

# WIPO



**IPC/WG/12/3**  
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**WORLD INTELLECTUAL PROPERTY ORGANIZATION**  
GENEVA

**SPECIAL UNION FOR THE INTERNATIONAL PATENT CLASSIFICATION  
(IPC UNION)**

**IPC REVISION WORKING GROUP**

**Twelfth Session**  
**Geneva, November 29 to December 10, 2004**

REQUEST FOR REVISION OF THE INTERNATIONAL  
PATENT CLASSIFICATION (IPC)

*Document prepared by the Secretariat*

1. The Annex to this document contains an IPC revision request, submitted by China, on IPC subclass A01N.

2. *The Working Group is invited to consider the revision request contained in the Annex to this document.*

[Annex follows]

## ANNEX

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# State Intellectual Property Office of P.R.China

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Request for revision of the IPC - Main group A01N65/00

Oct. 18th, 2004

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## Request for revision of the IPC - A01N65/00

### Background

IPC A01N65/00 is about botanical pesticides ( here biocides , pest repellants or attractants are called pesticides by a joint name ). There are approximately more than 1,000 documents already located in the main group, including more than 800 Chinese patent documents at present. And its growth in Chinese patent literature is about 125 documents in 2003. It is too difficult for searchers to find a very relative document. Therefore, a new subdivision of the group is needed to classify these documents located in A01N65/00 further.

### Solution

Please find Annex 1 detailed IPC revision proposal for A01N65/00. The proposal aims to subdivide the contents of the main group so that patent documents relating to botanical pesticide are classified into adequate subgroups.

In order to accurately achieve the object, the present proposal should be carried out according to the following guiding line and principles:

(1) In respect of the classification ideology, the present proposal should be consistent with the classification ideology of the IPC system, i.e. to facilitate the retrieval of technical subject matter, to classify the same technical subject in the same place , and to retrieved them from the same place, which is the one most likely to be searched for that subject.

(2) About the classification rules

Through number statistics of Chinese patent documents in A01N65/00, the document number of some kinds of plants are found larger. So these kinds of plants are designed frame of A01N65/00 subdivision. Because the pesticides included in A01N65/00 contain plant material, ( Engler ) botanical classification rule is referenced in this subdivision of A01N65/00. But botanical classification rule is based on phylum, class, order, family, genus, species, and the lowest level of botanical classification is species. So there would be too many subgroups in subdivision that it will not be better for search, if this proposal executes strictly according to botanical classification. In order to minimize number of classification in the main group, this proposal designs following rules:

- (a) the amount of documents in each main group or subgroup should be less than 100;
- (b) if the plants contained in pesticides only concentrate in certain genus of one family, this genus is merely given a classification place, but its higher level isn't given a classification place;

(c) if the plants contained in pesticides concentrate in more than one genus of one family, both its family and genus are considered to be given classification places ;

(d) if the plants contained in pesticides concentrate in one family and not in certain genus of the family, the family is only given a classification place and the genus isn't.

### **Explanation about A01N65/00 subdivision proposal**

1. In order to make further explanation about A01N65/00 subdivision proposal, we gave some examples of patent documents to each new group. The documents were selected from PCT Min. or Chinese patent documents. Please find the details in annex 2 below.
2. As mentioned in our proposal, the subdivision of A01N65/00 references botanical classification-Engler classification. According to Engler classification, Nicotiana is part of Solanaceae. So the existing group 65/02 related to Nicotiana transferred to 65/282 below 65/28 related to Solanaceae.
3. In addition, SIPO is doing further work on the proposal. Engler classification is unfamiliar to public and each group of the A01N65/00 subdivision includes a series of plants. For the better practice of the new groups, we are trying to attach some examples of plants in more common use to each group.

## Annex 1

### Revision Proposal :

A01N65/00 Biocides , pest repellants or attractants , or plant growth regulators containing plant material , e.g. derris root or extracts thereof ( containing compounds of determined constitution A01N27/00 to A01N59/00 ) [3]

- 65/02 • Umbelliferae e.g. *Cnidium monnieri*
- 65/04 • Compositae
- 65/06 • • *Artemisia* L.
- 65/08 • *Celastrus* L. e.g. *Celastrus angulatus* Maxim.
- 65/09 • *Tripterygium* Hook. f.
- 65/10 • Ericaceae e.g. *Rhododendron molle*
- 65/12 • Leguminosae
- 65/122 • • *Derris* L.
- 65/124 • • *Gleditsia* L.
- 65/126 • • *Sophora* Linn. e.g. *Sophora flavescens* Ait.
- 65/14 • *Cupressus* L.
- 65/15 • *Berberis* Linn., e.g. *Berberis paraspecta*
- 65/16 • *Zanthoxylum* L.
- 65/18 • *Cymbopogon* Spreng
- 65/20 • *Mentha* L.
- 65/22 • Lauraceae
- 65/222 • • *Cinnamomum* Trew
- 65/224 • • *Litsea* Lam.
- 65/24 • Meliaceae
- 65/26 • *Eucalyptus* L'Herit
- 65/28 • Solanaceae
- 65/