solid formulation of insecticidal mixtures having particularly good dispersion properties*

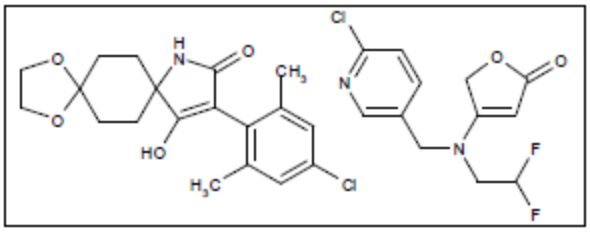
Action: Formulation, Insecticide
Target: Insecta
Class: Pyridine, Butenolide, Tetramic acid

Novelty: A solid composition in the form of water-dispersible granules containing tetramic acid derivatives, salts, inorganic salts of carbonates and hydrogen carbonates, dispersant, wetting agent, filler, structure former, optionally other active agents, other common adjuvants and formulation aids is claimed. A method for producing the composition by mixing the components and then extruding is also claimed. The use of a composition to combat insects is further claimed. The composition is stated to disintegrate particularly well in water and nevertheless have good long-term stability.

Biology: No biological data are presented.

Chemistry: The specified composition comprises (in g) compound I-2 (7.2), flupyradifurone (15), DAHP (41.5), kaliumhydrogencarbonate (5), Morwet EFW (2), Pergopak (5), Kaolin (15.8), Atlox Metasperse 550S (10), magnesium stearate (0.5) and rhodorsil Antimousse EP 6703 (1) (example 2, page 26). The suspensibility of the composition during initial, after 4 weeks and 26 weeks of storage at 54 °C and room temperature was found to be 97.6%, 96.9% and 97.3% and sediment was found to be 12.1, 12.7 and 12.3, respectively (example 2, page 27). The specified compound compound I-2 (claim 4, page 33) which is one of six tetramic acid derivative compounds and flupyradifurone (claim 11, page 34) which is one of several other active agents specifically claimed for use in the composition.

Structure:



Inventors: Egger, Holger; Zumsande, Laura

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 11-JAN-2024
Priority: 08-JUL-2022, EP 2022183985

Filing: 05-JUL-2023, 2023EP68582
Pages: 50
Language: German
IDdb Ref PA14743572

Pesticidal compositions comprising piropidion, cyantraniliprole and a filler 4-O-p-D-galactopyranosyl-a-D-glucopyranose

Original Title: *Pesticidal compositions*

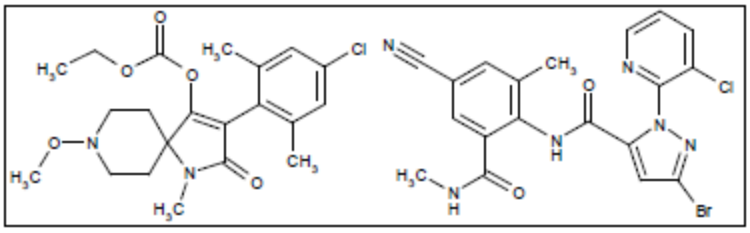
Action: Formulation, Insecticide
Target: Insecta
Class: Amide, Pyrazole, Tetramic acid, Carboxamide

Novelty: A pesticidal composition comprising spiropidion (25-35% by weight), cyantraniliprole (15 -25%% by weight), 4-O-p-D-galactopyranosyl-a-D-glucopyranose (15 - 30% by weight) as a filler component, dispersants (10 - 20%), anti-foaming agent (1 - 5%) and a buffer (5- 10%) is claimed. The composition is further claimed to comprise one or more additional agents such as wetting agents, biocides, stabilizers, pigments and additional insecticidal active agents. An aqueous composition comprising the pesticidal composition and optionally further comprising one or more adjuvants or carriers is also claimed. A method for combating and controlling pests applying the composition to a pest, to a locus of a pest, or to a crop of a useful plant susceptible to attack by a pest is further claimed, wherein the application is done by drip, drenching or injection. The composition possess beneficial suspensibility properties when diluted for a spray application to a crop.

Biology: No biological data are presented.

Chemistry: The specified composition comprises (in % by weight) spiropidion (30), cyantraniliprole (22.5), dispersant mixture (lignosulphonate salt and naphthalene, sulfonic acid salt) (15), buffer mixture (alkali metal sulfate and organic acid) (7), surfactant (co-polymer of 2,5-furandione and 2,4,4-trimethylpentene) (2), anti-foaming agent (Antifoam MSA) (2) and filler (PHARMATOSE 200M) (21.5) (composition B, pages 10 and 11; table 1). The composition was subjected to suspensibility studies. The suspensibility of the composition during initial and after 2 and 3 weeks at 54 °C and 40 °C was found to be 95%, 96% and 96%, respectively (pages 11 and 12; table 2). The specified compounds spiropidion and cyantraniliprole are specifically claimed for use in the composition (claim 1, page 13).

Structure:



Inventors: Avery, Roger

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 20-MAY-2022, EP 2022174578

Filing: 16-MAY-2023, 2023EP63171
Pages: 20
Language: English
IDdb Ref PA14628372

Synergistic pesticidal combination comprising triflumezopyrim, tebuconazole, and tricyclazole for controlling fungal diseases

Original Title: *Novel pesticidal composition*

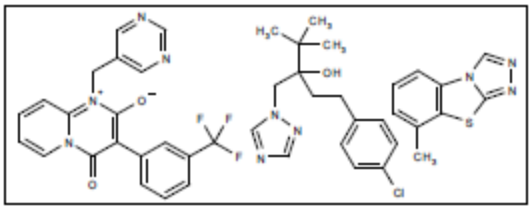
Action: Formulation, Fungicide, Insecticide, Preservative, Synergist
Target: Pyricularia oryzae, Rhizoctonia solani, Nilaparvata lugens, Helminthosporium oryzae
Class: Pyridine, Pyrimidine, Substituted benzene, Triazole, Benzothiazole, Thiazole

Novelty: Synergistic pesticidal combination comprising triflumezopyrim (0.1-20% w/w), tebuconazole (1-5% w/w), and tricyclazole (10-70% w/w), pesticidal compositions comprising the combination and excipients with a particle size of 0.1-75 microns, a process for their preparation, and their use for controlling fungal diseases, wherein the compositions have viscosity of 10-3000 cps, pourability of < 5%, dispersibility is 30%, and suspensibility is 30%, are claimed. The combinations exhibit synergistic effect, and the compositions have good stability.

Biology: In a field trial, the water dispersible granule composition comprising the specified combination (3.7 + 28.17 + 45% w/w), tebuconazole (25% w/w), tricyclazole (75% w/w) and triflumezopyrim (10% w/w) showed 95, 70.7, 45.5 and 6.4% control of *Helminthosporium oryzae* in rice, respectively. Also, the specified combination showed 34.9 yield increase over control (field trial 1, pages 47-51; table 1). Also, the specified combination showed synergic control of *Rhizoctonia solani*, *Pyricularia oryzae* and *Nilaparvata lugens* (field trials 2-4, pages 51-64; tables 2-4).

Chemistry: The specified composition comprises (in parts) the specified combination (4 + 30.3 + 48.5), mixture of salt of naphthalene sulphonic acid and phenol sulphonic acid condensate (4), sodium salt of naphthalene sulfonate condensate (4), sodium lauryl sulphate (2), antifoaming agent (0.2), clay (3), water (100), and sodium citrate (4). The composition has average particle size < 2.5 microns, granule size of < 1.5 mm, suspensibility of 90%, Wet sieve retention of 0.21% on 75 micron sieve, Degree of dispersion of 85%, and wetting out time 5 s (example 1, page 42). The specified combination comprising triflumezopyrim, tebuconazole, and tricyclazole is the only compound specifically claimed for use in the compositions (claim 1, page 65).

Structure:



Inventors: Rathod, Rajiv; Puthenveetil Kunjukrishna Menon, Ramdas

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 16-MAY-2022, IN 202221027931

Filing: 15-MAY-2023, 2023IN50456
Pages: 71
Language: English
IDdb Ref PA14628611

Compositions comprising a pesticide for controlling undesired vegetation, pests, fungi and nematodes

Original Title: *Urea complexes of active ingredients*

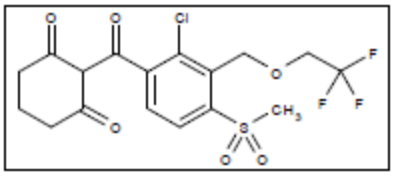
Action: Formulation, Herbicide, Insecticide, Preservative
Target: Palmer amaranth, Abutilon theophrasti, Barnyardgrass, Crabgrass, Agrotis ipsilon
Class: Ketone, Substituted benzene, Cyclohexane

Novelty: Compositions comprising a pesticide (5 %/w) with a melting point of 55 °C at 1013 mbar, solubility of ≤ 50 g/L in deionized water having a pH of 7 at 25 °C and 1013 mbar and molecular weight of < 800 Dalton, urea (50%/w), and a non-ionic surfactant (1 %/w), the compositions are solid form at 25 °C and 1013 mbar, and a process for their preparation, are claimed. Products obtained by extrusion of the composition, are also claimed. Applications mixtures comprising the composition, water, constituents selected from adjuvants and other active agent, formulations comprising the compositions, products or mixtures, and their use for controlling undesired vegetation, pests, fungi and nematodes, are further claimed. Methods for controlling undesired vegetation, plant pests, phytopathogenic fungi or phytopathogenic nematodes comprising the application of a composition, product, application mixture or formulation are finally claimed. The compositions have good stability.

Biology: In a field trial, post-emergence application with the specified composition (30 g/ha) + AU-973 adjuvant, the specified composition (46 g/ha) alone, Laudis® (30 g/ha) + AU-973 adjuvant, and Laudis® (30 g/ha) showed 99.5, 92, 89.2 and 0%; 91.7, 45, 90.8 and 0% control of barnyardgrass and crabgrass, respectively (example B17, pages 60 and 61; table B17). Also, the specified composition showed significant control of *Palmer amaranth* and velvetleaf, and the other composition showed significant control of black cutworm (also known as *Agrotis ipsilon*) (examples 7-19, pages 42-62; tables 6-18).

Chemistry: The specified composition comprises (in %) the specified compound (21), urea prills (63), Lutropur® MSA (1), Agnique® PE TDA9 (4), and Makon® TSP-60 (11) (formulation A-4, example 4, page 49). The specified compound tembotrione (table A-4, example A4, pages 48-49) is one of several compounds exemplified for use in the compositions. No compounds are specifically claimed for use in the compositions.

Structure:



Inventors: Morgenstern, David; Windler, Jr., Gary Kenneth

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 13-MAY-2022, US 2022341649

Filing: 11-MAY-2023, 2023US21883
Pages: 84
Language: English
IDdb Ref PA14610609

Insecticidal compositions comprising an insecticide, and an active agent comprising a plant growth regulator

Original Title: *Insecticide composition and method for insect control*

Action: Formulation, Insecticide, Synergist
Target: Hemiptera, Euschistus heros
Class: Gibberellin, Pyrethroid, Cyano imidamide

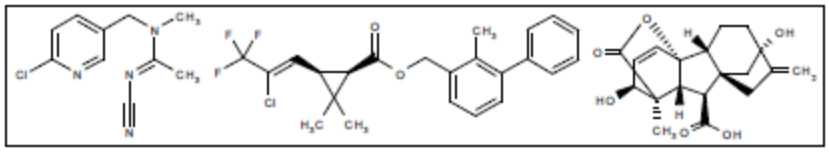
Novelty: An agrochemical combination for insect control comprising an insecticide, eg acephate and an active agent comprising a plant growth regulator, a fertilizer, a nutrient, or combinations is claimed. A composition comprising the combination is also claimed. The composition is claimed to be useful for controlling insects, wherein the composition is applied in a range of 500 g/ha to about 2500 g/ha.

Biology: Trials were conducted to evaluate the % control of nymphs + adult insects in soybean for specified composition at a concentration of 880 g a.ai/ha showed 98.75% and 100% control of adult insects pests after 3 days of 2nd and 3rd sprays with 10 days interval, respectively (example 9, page 73; table 6). Certain other compositions also showed efficacy in controlling *Euschistus heros* and adult and nymph stink bugs of the Hemiptera order (examples 4 and 8, pages 67, 68 and 72).

Chemistry: An exemplified composition comprises acetamiprid (6.38), bifenthrin (6.38), gibberellic acid (0.0040), sodium naphthalene sulfonate modified (6), sodium lignosulfonate (6), sodium diisopropyl naphthalene sulfonate (1), monopotassium phosphate (17.31), potassium chloride (31.86), ammonium sulfate (4.32), lactose monohydrate (8), disodium octaborate tetrahydrate (0.0050), magnesium sulfate monohydrate (0.150), polydimethylsiloxane emulsion (0.5) and filler (qs) (example 10, pages 73 and 74). The composition showed physico-chemical stability at AHS conditions. The composition is stable for 14 days AHS at 54°C. The specified compounds acetamiprid and bifenthrin (claim 3, page 81) are two of four insecticides and gibberellic acid (claim 4, page 81) which is one of six plant growth regulators specifically claimed for use in the composition.

Comment: *The second applicant is UPL Mauritius Ltd.*

Structure:



Inventors: Nobuo Chidi, Sergio; Wolffenbuttel Carloto, Bruno; De Oliveira Mascarenhas, Jessica; Ferreira Megda, Flavia

Coverage: ***156 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 02-NOV-2023
Priority: 27-APR-2022, BR 1020228024

Filing: 27-APR-2023, 2023BR50132
Pages: 88
Language: English
IDdb Ref PA14580498

Insecticidal compositions comprising a neonicotinoid insecticide for controlling pests

Original Title: *An insecticidal composition*

Action: Formulation, Insecticide, Preservative
Target: Insecta
Class: Pyridine, Neonicotinoid, Cyano imidamide

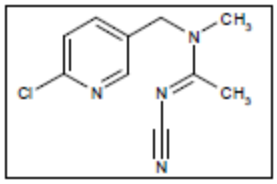
Novelty: Insecticidal compositions, preferably soluble or water-dispersible granules comprising a neonicotinoid insecticide, a diluent mixture comprising a disaccharide and an inorganic salt, and a salt comprising Cs-20 alkyl alcohol derivative, a process for their preparation, and their use for controlling pests, are claimed. The use of the insecticidal composition for controlling pests is also claimed. The compositions exhibit good stability.

Biology: No biological data are presented.

Chemistry: The exemplified soluble granule composition comprises (in % w/w) the specified compound (50), ammonium sulfate (26.34), lactose monohydrate (13.16), sodium salts of sulfuric esters of C10-16 alkyl alcohols (0.5), and anionic surfactant (10) (working example 2, page 40; table 2). In a stability test, the loss on drying (in %), dissolution rate, persistent Foam after 1 minute, pH with 1% dilution, and dilution stability of the specified compound in the composition and comparative example 1 at 0 and 14 days were found to be 0.98, 8, 4, 5.5 and 0.17; 0.62, 35, 10, 4.3 and 0.16; and 0.5, 3, 12.5, 4.9 and 0.18; and 0.42, 4, 8.5, 5 and 0.17, respectively. The attrition resistance of the specified composition and comparative example 1 were found to be 99.83 and 99.6%, respectively. further, the specified composition passed all the specifications in the stability test, whereas the comparative example showed dustiness observed in extruded granules (example 7, pages 43-45; table 7). The specified compound acetamiprid (claim 2, page 46) is one of seven active agents specifically claimed for use in the compositions.

Comment: *The second applicant is Upl Mauritius Limited.*

Structure:



Inventors: Burton, Robert; Kaur, Pardeep; Flood, Charles

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 02-NOV-2023
Priority: 28-APR-2022, GB 20226216

Filing: 26-APR-2023, 2023GB51101
Pages: 54
Language: English
IDdb Ref PA14581079

Fungicidal solid granular or liquid compositions comprising a water insoluble pesticide, polyglycoside and a carrier

Original Title: *New agrochemical formulations*

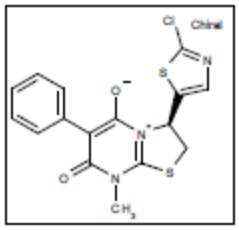
Action: Formulation, Fungicide, Insecticide
Target: Insecta, Fungus
Class: Pyrimidine, Thiazole

Novelty: A solid granular composition comprising a water insoluble pesticide P in solid form that does not comprise any sulfonyl urea herbicides, alkyl polyglycoside and a water soluble carrier containing inorganic salts is claimed. A process for making the composition is also claimed. Spray liquid comprising water insoluble pesticide P, alkyl polyglycoside, a water soluble carrier, a water insoluble carrier and an aqueous liquid phase is further claimed. A method for controlling phytopathogenic fungi and/or undesired plant growth and/or undesired insect or mite attack and/or for regulating the growth of plants by applying the composition is also claimed. It is stated that the compositions are stable with high concentration of pesticide and have a higher efficacy for controlling pests that suspension concentrate compositions of WG formulations known from the art with similar pesticide contents.

Biology: No biological data are presented.

Chemistry: An exemplified composition comprises (in %w/w) fenmezoditiaz (40), lignosulfonate (4), sodium salt of a highly sulfonated kraft lignin (3), sodium Tallowate (1), and C9-11 Alkyl Poly Glucoside, degree of polymerization 1.6, HLB 13.1, liquid at 20°C (7.5). The composition was evaluated for sediment and gravimetrical suspensibility properties after a test time of 5 hours. The results showed that the suspensibility of the composition in both water-soluble salts, such as ammonium sulfate and urea was found to be 87.05% and 97.53% with good compatibility and showed only traces of sediments (example 5, page 39). Fenmezoditiaz is one of several compounds exemplified for use in the composition (page 12). No compounds are specifically claimed.

Structure:



Inventors: Xu, Wen; Benton, Kara Walden

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 26-OCT-2023
Priority: 21-APR-2022, EP 2022169152

Filing: 13-APR-2023, 2023EP59605
Pages: 48
Language: English
IDdb Ref PA14563868

Insecticidal water-dispersible solid compositions comprising low-melting active ingredients, such as flupyradifurone and spiromesifen

Original Title: *Water dispersible granules with low melting active ingredients prepared by extrusion*

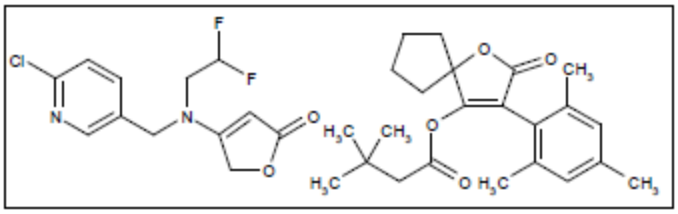
Action: Acaricide, Formulation, Insecticide, Preservative
Target: Insecta, Acarina
Class: Pyridine, Substituted benzene, Tetronic acid, Furan

Novelty: Insecticidal water-dispersible solid compositions comprising a low-melting active ingredient, optionally other active agents, a dispersant, a water-soluble filler, a water-insoluble filler, a water-insoluble filler, and other common adjuvants and formulation aids, wherein the low melting active ingredient has a melting point between 30-90 °C, and a process for their preparation, are claimed. The compositions have good storage stability.

Biology: No biological data are presented.

Chemistry: The exemplified water-dispersible granule composition comprises (in % w) the specified combination (12 + 12), Morwet EFW (2), Morwet D-425 (15), citric acid (0.25), Pergopak M (5), lactose (22), and kaolin (31.75) (example 5, pages 15 and 16). In a stability study, the percentage weight of flupyradifurone (in %w), spiromesifen (in %w), pH, wetting time (in s), suspensibility (%w), and we sieve residue at 45 µm sieve (in %w) of the composition upon stored at initial, 208 weeks at room temperature, -10 °C and 30 °C were found to be 12.1, 12.3, 4.8, 1, 95.5 and 0.028; 12, 12.3, 4.9, 2, 95.4 and 0.024; 12, 12.2, 4.8, 1, 95.5, 0.024; and 12, 12.3, 4.8, 2, 95.2, 0024, respectively (page 16). The specified combination comprising flupyradifurone (claim 4, page 19) and spiromesifen (claim 12, page 20) is one of several combinations specifically claimed for use in the compositions.

Structure:



Inventors: Egger, Holger; Vermeer, Arnoldus

Coverage: *156 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 20-APR-2022, EP 2022169127

Filing: 18-APR-2023, 2023EP59974
Pages: 25
Language: English
IDdb Ref PA14563882

Solid compositions comprising a pyrazolecarboxamide fungicide and other additional fungicides useful for controlling phytopathogenic fungal diseases

Original Title: *An agrochemical composition*

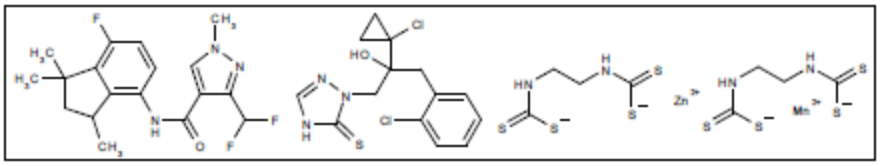
Action: Surfactant, Formulation, Fungicide
Target: Fungus
Class: Dithiocarbamate, Heterocycle, Substituted benzene, Triazole, Pyrazole

Novelty: An agrochemical composition comprising pyrazolecarboxamide fungicide, eg benzovindiflupyr, or a derivative and b) surfactants comprising aryl sulphonic acid salts or its derivatives is claimed, wherein the composition further comprises another fungicide, eg dithiocarbamate. A solid agrochemical composition comprising a) fungicide selected from fluindapyr or bixafen; b) mancozeb; c) prothioconazole; d) two aryl sulphonic acid salts and an excipient is also claimed, wherein the solid composition is in a form of water dispersible granules. A method of controlling phytopatho genic fungal diseases by applying the compositions is further claimed. It is stated that the composition exhibit excellent suspensibility and wettability upon dilution, the active agents were found to remain quite stable after preparation and even during storage studies, the pH of the composition remained quite stable.

Biology: No biological data are presented.

Chemistry: The specified composition comprises (in %w/w) fluindapyr (3.73), mancozeb (62), prothioconazole (4.75), sodium diisopropylenenaphthalene sulphonate (4), naphthalenesulphonic acid-formaldehyde condensate, sodium salt (4), antifoam (1.5) and binder (qs). The composition was evaluated for various physicochemical parameters. Spray dried granules appeared as Greyish yellow colour granules free from extraneous matter and remained as such in accelerated heat storage (AHS) study conducted at 54°C for 14 days. The active content of all the three specified compounds remained quite stable. Suspensibility of fluindapyr, prothioconazole and mancozeb was found to be around 90.6%, 91.2% and 85.4% respectively, moisture content remained less than about 2% in both ambient as well as AHS. The granules of the composition exhibited excellent wettability profile with wetting time as 3 sec in ambient and 8 seconds in AHS (examples 2 and 6, pages 40 and 43, table 1). The specified compounds fluindapyr (claim 2, page 46) which is one of pyrazolecarboxamide fungicides, prothioconazole (claim 9, page 47) which is one of several conazole fungicides and mancozeb (claim 8, page 47), which is one of several dithiocarbamate fungicides specifically claimed for use in the composition.

Structure:



Inventors: Chavan, Popat Ganesh; Mukherjee, Dev Varta; Shirshat, Rajan Ramakant

Coverage: ***156 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MU MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 28-SEP-2023
Priority: 22-MAR-2022, IN 202221015733

Filing: 21-MAR-2023, 2023IB52736
Pages: 53
Language: English
IDdb Ref PA14494665

Stable composition containing tetraconazole and metrafenone useful as bactericides and fungicides

Original Title: *Fungicidal composition comprising tetraconazole and metrafenone*

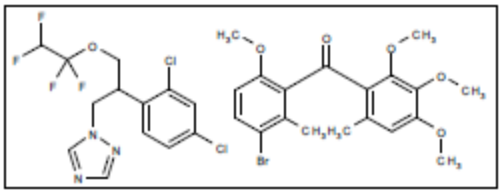
Action: Bactericide, Formulation, Fungicide, Synergist
Target: Bacteria, Fungus
Class: Ketone, Substituted benzene, Triazole

Novelty: A bactericidal and a germicidal composition comprising a liquid tetraconazole active material at room temperature; solid tetraconazole acid active material at room temperature; [2,4,6-tris(1-phenylethyl)phenyl]ether polymerized by ethylene oxide and propylene oxide; optional functional surfactant; and diluent (eg water or solid filler), is claimed. A stable water spray liquid, which contains the bactericidal composition and water, and a method for preparing them, are also claimed. The stable storage-compatible bactericidal composition (preferably a fungicidal composition) exhibits a synergistic effect, and is physically and chemically stable and has good storage and dilution stability, especially reducing or avoiding the problem of dilution, aggregation and sedimentation of the composition after storage.

Biology: No biological data are presented.

Chemistry: An exemplified composition comprises (in %) the specified combination (6 + 24), silicone defoaming agent (1), [2,4,6-tris(1-phenylethyl)phenyl polymerized with tetraconazole (6), naphthalene sulfonate formaldehyde condensation polymer (3), polycarboxylate dispersant (2), white carbon black (3) and lactose (upto 100). Before storing the samples of the exemplified composition at room temperature and after 12 months of storage, the changes were observed in the appearance of each sample and then dilute each sample 100 times with water. Shake evenly and let stand for 10 minutes, then changes in the diluent were observed. The amount of ethylene oxide and propylene oxide polymerized [2,4 , 6-tris(1-phenylethyl)phenyl] ether, effectively improved the room temperature storage compatibility of the composition. The concentration of the active compounds at the initial time, at 1, 2, 3 and 4 h were 1510, 1495, 1482, 1470 and 1443 ppm, respectively (example 4, pages 14 and 15; table 7 and 8). The specified combination comprises tetraconazole and metrafenone (claim 1, page 16), which is the only combination specifically claimed for use in the composition.

Structure:



Inventors: Luo, Changyan; Bristow, James Timothy

Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 21-SEP-2023
Priority: 14-MAR-2022, WO 2022CN80612

Filing: 14-MAR-2022, 2022CN80612
Pages: 22
Language: Chinese
IDdb Ref PA14475366

WO 2023169182 A1 Qingdao Kingagroot Resistant Weed Management Co Ltd; et al.

Herbicidal compositions comprising a substituted isoxazole compound and bentazone

Original Title: *Herbicidal composition comprising bentazone, and use thereof*

Action: Formulation, Herbicide, Synergist
Target: Echinochloa crus-galli, Chenopodium album, Digitaria sanguinalis, Abutilon theophrasti, Xanthium strumarium, Eleusine indica
Class: Substituted benzene, Isoxazole, Benzothiazine

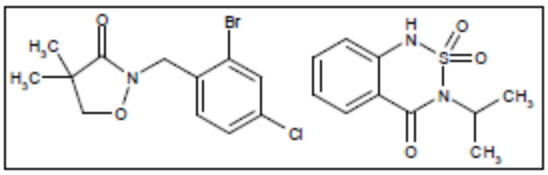
Novelty: A herbicidal composition containing a substituted isoxazole as active agent A and bentazone as active agent B more preferably in the ratio of 1:4-1:2 is claimed, wherein the composition further comprises carriers and/or surfactants and a safener, eg bifenoxazole. The composition is claimed to be used for controlling unwanted plant growth. It is stated that the composition effectively prevents and control various weeds in maize-soybean strip intercropping fields, has high safety to crops and good selectivity; expands weed control spectrum and produces a synergistic effect.

Biology: The specified composition at a concentration of 900 g a.i/ha showed 90.5%, 92%, 94.5%, 98%, 100% and 99.5% *Digitaria sanguinalis*, *Echinochloa crus-galli*, *Eleusine indica*, *Xanthium strumarium*,*Chenopodium album* and *Abutilon theophrasti*, respectively (pages 3-5; table 1).

Chemistry: The specified composition comprises (in %) compound A (20), bentazone (40), precipitated silica (6), open powder (4), polycarboxylate dispersant (4) and sodium lignosulfonate+diatomaceous earth (2) (example 1, page 3). The specified compounds, substituted isoxazole compound (active agent A) and bentazone (active agent B) are specifically claimed for use in the composition (claim 1, page 6).

Comment: *Also see WO2023169178 and WO2023169179. The second applicant is Shandong Provincial Institute for the Control of Agrochemicals (Shandong Provincial Station for the Inspection of Agrochemicals Quality).*

Structure:



Inventors: Gao, Chuanjie; Zhang, Yaozhong; Zhang, Rongquan; Jin, Yan; Lu, Xingtao; Li, Pingsheng; Cui, Qi; Wang, Peng; Chen, Shuang; et al.
Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Priority: 11-MAR-2022, CN 202210242010

Filing: 17-FEB-2023, 2023CN76785
Pages: 17
Language: Chinese
IDdb Ref PA14459704

Granular fungicidal compositions comprising an inorganic copper compound and a benzamide fungicide for controlling growth of fungal phytopathogens

Original Title: *Fungicide composition*

Action: Formulation, Fungicide, Preservative
Target: Fungus
Class: Benzamide, Copper compound, Substituted benzene

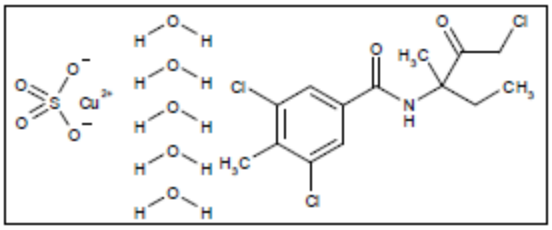
Novelty: Granular fungicidal compositions comprising a fungicide component containing an inorganic copper compound and a benzamide fungicide, and an anionic surfactant blend in a ratio of 10:1 to 1:1, are claimed. Water-dispersible granule fungicidal compositions comprising the fungicide combinations (tribasic copper sulfate and zoxamide) and an anionic surfactant blend comprising polynaphthalene sulfonate and sodium lignosulfonate, a process for their preparation and their use for controlling growth of fungal phytopathogens, are also claimed.

Biology: No biological data are presented.

Chemistry: The exemplified wet granule composition comprises (in % w/w) the specified combination (46.5 + 7.7), polynaphthalene sulfonate (5), sodium lignosulfonate (5), sodium isopropyl naphthalene sulfonate (0.5), silicone (0.1), and water (qs) (example 1, page 49). In a stability study, the copper, zoxamide content (in %), D_{50} size (in µm) and suspensibility (in %) of the composition upon stored at initial, 14 days at 54 °C, 28 days at 54 °C, 3 months at 40 °C and 18 months at ambient temperature were found to be 25.2, 25.5, 25.1, 25.1 and 25.4%; 7.61, 7.51, 7.4, 7.46 and 7.73%; 1.8, 1.9, 1.9, 1.9 and 1.9; and 92, 93, 92, 92 and 92%, respectively (pages 50 and 51; table 2). The specified combination comprising tribasic copper sulfate (TBCS) (claim 2, page 52) and zoxamide (claim 3, page 52) is one of several combinations specifically claimed for use in the compositions.

Comment: *The second applicant is UPL Corporation Limited.*

Structure:



Inventors: Pillot, Marc; Ferrier, Frederic; Pirotte, Alan

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 04-MAR-2022, EP 2022305248

Filing: 02-MAR-2023, 2023GB50476
Pages: 58
Language: English
IDdb Ref PA14442764

WO 2023160171 A1 Zhongshan Lanju Daily Chemical Industry Co Ltd

Compositions comprising an insecticide and a bactericide for killing cockroach

Original Title: *Compound cockroach killing composition, and preparation method therefor and application thereof*

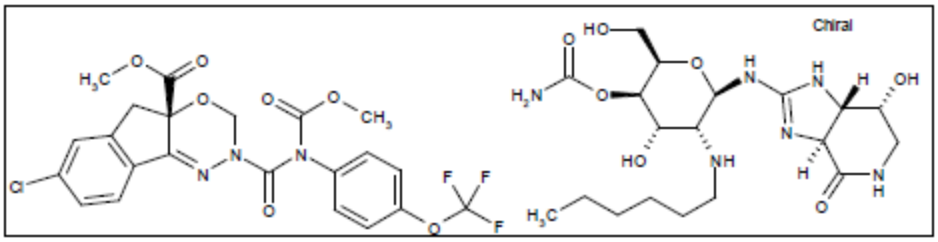
Action: Formulation, Insecticide, Synergist
Target: Blattella germanica
Class: Carbamate, Oxadiazine

Novelty: Compositions comprising (parts/w) insecticide selected from imidacloprid, dinotefuran, indoxacarb and fipronil (0.002-1), a bactericide selected from zhongshengmycin, zinc thiazole and copper hydroxide (0.002-1), protein powder (5-15), grease (8-15), starch matrix (20-40), carbohydrate (2-8), primer (38), excipient (8-15), and preservative (0.5-2), a process for their preparation, and their use as cockroach killing agent, insecticides or miticides, are claimed. The combinations exhibit synergistic effect.

Biology: The specified combination in a composition showed 90, 93.33, 96.67 and 100% mortality to German cockroach (also known as *Blattella germanica*), whereas control sample 15-1 (indoxacarb) showed 83.3, 93.33, 93.33 and 96.67% mortality to the cockroach after 1, 2, 3 and 4 dosing, respectively (experimental example 4, pages 8-12; tables 3-18).

Chemistry: The specified composition comprises (in parts) the specified combination (0.2 + 0.02), corn flour (10), sweet potato (15), peanut oil (8), sesame oil (7), whey protein powder (6), fried sesame powder (3), fried peanut powder (3), honey (5), glycrol (6), lard (6.5), and methyl p-hydroxybenzoate (1) (example 15, page 6). The specified combination comprising indoxacarb and zhongshengmycin is one of several combinations specifically claimed for use in the compositions (claim 1, page 13).

Structure:



Inventors: Luo, Jianhua; Zhu, Jian; Wu, Yinghua; Xu, Hanhong; Liao, Guodong; Tang, Liping; Zhang, Longlai

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 31-AUG-2023
Priority: 24-FEB-2022, CN 202210174280

Filing: 20-DEC-2022, 2022CN140226
Pages: 22
Language: Chinese
IDdb Ref PA14426634

Fungicidal compositions comprising picoxystrobin, copper oxychloride and Soy protein for controlling pests in rice

Original Title: *A synergistic fungicidal composition comprising picoxystrobin, copper oxychloride and soy protein*

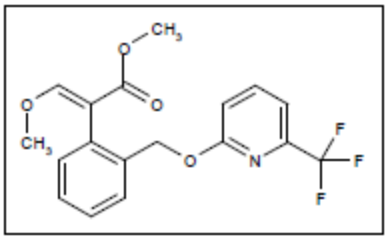
Action: Formulation, Fungicide, Synergist
Target: Rice blast
Class: Copper compound, Natural product, Pyridine, Strobilurin, Methoxyacrylate, acetate

Novelty: Fungicidal compositions comprising picoxystrobin (5-50% w/w), copper oxychloride (25-60% w/w), Soy protein (1-10% w/w), and further comprising excipients, and a process for their preparation, and their use for controlling pests in rice, are claimed. The combinations exhibit synergistic effect with reduced phytotoxicity.

Biology: In a field trial, 20 days after second application with the specified combination (125 + 437.5 + 12.5 ag g/ha), picoxystrobin (90 ai g/ha) and copper oxychloride (90 ai g/ha) showed 91.14, 80.2 and 68.75% control of rice blast disease (example 2, pages 13 and 14; table 4). Also, the specified combination showed no phytotoxicity to rice plant including leaf necrosis, vein clearing, epinasty, hyponasty and wilting (example 3, pages 14 and 15; table 6).

Chemistry: The specified wet granulation composition comprises (in % w/w) the specified combination (10 + 35 + 1), ethylene diamine tetra acetate (6), antifoam (0.1), sodium salt of naphthalene sulfonate condensate (7), sodium laurel sulphate (3) and lactose (qs to 100) (example 1, page 8; table 1). The specified combination comprising picoxystrobin, copper oxychloride and soy protein (not drawn) is the combinations specifically claimed for use in the compositions (claim 1, page 30).

Structure:



Inventors: Tripathi, Dr. Saurabh

Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 23-FEB-2022, IN 202211009598

Filing: 29-APR-2022, 2022IN50405
Pages: 35
Language: English
IDdb Ref PA14427075

Dust-free granular compositions comprising an agrochemical active agent

Original Title: *Dust-free granules and method for producing same*

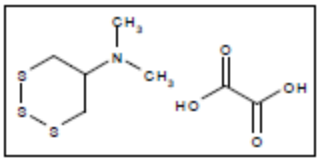
Action: Formulation, Insecticide, Preservative
Target: Insecta
Class: Amine, Trithiane

Novelty: Dust-free granular compositions comprising an active agent, a granular nucleus, a first coating layer of water-soluble polymer applied on the granule nucleus, and a second coating layer of a polymeric composition is applied on the first coating layer, and a process for their preparation, are clamed. The compositions provide the active agent for more than 1 hour and have good stability.

Biology: No biological data are presented.

Chemistry: The exemplified dust-free granular composition comprises (in % w/w) the specified compound (4.775), iron oxide (0.1), micron talc 4010 white (0.5), phosphoric acid (0.12), PVA (0.01), Dye-1 from Clariant (0.05), Dye-2 from Clariant (0.001), sand (94), PEG-10000 (0.3), and residual moisture (0.129) (example 1, pages 38 and 39). In a simulated transportation test, the specified composition showed 0.0003-0.0005% w/w of total dust at 27 ± 1 °C/65 ± 2% RH measured by using Linux® vitration tester, whereas comparative example 2 (Vibrant 4% GR) showed 0.07-0.1% of total dust at the same condition (pages 39 and 40; table 1). In a dissolution test, the specified composition showed 80% release of the specified compound over 30 minutes at 27 °C, whereas the comparative example showed 90% release. Further, the specified composition showed no irritation, allergy and broadcast allergy to field workers (examples B-C, pages 40 and 41; fig 1). The specified compound thiocyclam hydrogen oxalate (page 38) is one of several compounds exemplified for use in the compositions.

Structure:



Inventors: Dutta, Ashim Kumar

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 24-AUG-2023
Priority: 17-FEB-2022, IN 202211008467

Filing: 17-FEB-2023, 2023IB51437
Pages: 48
Language: English
IDdb Ref PA14409990

Composition of water-dispersible granules comprising dinitriles/phthalamides, azoles, and optionally strobilurins as fungicides used to eliminate or reduce the unwanted growth of pests in plants

Original Title: *Water-dispersible granular composition and process for preparing same*

Action: Formulation, Fungicide
Target: Fungus
Class: Nitrile, Pyridine, Substituted benzene, Triazole, Methoxyacrylate, Thione, acetate

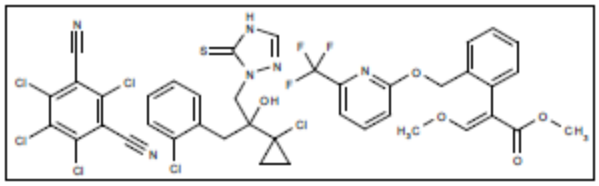
Novelty: Composition of water-dispersible granules (WG) (preferably solid powder form) characterized in that it comprises at least one compound selected from the group of dinitriles or phthalamides, azoles, and optionally strobilurins, their salts or their N -oxides, and a process for their preparation, are claimed. The composition is further claimed to comprise at least one additional compound. The composition is cliamed to be a fungicide to eliminate or reduce the unwanted growth of agricultural pests in plants and/or their habitat. The composition is stated to be capable of reducing the degradation effect of agricultural defensive compounds.

Biology: No biological data are presented.

Chemistry: An exemplified WG composition comprises (in % by weight) the combination (60.905 + 4.200 + 3.430), Morwet D 425 (5), Morwet EFW (2), Kaolin (22.958), silica (0.500), croscarmelose (1), PVP (0.004) and SAG 1572 (0.004) (example 3, page 18). Also, the state of degradation of the active ingredients of the compositions was analyzed. The state of degradation of chlorothalonil, picoxystrobin and prothioconazole in the initial days were 59.96, 3.6 and 4.16% p/p, respectively, and after 14 days of storing at 54 °C were 60.01, 3.58 and 4.04% p/p, respectively (example 4, pages 18-23; table 4; figures 1-5). The specified combination comprises chlorothalonil, prothioconazole and picoxystrobin (claims 2,3 and 4, pages 30 and 31), which is one of several combinations specifically claimed for use

Comment: *The second applicant is DVA Brasil Produtos Agricolas Ltda.*

Structure:



Inventors: Gonçalves, Natália; Aleixo, João Paulo; Feitosa Corsi, Rafaela Cristina; Hernández Navarro, Joseph Alberto

Coverage: ***155 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 11-FEB-2022, BR 1020222654

Filing: 06-FEB-2023, 2023BR50038
Pages: 50
Language: Portuguese
IDdb Ref PA14392190

Granular fungicidal composition comprising a fungicide component and an anionic surfactant blend useful for controlling growth of fungal pests

Original Title: *Fungicide composition*

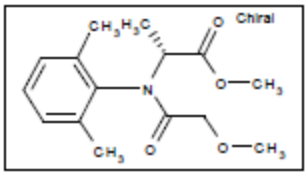
Action: Formulation, Fungicide
Target: Fungus
Class: Acylalanine

Novelty: A granular fungicidal composition comprising a fungicide component; and an anionic surfactant blend, useful for controlling growth of fungal pests, is claimed, wherein a weight ratio of the fungicide component to the anionic surfactant blend is 1:1 to 20:1, wherein the fungicide component comprises a copper compound and a phenylamide fungicide and the composition is in a form of a pre-formulated (pre-mix)/ready-mix formulation. A water-dispersible granule (WDG) fungicidal composition comprising a fungicide component comprising tribasic copper sulphate (TBCS) and metalaxyl; and an anionic surfactant blend comprising sodium naphthalene sulfonic acid, sodium lignosulfonic acid and tristyrylphenol phosphate surfactant; wherein a weight ratio of the fungicide component to the anionic surfactant blend is 1:1 to 20:1, is also claimed. The composition exhibits good stability, having efficient retention of the active ingredients and good suspensibility.

Biology: No biological data are presented.

Chemistry: An exemplified composition comprises (in % w/w) tribasic copper sulfate (TBCS) (30), specified compound (4.8), sodim naphthalene sulfonic acid (6), sodium lignosulfonic acid (6), tristyrylphenol phosphate surfactant (1.5), silicone oil (0.2) and water. Also, in a stability test, the content of the specified compound at T0, T1 (AHS (under accelerated heat stability); 14 days/54 °C) and T2 (3 months/40 °C) showed 5.01, 5 and 4.91%, respectively, with suspensibility to be 89, 88 and 87%, respectively; and with D90 6.78, 6.79 and 6.81 µm, respectively (examples 1 and 2, pages 56-58; table 1). The specified compound, metalaxyl-M (claim 4, page 59) is one of the six compounds specifically claimed.

Comment: *The second applicant is UPL Corporation Limited.*
Structure:



Inventors: Pillot, Marc; Ferrier, Frederic; Pirotte, Alan

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 10-AUG-2023
Priority: 04-FEB-2022, EP 2022305124

Filing: 03-FEB-2023, 2023GB50243
Pages: 65
Language: English
IDdb Ref PA14375721

Stable granules comprising a chemical active ingredient, a petroleum wax, a lubricant, and a superabsorbent resin useful as pesticides

Original Title: *Agrochemical granule*

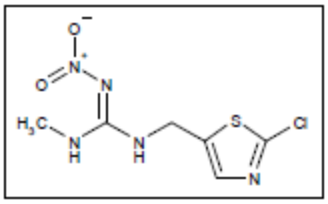
Action: Formulation, Insecticide
Target: Insecta
Class: Nitroguanidine, Thiazole

Novelty: An agrochemical granule comprising an agricultural chemical active ingredient, a petroleum wax having a melting point of 55 °C. or higher and 110 °C or lower, a lubricant, and a superabsorbent resin having a volume median diameter of 100 μm or less, is claimed. A powdery composition containing the active agent, and a method for producing pesticide granules, are also claimed. The granule is stated to exhibit high circularity coefficient and excellent immediate release of an agricultural chemical active ingredient in the environment, with good stabiity.

Biology: No biological data are presented.

Chemistry: An exemplified composition comprises the powdered agrochemical 4 containing the specified compound (4), petroleum wax (!3), white carbon (1), super absorbent resin (4) and wax stone. Also in a dissolution test in water, the production of spherical pesticide granules, circularity coefficient, and dissolution rate was tested. The exemplified composition (after 7 days) showed 100% dissolution (granule D; production example 4, pages 24-28; table 1). The specified compound, clothianidin (page 24) is one of the several compounds exemplified for use in the composition. No compounds are specifically claimed.

Structure:



Inventors: Sasakawa, Mitsuhiro; Furukawa, Yuki; Yamane, Mitsuyoshi

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

Published on: 29-JUN-2023
Priority: 23-DEC-2021, JP 2021209505

Filing: 13-DEC-2022, 2022JP45796
Pages: 53
Language: Japanese
IDdb Ref PA14261727

Composition comprising agrochemical active ingredient and rhamnolipid adjuvant useful for treatment of weeds, pests, nematodes, molluscs and/or fungi

Original Title: *Composition containing a rhamnolipid*

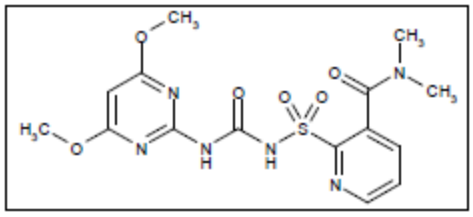
Action: Formulation, Herbicide, Adjuvant
Target: Euphorbia heterophylla, Setaria viridis, Chenopodium album, Digitaria sanguinalis, Brachiaria platyphylla, Abutilon theophrasti, Polygonum convolvulus
Class: Pyrimidine, Sulfonyl urea

Novelty: A composition comprising an agrochemical active ingredient and a rhamnolipid adjuvant is claimed; wherein the active ingredient is soluble in water and the rhamnolipid is derived from *Pseudomonas aeruginosa* and it has two rhamnose moieties. A method of preparing a composition and the use of rhamnolipid to improve the biological performance of an agrochemical are also claimed. The composition eg water dispersible granule and oil dispersion is claimed to be useful for the treatment of weeds, pests, nematodes, molluscs and/or fungi. It is stated that rhamnolipids may act as extremely effective adjuvant for a range of active ingredients illustrated to be herbicides and fungicides.

Biology: The effect of 0.2% rhamnolipid adjuvants on herbicidal activity of the specified compound in the form of water dispersible granule was tested in a glasshouse against weeds. The results showed that the specified compound alone sprayed at the rate of 15 and 60 g/ha demonstrated 47 and 73% herbicidal effect, whereas the specified compound along with 0.2% rhamnolipids showed improved herbicidal effect of 78 and 87%, respectively, against *Abutilon theophrasti* 21 days after application. Similarly, the addition of rhamnolipids improved the efficacy of herbicide against *Chenopodium album*, *Digitaria sanguinalis* and *Setaria viridis*. Certain other agrochemical active agents along with rhamnolipids showed improved herbicidal effect against *Brachiaria platyphylla*, *Euphorbia heterophylla* and *Polygonum convolvulus*.

Chemistry: The specified compound, nicosulfuron (pages 2 and 6) is one of the several active agents specifically exemplified for use in the composition.

Structure:



Inventors: Sevastos, Apostolos; Padia, Faheem Noorahmed; Ramsay, Julia Lynne; Taylor, Philip

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 15-JUN-2023
Priority: 08-DEC-2021, GR 2021100856

Filing: 01-DEC-2022, 2022EP84029
Pages: 15
Language: English
IDdb Ref PA14221091

Insecticide compositions comprising emamectin benzoate, fipronil and lambda-cyhalothrin

Original Title: *Insecticide composition, formulations and process for preparation thereof*

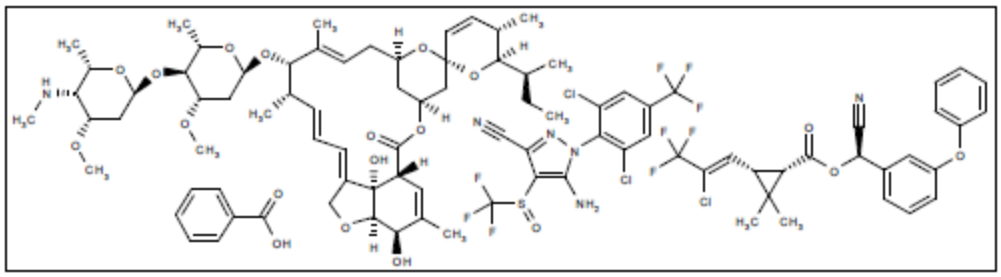
Action: Formulation, Insecticide, Synergist
Target: Spodoptera litura, Thrips
Class: Avermectin, Pyrethoid, Pyrazole

Novelty: An insecticide composition comprising emamectin benzoate, fipronil, lambda-cyhalothrin and one or more inactive excipients such as a pH stabilizer and an emulsifier is claimed. It is stated that the composition exhibits storage stability, excellent adherence to its target pest and easy penetration of active agents.

Biology: The specified WDG composition at a concentration of (11 + 25 + 50) g a.i./ha showed 89.43% control of thrips and 87.42% control of *spodoptera litura*, whereas individual treatments showed 66.29%, 65.17% and 33.71%, respectively at 10 days after application (examples 4 and 5, pages 35-38; tables 7 and 8).

Chemistry: The specified composition comprises (in % w/w) specified compounds (2.20 + 10 + 5), Tergitol ECO-36 (5), polyalkoxylted butyl ether (2), citric acid anhydrous (0.5), disodium hexadecyl sulphate (0.5), sodium salt of naphthalene formaldehyde condensate (5), polydimethyl siloxane (0.5), hydrophobic fumed silica (6), N,N-dimethyldecanamide (5) and corn starch (qs). During stability studies 100% of emamectin benzoate, 97.16% and 97.29% of fipronil and 96.55% and 96.79 % of lambda-cyhalothrin are uniformly distributed in water before and after the accelerated storage test (54 ± 2 °C for 14 days) , respectively (pages 31-34; tables 5 and 6). The specified compounds emamectin benzoate (major component drawn) , fipronil, lambda-cyhalothrin are specifically claimed for use in the composition (claim 1, page 39).

Comment: *For a related see WO2023095099.*
Structure:



Inventors: Siddappa, Mallikarjunappa; Gowdra Nanjappa, Kendappa; Yaddanapudi, Sai; Paul, Rupak; Reddy, Vijay Kumar; Hegde, Sandesh

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 29-NOV-2021, IN 202121055231

Filing: 29-NOV-2022, 2022IB61513
Pages: 50
Language: English
IDdb Ref PA14183876

Herbicidal combination comprising a pyrimidinyl benzoate derivative and an imidazolinone derivative useful for controlling weeds

Original Title: *Herbicidal combinations*

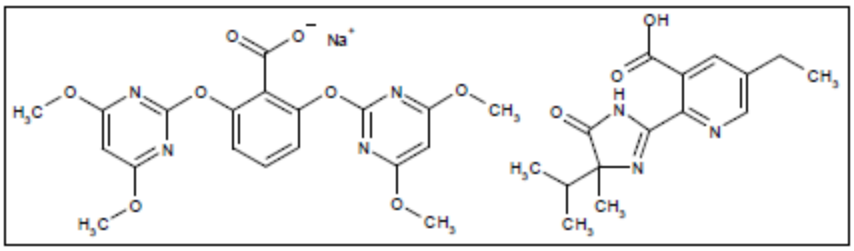
Action: Formulation, Herbicide, Synergist
Target: Sagittaria, Echinochloa colonum, Leptochloa chinensis, Cyperus difformis, Cyperus iria, Fimbristylis, Ludwigia, Echinochloa crus-galli, Monochoria vaginalis, Marsilea, Eclipta alba
Class: Imidazole, Nicotinic acid, Pyridine, Pyrimidine, Benzoate, Benzoic acid

Novelty: A herbicidal combination comprising a pyrimidinyl benzoate derivative; and an imidazolinone derivative, is claimed. A herbicidal composition comprising the combination and an agrochemically acceptable excipient(s), useful for controlling undesirable vegetation in crop plants, is also claimed. A method of controlling weeds which comprehends contacting the vegetation or the locus thereof with or applying an herbicidal combination, to the soil or water to prevent the emergence or growth of vegetation, is further claimed. The combination exhibits a synergistic effect and the formulation is physically stable.

Biology: The specified combination at a dose of 25 + 100 gai/ha showed 95.3, 94, 92, 94.7, 96.3, 96.7, 96.7, 97, 97.3, 95.7 and 97.3% mortality against *Echinochloa colonum*, *Echinochloa crus-galli*, *Leptochloa chinensis*, *Cyperus iria*, *Cyperus difformis*, *Fimbristylis* Spp, *Monochoria vaginalis*, *Eclipta alba*, *Ludwigia* Spp., *Sagittaria* Spp. and *Marsilea* Spp. seeds, respectively, wherein the expected response calculations showed 92.9, 86, 80.1, 89.7, 89.2, 96.7, 91.6, 92.6, 93.8, 90.5 and 94.8%, respectively. Also, Bispyribac-sodium (25 g ai/ha) was highly selective to rice and did not show any phytotoxicity. (pages 27-32; tables A-H).

Chemistry: The specified combination comprises bispyribac-sodium (claim 2, page 33), which is one of six pyrimidinyl benzoate derivatives claimed for use in the combinations and imazethapyr (claim 3, page 33) which is one of seven imidazolinones claimed for use in the combinations.

Structure:



Inventors: Dutta, Ashim Kumar; Gade, Vishwanath

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 20-NOV-2021, IN 202111053424

Filing: 18-NOV-2022, 2022IB61120
Pages: 36
Language: English
IDdb Ref PA14168786

Stable solid or water dispersible granule compositions comprising a triazinylsulfonylurea herbicide for controlling weeds

Original Title: *A stable herbicidal composition*

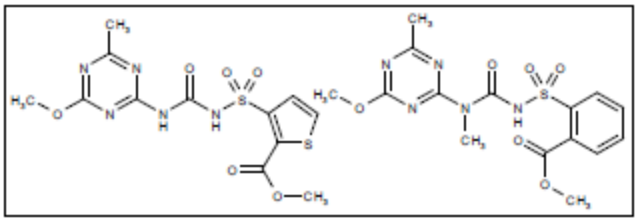
Action: Formulation, Herbicide, Preservative
Target: Weed
Class: Substituted benzene, Sulfonyl urea, Triazine, thiophene, Benzoic acid

Novelty: Stable solid or water dispersible granule compositions comprising a triazinylsulfonylurea herbicide, its salts or esters and a stabilizer system comprising a polymeric carrier and two salts of sulfonic acid derivatives, and/or excipients, a process for their preparation, and their use for controlling weeds, are claimed.

Biology: No biological data are presented.

Chemistry: The exemplified water dispersible granule composition comprises (in % w/w) the specified combination (5.2 + 47.17), sodium carbonate (4.82), sodium dodecylbenzenesulphonate (3), sodium lignosulfonate (9), kaolin clay (qs) (example 1, page 41). In a stability study, the amount (% w/w) of thifensulfuron-methyl and tribenuron-methyl in the composition upon stored at 25, 40 and 35 °C for o days, 2 and 3 months were found to be 4.98, 5.04 and 5.07; 45.06, 42.85 and 44.12, respectively (example 5, pages 43 and 44; table 1). In a dispersibility and sedimentation tests, the dispersion and sedimentation of thifensulfuron-methyl and tribenuron-methyl in the composition upon stored at 25 and 35 °C for o days and 3 months were found to be 26 and 29 inversions and 0.2 and 0.15% of sedeimentation (example 6, page 45; table 3. Further in a dispersion test, the percentage suspensibility of thifensulfuron-methyl and tribenuron-methyl in the composition was 99.6 and 98.6%, respectively (example 7, pages 44 and 45; table 2). The specified combination thifensulfuron-methyl and tribenuron-methyl is two of several triazinylsulfonylurea herbicides specifically claimed for use in the compositions (claim 3, page 49).

Comment: *The second applicant is Upl Corporation Limited.*
Structure:



Inventors: Mertes, Adrien; Pirotte, Alan

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 03-NOV-2021, IN 202121050620

Filing: 02-NOV-2022, 2022GB52757
Pages: 56
Language: English
IDdb Ref PA14134283

Combination of isooxazolines, triazolopyrimidines, sulfonylureas and adjuvants useful for controlling weeds

Original Title: *Herbicidal composition*

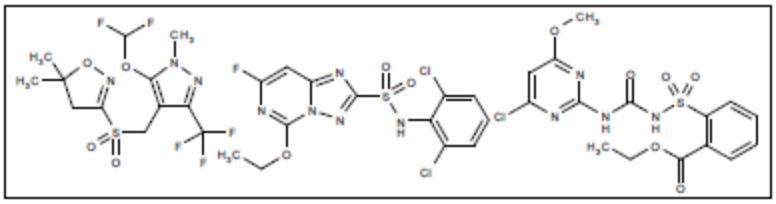
Action: Formulation, Herbicide, Synergist
Target: Echinochloa colona, Commelina communis, Acalypha indica, Digera arvensis, Dinebra retroflexa, Commelina benghalensis
Class: Pyrimidine, Sulfonamide, Sulfonyl urea, Triazolone, Triazolopyrimidine, Pyrazole, Isoxazole, Benzoic acid

Novelty: An herbicidal composition comprising an isooxazoline, a triazolopyrimidine, a sulfonylurea and adjuvants, is claimed, wherein the composition is formulated as a water dispersible granule (WDG). The composition is disclosed to be useful for controlling weeds. The combination exhibits a synergistic effect, non-phytotoxic and has good stability, wettability, suspensibility and dispersibility.

Biology: A WDG composition comprises the specified combination (120 + 20 + 6 GAH (gram active per hectare)) showed expected and observed mortality of 81.3 and 85%, respectively, against *Commelina benghalensis*; 71.65 and 80%, respectively, against *Commelina communis* and; 84.25 and 90%, respectively, against *Acalypha indica*; 91.6 and 98%, respectively, against *Digera arvensis*; 87.4 and 90%, respectively, against *Echinochloa colona*, and 92.8 and 98%, respectively, against *Dinebra retroflexa*, thus clearly demonstrating synergy between the combination (example 4, pages 17-23; tables 6-8)

Chemistry: An exemplified WDG composition comprises (in % w/w) the specified combination (30 + 5 + 1.5), dialkylnaphthalene sulfonate sodium salt (2.5), sodium ligno sulfonate (6), corn starch (33), China clay (11), ammonium sulphate (10) and polydimethylsiloane (1) (example 2, table 1, pages 12 and 13). The specified combination, pyroxasulfone, diclosulam and chlorimuron ethyl (claim 2, page 24) is the only combination specifically claimed for use in the composition.

Comment: *Also see WO2023079571 and WO2023079575.*
Structure:



Inventors: Islam, Aminul; Bhavani, Balram; Pawar, Kiran; Edoliya, Rajul; Trivedi, Rajan Kumar; Patil, Sanket
Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 11-MAY-2023
Priority: 02-NOV-2021, IN 202141050386

Filing: 01-NOV-2022, 2022IN50962
Pages: 28
Language: English
IDdb Ref PA14134400

Synergistic compositions comprising pyrasulfotole and picolinafen used for controlling or suppressing broad-leaved weeds

Original Title: *Pyrasulfotole and picolinafen composition*

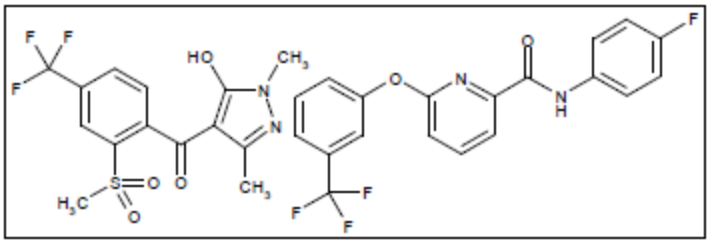
Action: Herbicide, Synergist
Target: Raphanus raphanistrum
Class: Carboxanilide, Ketone, Pyridine, Pyrazole

Novelty: A herbicidal composition comprising synergistic pyrasulfotole together with picolinafen is claimed, wherein the composition further includes other herbicidally active compounds and a safener. A method for controlling or suppressing broad-leaved weeds in a field by sequentially or simultaneously applying pyrasulfotole and picolinafen to that field is also claimed.

Biology: The specified combination (25 + 37.5 g/ha) showed 100% control of *Raphanus raphanistrum* in barley field after 14 and 24 days of application (pages 25 and 27; table 5).

Chemistry: The specified combination of pyrasulfotole (referred as Magnitude, an emulsifiable concentrate) (page 24, claim 1, page 28) and picolinafen (referred as Glocker, a water dispersible granule formulation) (page 24, claim 1, page 28) is specifically claimed for use in the composition.

Structure:



Inventors: Bastow, Kaileb; Morgan, Roy

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 04-MAY-2023
Priority: 28-OCT-2021, AU 2021903461

Filing: 28-OCT-2022, 2022AU51306
Pages: 34
Language: English
IDdb Ref PA14114058

Fast disintegration solid herbicidal compositions comprising high content of topramezone salts

Original Title: *Solid herbicide composition and the use thereof*

Action: Formulation, Herbicide
Target: Weed
Class: Ketone, Pyrazole, Isoxazole

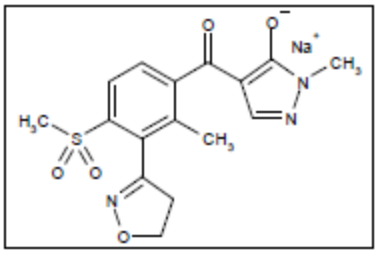
Novelty: A solid herbicidal composition, comprising, at least one topramezone salt,eg sodium or potassium salts; and at least one dispersant, eg aryl sulfonate salt/ester, alkaryl sulfonate salt/ester, sulfonate salt/ester and lignosulfonate is claimed, wherein the composition further comprises a functional additive and other herbicidal active agent. The composition is claimed to be in the form of water dispersible granules. It is stated that the composition have fast disintegration performance and with a high content of topramezone salts.

Biology: No biological data are presented.

Chemistry: The specified composition comprises (in %wt) the specified compound (40), naphthalene sulfonate condensed with formaldehyde (Tamol NN8906) (3) and diatomite (57) (example 1, page 4). An experiment was conducted to evaluate the disintegration time of the specified composition by adding 1.0 product granules into 250 mL of standard hard water which was added into a 250 ml graduated cylinder. The number of inversions required for the granules to completely disintegrate was observed and recorded. The granules of the composition are completely disintegrated and dispersed within 15 inversions, whereas comparative example 1showed within 62 inversions (page 6; table 1). The specified compound, topramezone sodium is one of four compounds specifically claimed for use in the composition (claim 2, page 6).

Comment: *Also see US20230138262 and US20230139501.*

Structure:



Inventors: Bristow James Timothy

Coverage: *1 country:* US
Published on: 04-MAY-2023
Priority: 03-NOV-2021, US 2021517760

Filing: 03-NOV-2021, 2021517760
Pages: 8
Language: English
IDdb Ref PA14116906

Fast-disintegrating solid herbicidal compositions comprising topramezone

Original Title: *Fast-disintegrating solid herbicide composition and the use thereof*

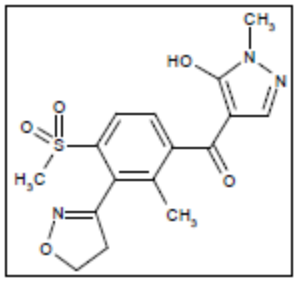
Action: Formulation, Herbicide
Target: Weed
Class: Ketone, Pyrazole, Isoxazole

Novelty: A solid herbicidal composition comprising at least 35 wt % of a topramezone herbicide and alkali metal ions in an amount of at least 80% of the molar equivalent of the topramezone herbicide is claimed, wherein the alkali metal ions comprise ions such as lithium ions, sodium ions, and potassium ions, and mixtures. It is caimed that the composition further comprises one or more functional surfactants. It is further claimed that the alkali metal ions are derived from lithium hydroxide; and further including methacrylic acid copolymer, organosilicone defoamer, white carbon black, and calcined kaolin. A method for preparing a solid herbicidal composition, is also claimed. It is stated that the composition have a fast disintegration performance and with a high content of topramezone.

Biology: No biological data are presented.

Chemistry: The specified composition comprises (in g) specified compound (800), water (800), lithium hydroxide (52.9), 25 g of methacrylic acid copolymer (Atlox) (25), organosilicone defoamer (SAG 1572) (10), white carbon black SIPERNAT 622S) (20) and calcined kaolin (92.1) (example 4, page 5). An experiment was conducted to evaluate the disintegration time of the specified composition by adding 1.0 product granules into 250 mL of standard hard water which was added into a 250 ml graduated cylinder. The number of inversions required for the granules to completely disintegrate was observed and recorded. The granules of the composition are completely disintegrated and dispersed within 12 inversions, whereas comparative example 4 showed within 65 inversions (page 6; table 1). The specified compound, topramezone is the only compound specifically claimed for use in the composition (claim 1, page 6).

Comment: *Also see US20230139501 and US20230139897.*
Structure:



Inventors: Bristow James Timothy

Coverage: *1 country:* US
Published on: 04-MAY-2023
Priority: 03-NOV-2021, US 2021517763

Filing: 03-NOV-2021, 2021517763
Pages: 8
Language: English
IDdb Ref PA14117232

Stable herbicide formulation comprising a carboxylic acid herbicide and 2,4-D for controlling weeds

Original Title: *Novel formulation systems of carboxylic acid herbicides*

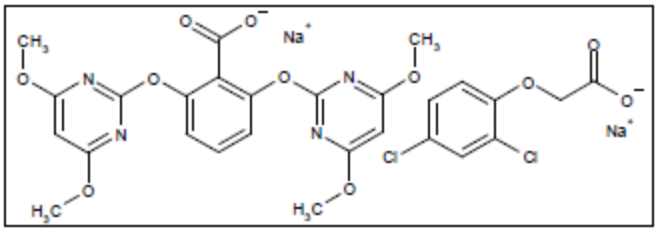
Action: Formulation, Herbicide, Preservative
Target: Ammannia, Digitaria, Cyperus, Echinochloa, Phyllanthus niruri, Dactyloctenium
Class: Carboxylic acid, Phenoxy acetic acid, Pyrimidine, Benzoate

Novelty: Stable herbicide formulation comprising one or more carboxylic acid herbicides, a metal- chelating agent complex, and a cationic surfactant containing quaternary ammonium moiety, and a carrier, and their use for treating a plant against undesired weeds, are claimed. Also claimed that herbicide comprising a carboxylic acid herbicide and/or 2,4-D.

Biology: In a field trial, 30 days after application with the specified combination (2500 g/ha) with ADSEE 6111 tank mix (250 ml/ha) showed 98.58, 100, 61.54 and 66.67% efficacy against *Phyllanthus niruri*, *Cyperus*, *Digitaria* and *Dactyloctenium* species in paddy. Also the specified combination showed significant control of *Echinochloa* and *Ammannia* species (pages 18-22).

Chemistry: The specified composition comprises (in w/w) the specified combination (2.1 + 58.6), Fe EDDHA (15), alcohol ethoxylate (5), China clay (6), sodium carbonate anhydrous (1), and precipitated silica (12.3) (batch 2, page 16 and 17). In a stability test, the % w/w of 2,4-D sodium and bispyribac sodium in the composition on stored at ambient at day 1, ambient at day 14 and 54 °C at day 14 were found to be 54.26, 54.22 and 54.18; and 2.12, 2.14 and 2.1, respectively (page 18). The specified combination comprising bispyribac sodium and 2,4-D sodium is one of several combinations specifically claimed for use in the compositions (claim 13, page 25).

Structure:



Inventors: Sugata, Roy; Venkateswararao, Yadagani; Arunagirinathan Manickam, Adhimoolam

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Pages: 32

Language: English

IDdb Ref PA14062979

Herbicidal compositions comprising bispyribac sodium, chlorimuron ethyl and penoxsulam for controlling weeds

Original Title: *Ternary herbicidal composition*

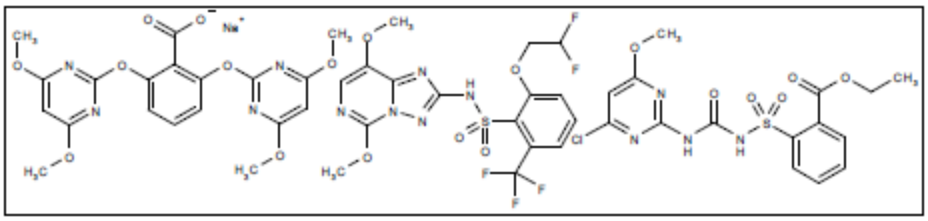
Action: Formulation, Herbicide, Synergist
Target: Cyperus, Echinochloa, Marsilea, Cyperus iria, Echinochloa colonum
Class: Pyrimidine, Substituted benzene, Sufonamide, Sulfonyl urea, Triazole, Benzoate

Novelty: Herbicidal compositions comprising bispyribac sodium, chlorimuron ethyl or its derivatives and penoxsulam, further comprising excipients, a process for their preparation, and their use for concurrently controlling of narrow leaved weeds, broad leaved weeds and sedges in agricultural crops, are claimed. The combination exhibits synergistic effect.

Biology: In a field trial, the specified combination (33 + 16.5 + 6.6) showed 96, 100 and 95% control of *Echinochloa*, *Marsilea* and *Cyperus* in paddy field, respectively, whereas bispyribac sodium 10 SC (37.5), penoxsulam 2.67 OD (25), chlorimuron ethyl 25 WP (6) showed 72, 64.28 and 60; 64, 57.14 and 80; and 32, 42.85 and 80% control of the respective species (example 3, pages 11-15; tables 4 and 5). Also, the specified combination showed significantly reduced phytotoxicity towards rice and wheat. Further, the specified combination showed 90.27% overall weed (including *Echinochloa colonum*, *Marsilea* and *Cyperus iria*) control as compared to control (example 4, pages 15-20; tables 7-10).

Chemistry: The specified wet granule composition comprises (in % w/w) the specified combination (24 + 12 + 4.8), ammonium sulphate (5), lactose (8), sodium salt of naphthalene sulfonate condensate (10), sodium laurel sulphate (4), antifoam (0.5), and China clay (qs) (formulation CH24124 WG, example 1, page 9; table 1). The specified composition comprising bispyribac sodium, penoxsulam and chlorimuron ethyl is the only compound specifically claimed for use in the compositions (claim 1, page 21).

Structure:



Inventors: Tripathi, Saurabh

Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 13-APR-2023
Priority: 08-OCT-2021, IN 202141045913

Filing: 29-APR-2022, 2022IN50404
Pages: 25
Language: English
IDdb Ref PA14062985

Synergistic composition comprising trifloxystrobin, difenoconazole, sulfur and excipients useful as fungicides

Original Title: *Synergistic fungicidal composition comprising strobilurin and triazole fungicides with sulphur*

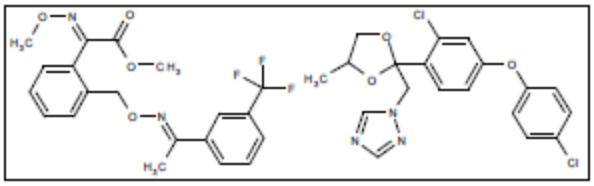
Action: Formulation, Fungicide, Synergist
Target: Erysiphe graminis tritici, Alternaria solani, Puccinia recondita, Septoria nodorum
Class: Oximinoacetate, Triazole

Novelty: A synergistic fungicidal composition comprising trifloxystrobin or its salts and difenoconazole or its salts and sulfur as a catalyst and or a performance enhancer and excipients, is claimed, wherein the formulation is applied to a plant/crop by spraying, rubbing, dusting, pouring, mist blowing, soil mixing, drenching, dipping or drip irrigation. The composition is further claimed to comprise organosilicone surfactants as spreading and sticking agents and bio based efficacy enhancing agents. The combination exhibits a synergistic effect increased bio-efficacy/dispensability and good stability.

Biology: A composition comprising the specified combination (50 + 62.5 gai/ha) with sulphur (15 gai/ha) showed 100 and 95.64% of observed (OE) and expected efficacy (EE) against *Erysiphe graminis f.sp.tritici*, respectively; 93.33 and 85.75%, respectively against *Septoria nodorum*; 95.33 and 84%, against *Puccinia recondita*, infested in wheat seedlings (study 1-3; experiment 1, 4, 7 pages 31-; tables 2, 6 and 9). A mix comprising the specified combiantion with sulphur (50 + 75 + 15 gai/ha dose) showed 88 and 59.15% of OE and EE against *Alternaria solani*, infested in tomato, with no Phytotoxicity (study 4, pages 43-52; tables 11-15).

Chemistry: An exemplified water dispersible granule composition comprises (units not given) the specified combiantion (20 + 25), sulphur (7), sodium polycarboxylate (10), sodium lauryl sulfate (4), sodium ligno sulfonate (1), sodium alkylnaphthalenesulfonate, formaldehyde condensate (0.50), silicone based anitfoam (0.10), blend of poly terne resin (0.10) and China clay. Also, in a dispersibility test, the exemplified composition showed 96.92%, thus dispensability increased with the increase in % of Sulfur content (example 1; composition 5, pages 54 and 55; tables 18 and 19). The specified combination comprising trifloxystrobin and difenoconazole (claim 1, page 56), is the only combination specifically claimed for use in the composition.

Structure:



Inventors: Sabalpara, Hardik; Gujral, Ajit Singh; Kumar, Vimal; Ailawadhi, Raajan Kumar

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Pages: 59
Language: English
IDdb Ref PA14062971

Compositions comprising a triazolone herbicide and another herbicide for controlling weeds

Original Title: *A stable agrochemical composition*

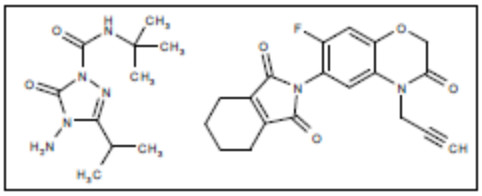
Action: Formulation, Herbicide, Preservative
Target: Eleusine indica, Brachiaria decumbens, Alternanthera tenella, Cyperus rotundus, Ipomoea hederifolia, Digitaria nuda, Merremia cissoides
Class: Amide, Ketone, Triazole, Triazolone, Cyclohexene, Benzoxazine, Isoindole, Phenylimide

Novelty: Compositions comprising a triazolone herbicide or its derivatives and a dispersion aid comprising an interface additive and a high surface hydrophilicity inert, a process for their preparation, and their use for controlling weeds are claimed. Compositions comprising a triazolone herbicide, an additional active agent and the dispersion aid, are also claimed. Use of the compositions for controlling weeds, compositions comprising a triazolone herbicide for controlling weeds, and kits comprising the compositions, are further claimed. The compositions exhibit good stability.

Biology: In a field trial, 120 days after preemergence application with the specified combination (840 + 150 a ai/ha) showed 100, 95, 100, 98, 98, 100, and 100% control of *Alternanthera tenella*, *Brachiaria decumbens*, *Cyperus rotundus*, *Digitaria nuda*, *Eleusine indica*, *Ipomoea hederifolia* and *Merremia cissoides* in sugar cane field (trial 1, pages 38 and 39; table 7).

Chemistry: The specified wet granule composition comprises (in % w/w) the specified combination (71.79 + 12.51), sodium polycarboxylate (7), sodium lauryl sulfate (4), and kaolin (qs) (example 3, page 31). In a stability, the specified composition exhibited good stability. The amount (in % w/w) amicarbazone and flumioxazin in the composition on stored at 25 °C and 14 days at 54 °C were found to be 70.25 and 70.10; and 12.89 and 12.79, respectively (pages 33 and 34; table 1). The specified combination comprising amicarbazone (claim 2, page 41) and flumioxazin (claim 12, page 42) is one of several combinations specifically claimed for use in the compositions.

Comment: *Also see WO2023053014.*
Structure:



Inventors: Saini, Anil; Campos, Luiz; Shirsat, Rajan Ramakant; Pagare, Ritesh
Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Priority: 01-OCT-2021, IN 202121044726

Filing: 29-SEP-2022, 2022IN50869
Pages: 51
Language: English
IDdb Ref PA14046189

Pesticidal compositions comprising elemental sulphur and acynonapyr for treating plants

Original Title: *Novel pesticidal composition comprising elemental sulphur and acynonapyr*

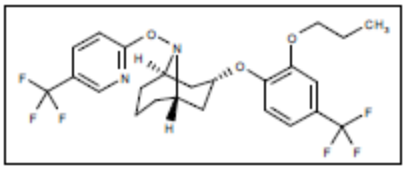
Action: Formulation, Miticide, Synergist
Target: Red spider mite
Class: Inorganic, Pyridine, Substituted benzene

Novelty: Pesticidal compositions comprising elemental sulphur (20-90% w/w), acynonapyr (0.1-50% ww/w), and excipients, a process for their preparation, wherein the particle size of the compositions are 0.1-50 microns, viscosity of 10-3000 cps, pourability of < 5% residue, suspensibility and dispersibility < 30%, under accelerated storage conditions, are claimed. Methods for treating plant, crops, plant propagation materials, locus, seeds, seedlings, or soil with the composition are also claimed. The compositions exhibit synergistic effect and increase the yield with reduced phytotoxicity.

Biology: In field trial, the specified combination (1500 + 150 g/ha) in the composition (2500 g/ha) showed 95.1, 92.16 and 93.26% control of red spider mite in tea at 3, 7 and 21 days after application, whereas sulphur 80% WDG* (875 g/ha), acynonapyr 5.45% EC (2500 g/ha), and hexythiazox 5.45% EC (500 g/ha) showed 51.49, 55.56 and 42.7%; 67.65, 70.59 and 52.81%; and 65.69, 47.06 and 46.63% control of the red spider mice at the same application rate and time (field trial 1, pages 56-60; table1). Also in another field trial, 21 days after application the specified composition showed 92.31% control of red spider mite and 24.24% yield increase in chilli (field trial 2, pages 60-62; table 2).

Chemistry: The specified extruded water dispersible composition comprises (in parts) the specified combination (60 + 6), Supragil MNS 90 (10), Supragil WP (5), ligninsulphonate (15), and kaolin (4). The particle size, granule size, dispersibility, suspensibility, wettability and wet sieve retention of the specified composition was 8 microns, 1.5 mm, 87%, 73%, < 12 s, and 0.2%, respectively. In accelerated conditions, the composition demonstrated dispersibility of 75% and suspensibility of 80% (example 2, page 51). The specified combination comprising elemental sulphur and acynonapyr is the only combination specifically claimed for use in the compositions (claim 1, page 64).

Structure:



Inventors: Doshi, Hiteshkumar Anilkant; Rathod, Rajiv

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Filing: 09-SEP-2022, 2022IB58494
Pages: 71
Language: English
IDdb Ref PA14000731

Stable insecticidal compositions comprising a pyrethroid insecticide, an additional insecticide and a granulation aid

Original Title: *Insecticidal compositions*

Action: Formulation, Insecticide
Target: Stinkbugs
Class: Phosphorodithioate, Pyrethroid

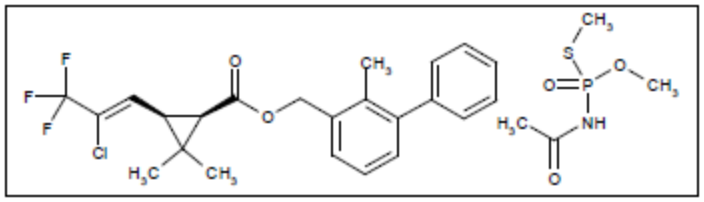
Novelty: An insecticidal composition comprising a pyrethroid insecticide, an additional insecticide, and at least one N,N-dialkyl-C_8-C_{20} alkylcarboxamide is claimed, wherein the insecticidal composition comprises water dispersible granules (WDG). A process of preparing an insecticidal composition is also claimed. A method of controlling insects, by administering the composition is also claimed. It is stated that the compositions are found to be stable and are very effective in controlling the physico-chemical profile of a low melting pyrethroid even at higher temperatures of granulation process.

Biology: Efficiency in controlling brown stink bug in soybean was evaluated by spraying the dilutedspecified composition at a dose rate of 0.8 Kg/Ha. The composition was applied three times in 20 days on infected soybean crop. Around 88% control was observed after 3 applications of the composition. In contrast, the market sample could control only about 76% brown stink bugs (example 9, page 11).

Chemistry: The specified water dispersible granule composition comprises(in w/w), bifenthrin (3.2), acephate (87.9), N,N-dimethyloctanamide and N,N-dimethyl-decanamide mixture (4), dispersing agent (0.9), binder (1.0), filler (q.s. 100) (example 1, pages 7 and 8). The was tested for its physicochemical parameters. Fully dispersed suspensions were obtained from the composition within 10-12 inversions, with good suspensibility above 99%, found to be quite acceptable as maximum wetting time was less than 6 seconds, degradation of active agents were minimal and remained within acceptable limits, found to pass the wet sieve test as and less than 1% residue was retained on the wet sieve and found to have more than 90% suspensibility (example1, pages 7 and 8). The specified compounds bifenthrin which is one of ten pyrethroid insecticides and acephate which is one of six organophosphorus compounds specifically claimed for use in the composition (claims 2 and 4, page 12).

Comment: *The second applicant is UPL Corporation Limited.*

Structure:



Inventors: Borane Mahesh Dharma; Pagare Ritesh; Campos Luiz

Coverage: *1 country:* US
Published on: 16-MAR-2023
Priority: 02-SEP-2021, BR 10202117442

Filing: 02-SEP-2022, 2022902354
Pages: 14
Language: English
IDdb Ref PA14003527

Synergistic pesticidal combination comprising sulfur, fluxapyroxad and prothioconazole useful for controlling fungal disease, crop protection or improving the plant health and yield

Original Title: *Novel pesticidal composition*

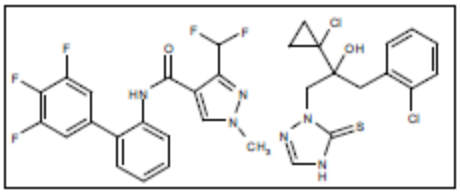
Action: Formulation, Fungicide, Synergist
Target: Anthracnose, Powdery mildew
Class: Amide, Carboxanilide, Organosulphur, Triazole, Pyrazole, Thione

Novelty: A synergistic pesticidal combination comprising: elemental sulfur in the range of 30% w/w to 90% w/w of the total composition; fluxapyroxad in the range of 0.01% w/w to 25% w/w of the total composition and prothioconazole in the range of 1 % w/w to 20% w/w, is claimed. Also claimed is a composition comprising the combination along with an excipient, preferably in the form of a solid or a liquid or a gel, wherein the granules are in the size range of 0.05 mm to 6 mm. The process for preparation of pesticidal composition, is also claimed. A method for controlling fungal disease, crop protection or improving the plant health and yield comprising treating at least one of a plant, crop, plant propagation material, locus, parts thereof or seed, seedling and soil with the combination, is also claimed. The combination exhibits a synergistic effect.

Biology: The specified composition at a dose of 1500 + 199 + 191 gai/ha showed 92% reduction of Powdery mildew disease and an yield of 159 Qtl/ha of cucumber (field trial 1, pages 47-57; tables 1-3). The specified composition also showed 94% reduction of Anthracnose disease in Chilli (field trial data 2 and 3, pages 57-63; tables 4 and 5).

Chemistry: A specified composition comprises the specified combination 40% + 5.3% + 5.1% WG (water dispersible granules) at 3750 g/ha (treatment T-1, page 50; table 1). The specified combination, sulfur (not drawn), fluxapyroxad and prothioconazole (claim 1, page 64) is the only combination specifically claimed for use.

Structure:



Inventors: Doshi, Hiteshkumar Anilkant; Rathod, Rajiv

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Filing: 18-AUG-2022, 2022IB57750
Pages: 71
Language: English
IDdb Ref PA13946922

Wettable fungicidal compositions comprising mandipropamid, pyraclostrobin and propineb

Original Title: *Fungicide composition comprising mandelamide type compound, strobilurin and dithiocarbamate*

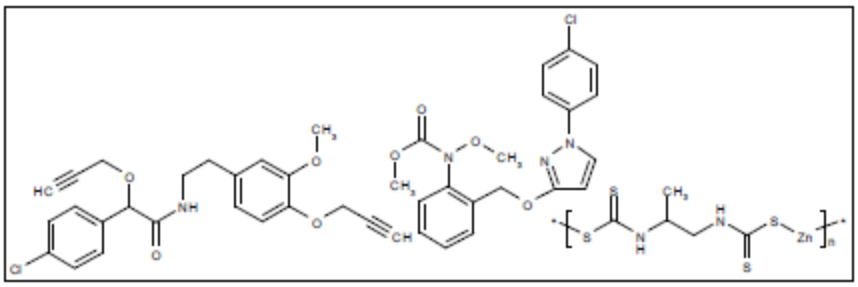
Action: Formulation, Fungicide, Synergist, Oomyceticide
Target: Alternaria solani, Phytophthora infestans, Plasmopara viticola
Class: Amide, Carbamate, Dithiocarbamate, Substituted benzene, Pyrazole, Strobilurin, Mandelamide, Zinc

Novelty: Wettable fungicidal compositions comprising a mandelamide fungicide, eg mandipropamid (2-6% w/w), a strobilurin fungicide, eg pyraclostrobin (2-6% w/w), a dithiocarbamate fungicide, eg propineb (50-55% w/w), and adjuvants, are claimed. The combinations exhibit synergistic effect.

Biology: In a field trial, 10 days after application with the wet powder (1140 g) comprising the specified combination (3.5 + 3.5 + 50%) showed 85% control of *Plasmopara viticola*, whereas expected efficacy was 61.75% (example 3, pages 16-19; table 7). Also, the specified combination showed synergistic efficacy of *Alternaria solani*, and *Phytophthora infestans* (trials 1 and 2, pages 19-24; tables 9 and 11).

Chemistry: The specified composition comprises (in % w/w) the specified combination (3.619 + 3.608 + 61.728), Supragil WP (2.5), sodium ligno sulphate (6), Active 30.1X (3), PPT silica (1), and China clay (18.545) (example 2, pages 11 and 12; table 1). The specified combination comprising mandipropamid, pyraclostrobin and propineb is the only combinations specifically claimed for use in the compositions (claim 1, page 26).

Structure:



Inventors: Islam, Aminul; Pawar, Kiran; Bhavani, Balram; Devidas, Nikumbhe Sagar; Edoliya, Rajul; Trivedi, Rajan Kumar; Patil, Ramakant

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Filing: 16-AUG-2022, 2022IN50739

Pages: 30
Language: English
IDdb Ref PA13946952

Synergistic insecticidal compositions comprising flonicamid and diafenthiuron

Original Title: *Synergistic insecticidal composition*

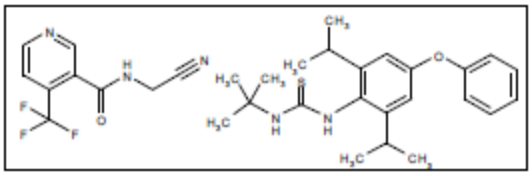
Action: Formulation, Insecticide, Synergist
Target: Hemiptera, Jassid, Trialeurodes vaporariorum
Class: Pyridine, Urea

Novelty: An insecticidal composition comprising flonicamid; diafenthiuron; soy protein; and potassium laurate is claimed. A process for preparing the insecticidal composition as a water- dispersible formulation is also claimed.

Biology: The specified composition (87.75 + 270 + 15) (g.a.i)/ha showed 90.43%, 90.63% and 89.06% control of *Trialeurodes vaporariorum* (nymphs + adults) on tomato after 3, 7 and 10 days after treatment, respectively. Further the specified composition at the same concentrationalso showed 84.67%, 84.66% and 83.89% control of Jassids *Hemiptera*) (Nymphs + adults) on tomato after 3, 7 and 10 days after treatment, respectively (example 2; tables 2c and 2d; pages 9-11).

Chemistry: The specified wettable dispersible granule composition comprises (in %w/w) flonicamide (11.70), diafenthiuron (36), soy protein (2), potassium laurate (1), ammonium sulfate (5), lactose (0.5), sodium salt of naphthalene sulfonate condensate (5), sodium laurel sulfate (2), antifoam (0.05), corn starch (10) and china clay (qs to make 100%) (CI-1136 WDG, example 1, pages 6 and 7; table 1). The specified compounds flonicamide and diafenthiuron are the two compounds specifically claimed for use in the composition (claim 1, page 18).

Structure:



Inventors: Tripathi, Dr. Saurabh

Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Pages: 23
Language: English
IDdb Ref PA13900858

Water dispersible granular crop nutrition compositions comprising mixture of water insoluble iron, zinc, and magnesium salts for increase yield and plant health

Original Title: *Crop nutrition composition*

Action: Fertilizer, Formulation, Nutrient enrichment, Yield enhancer
Target: Tomato, Wheat, Onion, Groundnut, Cauliflower, Solanum melongena
Class: Inorganic

Novelty: Water dispersible granular crop nutrition compositions comprising a homogeneous mixture of a water insoluble iron salt (1-50% w/w), a water insoluble zinc salt (1-50% w/w), water insoluble magnesium salt (1-80% w/w), and excipients (0.01-97% w/w) with granule size of 0.05-4 mm, and particle size of 0.1-20 microns, a process for their preparation, and their use as fertilizer, nutrient, crop strengthener, solid conditioners and yield enhancer compositions, are claimed. Methods for improving plat health, yield and treating plants to meet nutritional requirements by enhancing uptake of magnesium, zinc and iron comprising the application of the compositions, are also claimed. The compositions exhibit synergistic effect.

Biology: In a field trial, the specified composition (19 kg/ha) showed 31.56% increase in tomato yield, whereas SPIC nourish comparator (25 kg/ha) showed 7.64% increase in tomato yield (experiment 7, pages 83-85; table 7). Also, the other composition showed synergistic yield increase and nutrition uptake over control in wheat, groundnut, cauliflower, tomato and brinjal (also known as *Solanum melongena*) (experiments 1-5, pages 48-77; tables 1-5). Further the other compositions showed significant increase in nutrition uptake in onion planted in alkaline soil (experiment 6, pages 77-81; tables 6A-6C).

Chemistry: The specified water dispersible granule composition comprises (in %) zinc oxide (1), iron II fumarate (6), magnesium hydroxide (10) (formulation T1, pages 84 and 85; table 7; claims 2-4, pages 91 and 92) is one of several combinations specifically claimed for use in the compositions.

Inventors: Naik, Harsha Ramanand

Coverage: *155 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Priority: 07-JUL-2021, IN 202121030573

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Pages: 94
Language: English
IDdb Ref PA13869034

WO 2023281518 A1 **Redson Retail & Reality Pvt Ltd**

Synergistic insecticidal compositions comprising combination of clothianidin, chlorantraniliprole and kojic acid

Original Title: *Synergistic insecticidal composition*

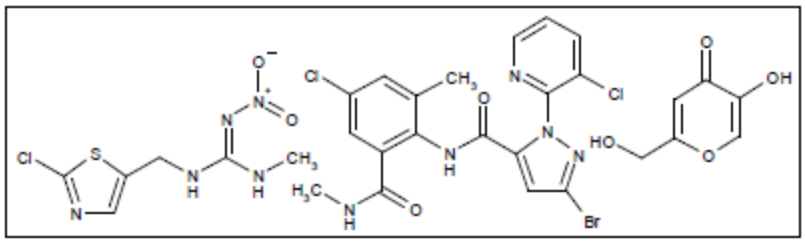
Action: Formulation, Insecticide, Synergist
Target: Stem borer
Class: Amide, Nitroguanidine, Pyran

Novelty: An insecticidal composition comprising clothianidin as first active agent, chlorantraniliprole as second active agent, Kojic acid as UV photodegradation arrester and an excipient is claimed. The composition is preferably claimed to be in the form of wettable granule (WG) formulation and further comprises a wetting agent, a dispersing agent, a defoaming agent. A method for controlling insects in rice by treating rice crop with the insecticidal composition is further claimed. A process for preparing the insecticidal composition is further claimed. It is stated that the composition exhibits surprising and unexpected synergism/functional interrelationship especially when applied to Rice crop for control of insects and shows better safety profile than EC.

Biology: The specified composition comprising combination (105 + 60 + 22.5) a.i/ha showed 94.59% and 90% control of rice stem borer at 20 Days after 1st and 2nd application, whereas clothianidin 50 WDG alone application showed 72.07% and 70.0% controland chlorantraniliprole 18.50 SC alone application showed 84.68% and 85.0% , control respectively (example 6, pages 21 and 22; table 6a).

Chemistry: The specified composition comprises clothianidin 14%, chlorantraniliprole 08% and Kojic acid 3% (1483 WG) (page 21). The specified combination comprising clothianidin, chlorantraniliprole and kojic acid is specifically claimed for use in the combination (claim 1, page 28).

Structure:



Inventors: Tripathi, Dr. Saurabh

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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WO 2022269195 A1 **Scea Du Chateau Montrose**

Compositions comprising potassium bicarbonate for controlling fungal infections in crops

Original Title: *Composition comprising potassium bicarbonate and use thereof for treating and/or protecting crops*

Action: Formulation, Fungicide, Oomyceticide
Target: Erysiphe necator, Pseudoperonospora cubensis, Phytophthora infestans, Botrytis cinerea, Plasmopara viticola
Class: Inorganic, Carbonate

Novelty: Compositions comprising potassium bicarbonate (5-90%/w), an excipient selected from anionic surfactants (0.1-30%/w) and additional surfactants selected from anionic polyelectrolyte polymer, nonionic or cationic surfactants and additional water-soluble excipients, wherein the potassium bicarbonate is obtained from alcoholic fermentation, are claimed. Also claimed are the composition may further comprise a clay content and a solvent. The compositions are claimed to use as phytosanitary composition, preferably an antifungal composition, and protecting crops (such as vines, Cucurbitaceae or Solanaceae) from fungal diseases. Methods for protecting the crops from pathogenic fungi or fungal diseases comprising the application of the compositions are further claimed. The uses of the composition for protecting crops from fungal diseases are finally claimed. The compositions provide better efficacy with reduced phytotoxicity, better adhesion and spreading, increased resistance to washing and greater longevity on leaves.

Biology: In a greenhouse trial, seven days after application with the specified composition showed 50-95% protection against *Plasmopara viticola* in grape wine plant, whereas comparative example (20A20SL01) showed 28% protection against *P viticola* (example 4, pages 66-71). Also, the specified composition *Phytophthora infestans*, *Erysiphe necator*, *Botrytis cinerea*, and *Pseudoperonospora cubensis* (examples 2-5, pages 57-74).

Chemistry: The specified compound comprising Ufoxane 3A (10), Tergitol 15-S-12 (7.5), Adinol OTOT-72 (6), Rhodorsil EP6703 (1), Argirec B22 (25.5), the specified compound (50) (product 4, formulation 20B14GR01, page 57; table 2). The specified compound potassium bicarbonate (claim 1, page 76) is specifically claimed for use in the compositions.

Inventors: Decup, Vincent

Filing: 22-JUN-2022, 2022FR51220
Pages: 95
Language: French
IDdb Ref PA13833390

Coverage: *154 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 29-DEC-2022
Priority: 23-JUN-2021, FR 20216708

Novaluron water dispersible solid composition for controlling insects

Original Title: *Novaluron water dispersible solid composition*

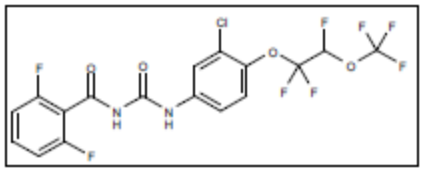
Action: Arthropodicide, Formulation, Insecticide
Target: Spodoptera littoralis
Class: Benzamide, Benzoyl urea, Substituted benzene, Urea

Novelty: Combinations comprising novaluron (disclosed in WO2003049540) and organo-silicone based surfactant, wherein the mixture comprising solid particles of novaluron, and organo-silicone based surfactant dispersed in water, and the particles D_{90} size of 10-20 microns are claimed. Tank mixing comprising the mixture is a suspension or a tank mix. Water dispersible solid compositions comprising novaluron (80% w/w), organo-silicone based surfactant (1.5% w/w), a dispersing agent (9% w/w), a wetting agent (3%), and solid additive (6.5% w/w), water dispersible solid compositions comprising novaluron or suspensions comprising the composition, a process for their preparation, and their use for controlling unwanted insects or plant disease caused by unwanted insects, are further claimed. Packages comprising the water dispersible solid compositions, and their for controlling unwanted insects, or water dispersible solid composition and their use for controlling insect in the vicinity of pesticide sensitive crop, are finally claimed.

Biology: In an in vitro ingestion assay, the specified compound (0.08 ppm) in the composition showed significantly increased mortality towards *Spodoptera LittoralIs* on over and Rimon® 10EC (example 4, pages 67-70; fig 1). Further in a greenhouse trial, the specified compound showed significant control on chlorosis in pepper plant (example 5, pages 70 and 71; table 6).

Chemistry: The specified water dispersible solid composition comprises (in % w/w) the specified compound (80), Morwet EFW (3), Ufoxane 3A (2), Atolx Metasperse 550S (7), corn starch (1), talc (5.5), and Silwet L-77 (1.5), wherein the D90 particle size of 17 microns (formulation 800 WDG-03, example 1, pages 63 and 64; table 2). In an experiment, the specified compound showed 95% dispersibility and 85-90% suspensibility, whereas the comparative example Rimon® 10EC showed 85% dispersibility and 80-85% suspensibility on stored at 54 °C for 14 days (example 2, example 2, pages 65-67; table 4). The specified compound (±)-1-[3-chloro-4-(1,1,2-trifluoro-2-trifluoromethoxyethoxy)phenyl]-3-(2,6-difluorobenzoyl)urea (novaluron) (page 1; claim 1, page 72) is the only compound specifically claimed for use in the compositions.

Structure:



Inventors: Koren, Lital; Dayagi, Yohai; Mines, Yaakov

Coverage: *154 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IQ IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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IDdb Ref PA13823268

Synergistic herbicidal compositions comprising clodinafop propargyl, fomesafen and chlorimuron ethyl.

Original Title: *Synergistic herbicidal composition*

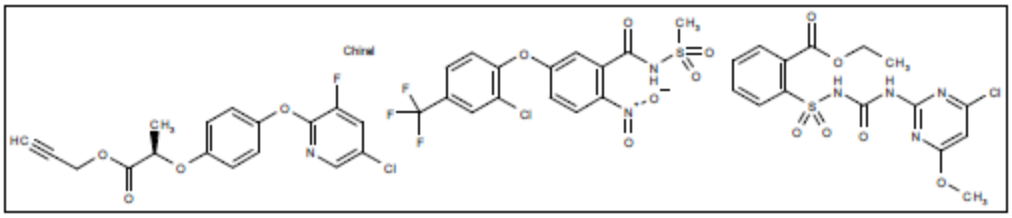
Action: Formulation, Herbicide, Synergist
Target: Cyperus, Echinochloa colonum, Commelina benghalensis
Class: Aryloxyphenoxypropionic acid, Benzamide, Diphenylether, Pyridine, Pyrimidine, Sulfonyl urea

Novelty: A herbicidal composition comprising a) clodinafop propargyl (1-25% w/w) b) fomesafen (5-45%w/w) and c) chlorimuron ethyl (1-30% w/w) and an excipient is claimed. The composition is preferably claimed to be in the form of wettable granule (WG) formulation. The compositions are claimed to be used for controlling undesired weeds in soybean crop cultivation. A process for preparing a herbicidal composition is also claimed. The compositions is disclosed to be synergistic, and broad-spectrum herbicidal composition for the control of narrow leaved weeds, broad-leaved weeds and sedges in agricultural crops, particularly Soybean.

Biology: The specified WG composition (84+154+9.8 g ai/hectare) showed 96.16%, 94.74% and 92.50% control of *Echinocloa colonum*, *Commelina bengalensis* and *Cyperusspp*, respectively compared to the effect of application of the three actives concurrently at their recommended dosages (CH1221 WG, example 2, pages 11-14; table 6).

Chemistry: The specified composition comprises (in %w/w)specified compounds namely clodinafop propargyl (12), fomesafen (22), chlorimuron ethyl (1.4), ammonium sulfate (10), sodium salt of naphtahlene sulfonate condensate (8), sodium laurel sulphate (4), antifoam (0.02), binder (10) and Chinal clay (qs to make w/w) (example 1a, pages 8 and 9, CH1221WG, table 1). The specified compounds clodinafop propargyl, fomesafen and chlorimuron ethyl are specifically claimed for use in the composition (claim 1, page 25).

Structure:



Inventors: Tripathi, Saurabh

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Pages: 31
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IDdb Ref PA13807920

Broad spectrum synergistic herbicidal compositions comprising trimix of pinoxaden, metribuzin and metsulfuron methyl

Original Title: *Broad spectrum herbicidal composition for wheat*

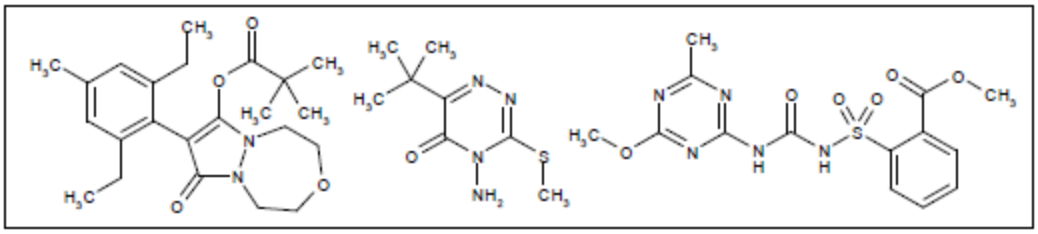
Action: Formulation, Herbicide, Synergist
Target: Phalaris minor, Fumaria, Chenopodium album
Class: Pyrazoline, Sulfonyl urea, Triazinone

Novelty: A synergistic herbicidal combination comprising three active agents namely pinoxaden, metribuzin and metsulfuron methy and excipients is claimed. The composition is preferable claimed to be in the form of wettable granules (WG). A process for preparing the synergistic herbicidal composition is also claimed. It is stated that the composition is broad-spectrum herbicidal composition for the control of both narrow leaved and broad-leaved weeds in Wheat crop.

Biology: The specified combination comprsing three specified compounds at respective concentrations of 48.75+127.5+3.98 gm ai/h showed 92.30%, 100% and 100% control of *Phalaris minor*, *Chenopodium album* and *Fumaria Spp* after 14 days of application and 82.69%, 89.23% and 88.88% control after 28 days of application, respectively (example 2, pages 11 and 12; tables 4a and 4b). Further the specified combination (45.5+119+3.71) ai/hectare showed 77.26% of weed control with no phytotoxicity (example 3, page 20; table 6d).

Chemistry: The specified WG composition comprises (in %w/w) pinoxaden (6.5), metribuzin (17), metsulfuron methyl (0.53), sodium bicarbonate (1), citric acid (0.5), sodium salt of napththalene sulfonate condensate (5), sodium laurel sulphate (2), antifoam (0.05), PPT silica (5) and China clay (qs to make 100%) (CH-65175, example 1, pages 7 and 8; table 1). The specified compounds pinoxaden, metribuzin and metsulfuron methyl are specifically claimed for use in the composition (claim 1, page 22).

Structure:



Inventors: Jha, Rajeev

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Pages: 27
Language: English
IDdb Ref PA13745361

WO 2022227315 A1 **Environment & Plant Protection Institute Chinese Academy of Tropical Agricultural Sciences**

Herbicidal compositions comprising sarmentine and clomeprop for controlling weeds

Original Title: *Sarmentine-containing compound herbicidal composition and application thereof*

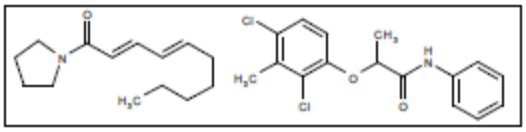
Action: Formulation, Herbicide, Synergist
Target: Echinochloa crus-galli, Cyperus rotundus, Chloris virgata, Cyperus difformis
Class: Amide, Ketone, Pyrrolidine, Substituted benzene

Novelty: Herbicidal compositions comprising sarmentine and clomeprop in a ratio of 1:2 to 8: 1, and their use for controlling weeds including *Cyperaceae* or *Gramineous* plants are claimed. Further claimed that the composition may comprises a water dispersible granule, a wettable powder, a water suspending agent and an oil suspending agent. The combinations exhibit synergistic effect, low phytotoxicity, and environmentally safe.

Biology: In a field trial, the specified combination in a composition (1200 g/ha) showed 94.61, 95.42, 100 and 100% control of *Cyperus rotundus L*, *Cyperus Difformis L*, *Echinochloa Crusgalli L* and *Chloris Virgata*, respectively. whereas sarmentine (1200 g/ha) and clomeprop (500 g/ha) showed 27.64, 31.18, 86.23 and 82.47%; and 83.76, 81.57, 20.19 and 18.76% control of the respectively species (experimental example 2, pages 7 and 8; table 3).

Chemistry: The specified dispersible granule comprises (in %) the specified combination (75 + 50), mixed alcohol polyoxyethylene ether (2), naphthalene sulfonic acid formaldehyde condensate (7), sodium bicarbonate (5), methyl cellulose (1), organic silicon defoaming agent (0.5), and balance of kaolin (qs) (example 5, page 4). The specified combination comprising sarmentine and clomeprop is the only combinations specifically claimed for use in the compositions (claim 1, page 9).

Structure:



Inventors: Feng, Gang; Wang, Jingru; Zhang, Jing; Ye, Huochun; Gu, Liushuang; Zhu, Fadi; Yan, Chao
Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Pages: 14
Language: Chinese
IDdb Ref PA13710671

Methods for improving a performance of an agrochemical by combining the agrochemical with an adjuvant having a cereal or legume base

Original Title: *Cereal based adjuvant for agrochemical performance*

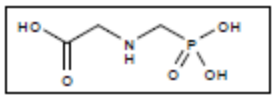
Action: Formulation, Herbicide, Adjuvant
Target: Weed
Class: Glyphosate

Novelty: A method for improving a performance of an agrochemical by combining the agrochemical with an adjuvant having a cereal or legume base selected from a group comprising corn, wheat, oat, canola, and soybean is claimed, wherein the adjuvant comprising solids obtained from a process of grinding the cereal base and extracting oils therefrom, drying and milling said solids into an isolate having a particle size between about 20 and 200 microns, introducing the isolate into the adjuvant in a solution of up to twenty-five percent (25%) by weight of isolate, five to twenty-five percent (5% - 25%) nonionic or anionic surfactant, and water. It is also claimed that the adjuvant solution includes soil micronutrients, humectant, silica, clay, oat protein, dispersant, surfactant and an emulsifier. The adjuvant solution is claimed to be processed into water dispersible granules. It is stated that the adjuvant enhances the active agents in products such as herbicides, fungicides, insecticides, biologicals, PGRs, fertilizers, and utility products by, among other things, increases the absorption surface area per droplet, also increases the chemical penetration of the agrochemical into the leaf stoma due to the adjuvant's complex protein and carbohydrate relationship upon deposition. This rapid induction then translates to maximum absorption potential while remaining less obstructive/invasive to the leaf/plant, and yielding healthier produce than current technologies. The adjuvant reduces driftable fines by altering common use ingredients into larger droplets that have less shear and splatter properties.

Biology: No biological data are presented.

Chemistry: The specified composition comprises 41% of the specified compound and 5%-25% of a cereal based adjuvant (example 1, page 11). The specified compound glyphosate is one of two compounds exemplified for use in the composition (page 11). No compounds are specifically claimed.

Structure:



Inventors: Sondgroth, Broc; Berg, Eric

Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 28-APR-2021, US 2021180858

Filing: 21-APR-2022, 2022US25847
Pages: 16
Language: English
IDdb Ref PA13711635

Solid compositions comprising substantially water insoluble insecticide, anionic surfactant and lignosulphonates used for controlling animal pests

Original Title: *Novel compositions comprising anionic surfactant containing sulfate or sulfonate group*

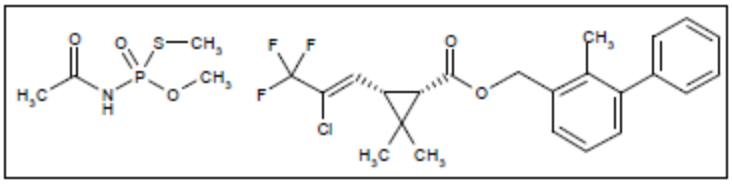
Action: Surfactant, Formulation, Insecticide
Target: Euschistus heros
Class: Phosphorus amide, Pyrethroid

Novelty: A solid composition comprising an insecticide which is substantially insoluble in water, ammonium salt, at least one anionic surfactant containing sulfate or sulfonate group (optionally alkylated naphthalene sulfonate condensate; b) lignosulphonates and/or compounds) and a carrier is claimed. The compositions are claimed to be used for controlling animal pests. A solid agrochemical composition comprising acephate, ammonium salt and a carrier used for controlling animal pests is also claimed. A method for reducing the odor of compositions containing acephate characterized by adding ammonium salt to solid compositions containing acephate and a carrier is further claimed. It is stated that the compositions exhibit reduced odor, high efficacy and high dispersibility.

Biology: In a randomized block field trail, the specified composition when applied at a concentration of (850 + 35 g AI/Ha) showed 87% control of *Euschistus heros* after 10 days of application (example 4, pages 42 and 43; table 7).

Chemistry: The specified composition comprises (in %/wt) specified compounds (85 + 3.5), Aerosil 200 (0.5), Atlox Matasperse 55OS-PW-(AP) (modified styrene acrylic polymer) (1.0), Rhodapon LS 94RPB (Sodium lauryl sulphate) (3.5), SAG 1572 (polydimethylsiloxane emulsion), Soprophor 4D/384 (tristyrylphenol sulfate, ammonium salt) (1.0) and ammonium sulfate (5.3) (formulation A, pages 38 and 39; table 1). The suspensibility percentages of acephate and bifenthrin at ambient temperature after 14 days were found to be 98.49% and 91% and at AHS 54 °C after 14 days was found to be 99% and 90%, respectively (table 2, page 39). The specified combination comprising acephate (claim 17, page 46) which is one of four phosphoramidothioate insecticide compounds and bifenthrin (claim 11, page 45) which is one of several substantially water insoluble insecticides are specifically claimed for use.

Structure:



Inventors: Yadagani, Venkateswararao; Adhimoolam, Arunagirinathan Manickam
Coverage: *153 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JM JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 27-OCT-2022
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Filing: 19-APR-2022, 2022IL50408
Pages: 52
Language: English
IDdb Ref PA13692786

Novel crystalline form of pyroxasulfone, methods for its preparation and use of the same

Original Title: *Novel crystalline form of pyroxasulfone, methods for its preparation and use of the same*

Action: Herbicide
Target: Amaranth, Polygonum, Chenopodiaceae
Class: Pyrazole, Oxazole

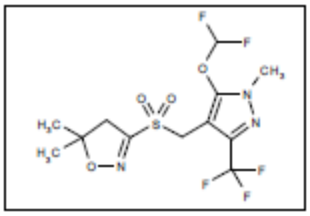
Novelty: Novel crystalline forms of pyroxasulfone (designated as modification I) and processes for their preparation and compositions comprising them are claimed. Also claimed is a composition comprising the crystalline modification I of pyroxasulfone for controlling plant growth or undesirable plant growth, wherein the composition is in the form of a suspension concentrate (SC), an oil-based SC, water-soluble granules, a dispersible concentrate, an emulsifiable concentrate, an emulsion seed dressing, a suspension seed dressing, granules, microgranules, a suspoemulsion or water-dispersible granules. Further claimed is a method for controlling plant growth at a locus, wherein the plant growth being controlled is in a crop of plants, eg maize, soybeans, wheat and triticale. It is claimed that the undesirable plant, such as chenopodiaceae, amaranthaceae, polygonaceae, daygrass, hamamelis, and dodder. A process for preparing the crystalline modification I of pyroxasulfone comprising the steps of providing a solution of pyroxasulfone in a solvent system, followed by precipitation and isolation, is also claimed. Use of a solvent system to prepare crystalline pyroxasulfone having an improved stability and resistance to hydrolysis, is further claimed.

Biology: No biological data are presented.

Chemistry: Compound of (I) (10 g) was dissolved in dichlorodiethyl ether and stirred and heated at 90 °C and slowly cooled at RT. The slurry was stirred at RT for 2 h, filtered, washed with dichlorodiethyl ether. The resulting solid was filtered, washed, and dried under vacuum at RT to yield crystalline form of pyroxasulfone with >98% of purity and 80% of yield (example 2, pages 20 and 21; claim 1, page 26).

Comment: *Also see WO2022170964.*

Structure:



Inventors: Bristow, James Timothy

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 11-FEB-2021, GB 20211909

Filing: 28-DEC-2021, 2021CN141978
Pages: 40
Language: English
IDdb Ref PA13523960

Novel crystalline hydrate of topramezone sodium salt and preparation method therefor

Original Title: *Novel crystalline hydrate of topramezone sodium salt and preparation method therefor*

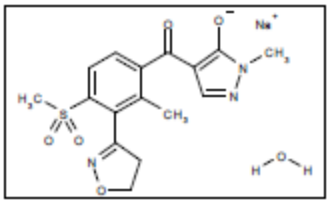
Action: Herbicide
Target: Portulaca oleracea, Goosegrass, Weed, Barnyardgrass, Black nightshade, Cocklebur, Chenopodium quinoa, Broadleaf
Class: Pyrazole, Oxazole

Novelty: Novel crystalline 2.5 hydrate forms of topramezone sodium and processes for their preparation is claimed, wherein the crystalline hydrate is orthorhombic. It is used that the crystalline hydrate forms of compound for the control of undesirable plant growth. Also claimed is an herbicidal composition comprising the crystalline hydrate of compound and fillers and/or surfactants, wherein the composition is in the form of a soluble granule (SG), a water dispersible granule (WG), a wettable powder (WP), an oil dispersion (OD) or a dispersible tablet. Further claimed is a method for the control of undesirable plant or locus growth, wherein the undesirable plant (fern, barnyard grass, Indian goosegrass, wild paris, dog-tail herb, Chenopodium quinoa, polygonum capitatum, cimicifugae, purslane, cocklebur, or black nightshade) is a gramineous weed or broadleaf weed in a maize field. The crystalline forms of compounds exhibited better stability and solubility and effectively resolve the dusty situation during jet pulverization, reduce granulation difficulties.

Biology: No biological data are presented.

Chemistry: Free base of (I) (22.0 g) was dissolved in 90 ml of water, followed by addition of sodium hydroxide at RT and heated at 50 °C and stirred until the solution became clear, and pressure was reduced to remove 30 g of water and then treated with methanol and then headed and slowly reduced to RT. The resulting solid was filtered, washed, and dried at 60 °C to yield crystalline form of specific product, 2.5 hydrate of topramezone sodium (I) (22.8 g) with 93% of yield (KF: water content 10.9%) (page 4; example 3, page 11; claim 1, page 15).

Comment: *Also see WO2022170871.*
Structure:



Inventors: Bristow, James Timothy

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 12-FEB-2021, US 2021175112

Filing: 25-JAN-2022, 2022CN73702
Pages: 23
Language: English
IDdb Ref PA13523987

WO 2022126466 A1

Shandong Provincial Institute for the Control of Agrochemicals (Shandong Provincial Station for the Inspection of Agrochemicals Quality)

Ternary herbicidal composition comprises an herbicidal effective amount of Ethiozin, Biscarfentrazone and quinclorac useful in controlling weeds

Original Title: *Ternary herbicidal composition and application thereof*

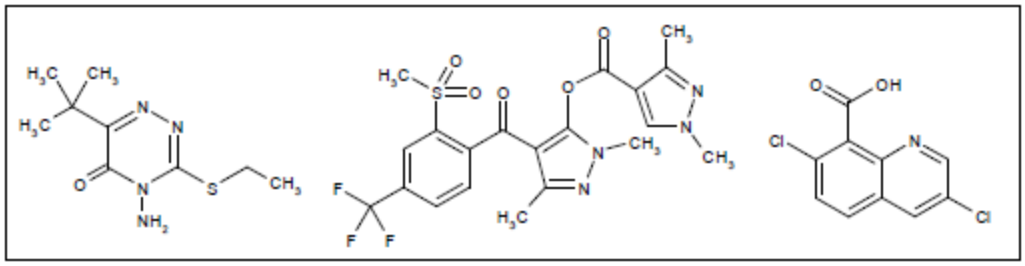
Action: Formulation, Herbicide, Synergist
Target: Shepherds purse, Chickweed, Artemisia annua, Callosobruchus chinensis
Class: Carboxylic acid, Quinoline, Triazine, Pyrazole, Triazinone

Novelty: A ternary herbicidal composition comprising an one or more active agents as an herbicide, useful in controlling weeds, is claimed, wherein the formulation is a dispersible oil suspension, an aqueous suspension, a suspoemulsion, a wettable powder, an emulsifiable concentrate, a water dispersible granule formulations, aqueous emulsions or microemulsions. The composition further comprises conventional adjuvants and safener. A method for controlling the growth of weeds, using the composition is also claimed. The composition is environmentally friendly and is easily degraded in the environment, has low cost and convenient use, and its popularization and application have huge economic and social benefits. The combination exhibits a synergistic effect.

Biology: The specified combination, at a dose of 80.5 + 82 + 75 gai/ha showed 49.5 and 14.9% of observed and expected inhibition of *Callosobruchus chinensis*. The specified combination at a dose of 570 gai/ha showed 91.2% of herbicidal activity against chickweed, bovine chickweed, *Artemisia annua*, and Shepherd's purse (tables 1 and 2, pages 2-4).

Chemistry: The specified combination comprises ethiozin, biscarfentrazone, and quinclorac (claim 1, page 5), which is the only combination specifically claimed for use in the combination.

Structure:



Inventors: Zhang, Yaozhong; Li, Xiangyang; Chi, Guibing

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 17-DEC-2020, WO 2020CN137075

Filing: 17-DEC-2020, 2020CN137075
Pages: 10
Language: Chinese
IDdb Ref PA13385857

Aqueous emulsion formulations comprising a discrete oil phase comprising cinnamaldehyde; and a continuous aqueous phase comprising a water soluble ingredient useful for controlling phytopathogenic fungi

Original Title: *Fungicidal composition*

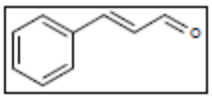
Action: Formulation, Fungicide
Target: Fungus
Class: Aldehyde

Novelty: A composition (preferably an aqueous emulsion (EW) formulation) comprising a discrete oil phase comprising cinnamaldehyde; and a continuous aqueous phase comprising a water soluble ingredient, useful for controlling or preventing phytopathogenic fungi, is claimed, wherein said oil phase comprises at least one water dispersible ingredient. The composition is further claimed to comprise a cosolvent. A process for preparation of the composition, is further claimed. The formulation is stated to exhibit stability on storage,is environmentally friendly, economically feasible, shows no phytotoxicity or high biodegradability and overcome some of the disadvantages of EC formulation such as skin irritation and flammability issues and cost.

Biology: No biological data are presented.

Chemistry: An exemplified EW formulation comprises (in %) the specified compound (31), propylene glycol (5), polysorbate 80 (5), methyl-oxirane polymer with oirane (5), isopropyl myristate (4) and water (qs) (example 1, pages 22). Also, in a stability test, the exemplified formulation was stable at both ambient and 14 days AHS (Accelerated Heat Stability) at 54 weeks (example 6, pages 25-27; table 2). The specified compound, cinnamaldehyde (claim 1, page 30) is the only active agent specifically claimed for use in the formulation.

Structure:



Inventors: Chokashi, Kalpesh Parimal; Sharma, Shiv Kumar; Das, Kuntal

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
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Priority: 24-SEP-2020, IN 202021041481

Filing: 24-SEP-2021, 2021IB58711
Pages: 37
Language: English
IDdb Ref PA13178090

Pesticidal compositions comprising elemental sulphur and choline salt of pelargonic acid for treating plants and their parts

Original Title: *Pesticidal composition comprising elemental sulphur and choline salt of pelargonic acid*

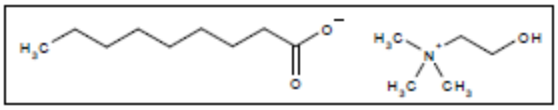
Action: Formulation, Fungicide, Preservative, Synergist
Target: Rhizoctonia, Alternaria, Aspergillus, Erysiphe cichoracearum, Leveillula taurica, Fusarium
Class: Aliphatic, Ammonium, Carboxylic acid, Inorganic

Novelty: Pesticidal compositions, preferably solid or liquid gel comprising elemental sulphur (1-95% w/w), choline salt of pelargonic acid (0.01-50% w/w), and excipients, a process for their preparation, and their use for treating plants, crops, plant propagation materials, locus, seeds, seedlings, or soil, wherein the particles size of the composition was 0.1-50 µM, are claimed. It is also claimed that the composition has the viscosity of 10-3000 cps, pourability of < 5% residue, and suspensibility or dispersibility of > 30% on stored under normal and accelerated storage conditions. The compositions have good stability and synergistic effect with reduced plant phytotoxicity.

Biology: In a field trial, foliar application with the specified combination (1000 + 1600 g ai/ha) showed 91% control of *Erysiphe cichoracearum* in cucumber with 160 qtl/ha cucumber yield without phytotoxicity (example 3, pages 57-60; table 3). Also, the specified combination showed significant control of *Leveillula taurica* in chilly, *Fusarium*, *Rhizoctonia*, *Aspergillus*, and *Alternaria* species (examples 1 and 2, pages 51-57; tables 1 and 2).

Chemistry: The preparation of exemplified water dispersible granules comprising (in parts) the combination (40 + 30), magnesium aluminium silicate (15), lignin sulfonate (10), naphthalene sulfonate (5), wherein the particle size of the composition is > 50 µM (example 1, page 46). The specified combination comprising elemental sulphur (not drawn) and choline pelargonate is one of two combinations specifically claimed for use in the compositions (claims 1 and 3, page 61).

Structure:



Inventors: Doshi, Hiteshkumar Anilkant

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 24-FEB-2022
Priority: 17-AUG-2020, IN 202035IN202021035

Filing: 16-AUG-2021, 2021IB57526
Pages: 68
Language: English
IDdb Ref PA13076293

Crystalline form of 4-amino-N-tert-butyl-4,5-dihydro-3-isopropyl-5-oxo-1,2,4-1H-triazole-1-carboxamide and a process for producing thereof

Original Title: *Crystalline form of 4-amino-N-tert-butyl-4,5-dihydro-3-isopropyl-5-oxo-1,2,4-1H-triazole-1-carboxamide and a process for producing thereof*

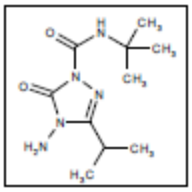
Action: Formulation, Herbicide, Process
Target: Grass, Weed, Sedge
Class: Amide, Triazolone

Novelty: Novel crystalline forms of 4-amino-N-tert-butyl-4,5-dihydro-3-isopropyl-5-oxo-1,2,4-1H-triazole-1-carboxamide (also known as amicarbazone; designated as Form C), processes for their preparation and compositions comprising them are claimed. Also claimed is a process for preparing the crystalline forms of the amicarbazone comprising the steps of providing a solution of the amicarbazone in an organic solvent, followed by effecting crystallisation to obtain the crystalline Form C of the amicarbazone. Further claimed is an agrochemical composition comprising the crystalline Form C of the amicarbazone and a carrier, wherein the composition is in the form of solid formulation. A method for the control of undesired plant growth, is also claimed. The composition is useful for controlling weeds and protect the plants from unwanted weeds. Amicarbazone is known to be an herbicidal active substance with a broad spectrum of weed control. The crystalline forms of compounds are stated to be more stable.

Biology: A field trials were carried out using water-dispersible granular formulation comprising Form C of the specified compound on crop and non-crop land containing many broad leave weeds, grasses, and sedges. Results showed that the specified compound in Form C exhibited 7.5, 5 and 9% control of *Ipomea hederacea*, *Setaria* sp, and Wild okra, respectively (example 8, pages 6 and 7; table 2).

Chemistry: 2 g of amicarbazone (prepared according to US5194085) was dissolved in 20 ml of toluene at 40 °C and stirred for 1 hour and filtered. The filtrate was brought at 25 °C and checked for crystallisation initiation. The resulting slurry was then stirred at 0-10 °C for 30 minutes. The resulting precipitated solid was filtered out and dried at 50 °C to yield crystalline Form C of the specified compound, amicarbazone (1.42 g) with purity of 100% by HPLC (page 1; example 1, page 6; claim 1, page 7; figure 5). An exemplified granular composition comprises crystalline Form C of the specified compound (70.5), citric acid (0.5), precipitated silica (2.0), PVP K 30 (2.0), sodium lauryl sulfate (8.0), morwet 400 (10) and ammonium sulfate (7.0) (example 6, page 6).

Comment: *Also, see WO2022034514, published alongside.*
Structure:



Inventors: Kini Prashant Vasant; Chhatre Ajay Sadashiv

Coverage: *1 country:* US
Published on: 17-FEB-2022
Priority: 14-AUG-2020, IN 202021035020

Filing: 16-AUG-2021, 2021402612
Pages: 14
Language: English
IDdb Ref PA13056074

Herbicidal compositions comprising combinations of penoxsulam and additional herbicide for controlling weeds

Original Title: *Synergistic herbicidal formulations, process for preparing thereof*

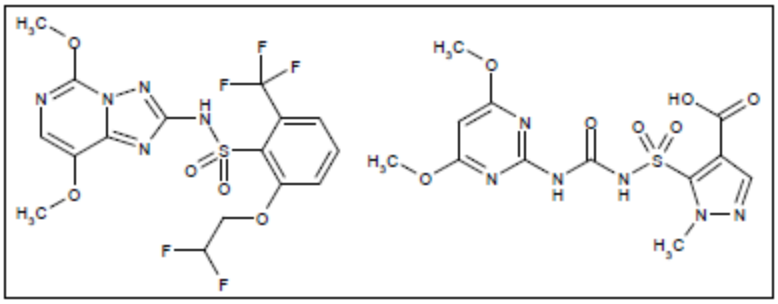
Action: Formulation, Herbicide, Synergist
Target: Cyperus rotundus, Monochoria vaginalis, Ludwigia parviflora, Eragrostis pilosa, Echinochloa colonum, Cyperus difformis
Class: Carboxylic acid, Pyrimidine, Substituted benzene, Sufonamide, Sulfonyl urea, Triazole, Pyrazole

Novelty: Herbicidal compositions comprising combinations of penoxsulam and additional herbicide (such as pyrazosulfuron or its derivative, bispyribac and 2,4-D), wetting agent, dispersing agent and other agrochemical auxiliaries, a process for their preparation, are claimed. The combinations exhibit synergistic effect.

Biology: In a field trial, the specified combination (27 + 18 GAH) showed 95 and 100% control *Cyperus rotundus* and *Cyperus difformis*, respectively. whereas penoxsulam SC (27 GAH) and pyrazosulfuron WP (18 GAH) showed 60 and 70%; 40 and 50% against the respective species. Also, the specified combination showed synergistic control of *Echinochloa colonum*, *Eragrostis pilosa*, *Monochoria vaginalis*, and *Ludwigia parviflora* (pages 26-28; table 1-3).

Chemistry: The exemplified water dispersible granules comprise (in % w/w) the specified combination (9.08 + 6.18), Morwet 3028 (3), Morwet D-425 (5), ammonium sulfate (25), polydimethylsiloxane (0.5), and ammonium clay (qs) (example 1, page 20). The specified combination comprising penoxsulam and pyrazosulfuron is one of four combinations specifically claimed for use in the composition (pages 2 and 3; claim 1, page 34).

Structure:



Inventors: Dsouza, Jaison Joyal; Edoliya, Rajul; Bhavani, Balaram; Islam, Aminul; Dosetty, Sai Kiran; Trivedi, Rajan Kumar
Coverage: ***152 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW
Published on: 03-FEB-2022
Priority: 25-JUL-2020, IN 202041031907

Filing: 24-JUL-2021, 2021IB56688
Pages: 38
Language: English
IDdb Ref PA13022285

Compositions comprising thifluzamide, kasugamycin and an adjuvant useful as a fungicide

Original Title: *Fungicidal compositions and methods related thereto*

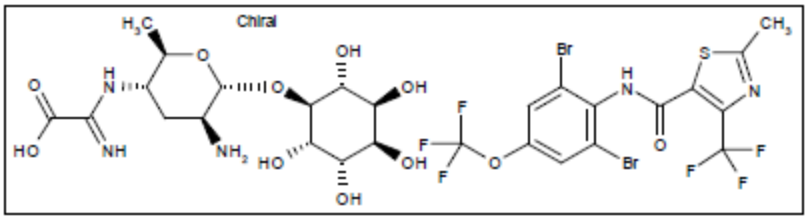
Action: Formulation, Fungicide, Synergist
Target: Rice blast, Rhizoctonia
Class: Anilide, Antibiotic, Natural product, Thiazole

Novelty: A pesticidal composition comprising thifluzamide, kasugamycin and an adjuvant, is claimed, wherein the composition is formulated as a wettable powder, suspension concentrate, a micro emulsion, an encapsulated suspension or a water dispersible granule. The compositon is disclosed to be a fungicide. Kasugamycin is disclosed to be an aminoglycoside antibiotic isolated from *Streptomyces kasugaensis*. The composition exhibits good stability and synergistic effect.

Biology: The specified composition was evaluated for the bio-efficacies for the control of the sheath blight and blast diseases on paddy crop. The expected efficacies for active ingredient combinations were determined using Colby's formula and compared with observed efficacies. No phtotoxicity symptoms were recorded on paddy crop after administering the composition (89.70 + 20.70 g.a.i/ha) with 29.30% of yield increase over check, with a gross profilt from produce (in Rs/ha) to be 106590; whereas thifluzamide and Kasugamycin showed 13.61 and 8.70% of yield, respectively. Thus the combination exbibtied a synergistic effect (pages 8 and 9; table 2).

Chemistry: A specified composition comprises (in g w/v) the specified combination of thifluzamide and Kasugamycin hydrochloride hydrate (in a.i.) (26 + 6), ethoxylated branched C11-C13 rich alcohol C14 (2.36), acrylic graft copolymer in propylene glycol (3.54), water, propylene glycol (7.08), dimethyl siloxane reaction with silica octamethyl cyclotetrasilane (0.59), smectite clay (0.35), xanthan gum (0.29), 1,2-benzisothiazol-3-(2H)-one sodium hydrate (0.03) and phosphoric acid (0.14). The composition exhibited good physico-chemical stability (pages 7 and 8; table 1). The specified compound, thifluzamide and kasugamycin (claim 1, page 10) is one of the several compounds exemplified. No compounds are specifically claimed.

Structure:



Inventors: Aggarwal, Rajesh; Rohela, L.C.

Coverage: *152 countries:* AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Priority: 28-JUN-2019, IN 201911025904

Filing: 24-JUN-2020, 2020IB55941
Pages: 14
Language: English
IDdb Ref PA12002073

Process for preparation of water dispersible fertilizer composition

Original Title: *Process for preparation of water dispersible fertilizer composition and compositions in powder form made therefrom*

Action: Fertilizer, Formulation
Target: Mustard, Groundnut
Class: Inorganic

Novelty: A powder-form water dispersible fertilizer composition having particle size of up to 90 microns and a process for its preparation are claimed; wherein the process involves: mixing sulfur prills with fillers, dispersing agents and wetting agents in a fluid medium; aging, under continuous stirring; adding a defoamer; grinding to obtain a wet ground mixture; drying; and sieving the final mixture using a sieve.

Biology: In field trials, a mixture of commercially available fertilizer (NPK) and the specified composition showed good response towards vegetative growth and yield attributing characters, wherein the average oil content in the kernel was found to be 45.53-48.37%, as compared to other treatments (commercially available fertilizer (NPK) alone and combination of commercially available fertilizer (NPK) with water dispersible sulphur granules) in summer groundnut plant of GG-2 variety. Also, the use of the specified composition along with the recommended dose of fertilizer provided a higher yield as compared to the other treatments (pages 18-21; tables 2-7; figures 3a-3c).

Chemistry: The specified composition as a powder-form water dispersible fertilizer composition was prepared from (in g) Tersperse 2700 dispersant (15), Terwet 1004 wetting agent (3), sulfur prills of 5 mm size (910), bentonite clay (63), and amorphous silica based concentrated defoamer (0.1). A suspension was prepared from the dried product and the particle size of the sulfur particles was found to be below 25 microns. The composition had moisture content of 1%, elemental sulfur content of 91% and suspensibility of >80%, whereas comparative compositions showed sulfur content of 90.1-90.5%, moisture content of 0.5-0.9% and suspensibility of 40-42% (example 2, pages 15-17; table 1).

Inventors: Puthiyaveetil, Othayoth Suresh; Sanchapara, Nirmit Kantibhai; Joshi, Ajay Bhanushankar; Vaishnav, Pujan Bhupendrabhai

Coverage: ***152 countries:*** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN WS ZA ZM ZW

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Pages: 34
Language: English
IDdb Ref PA11970938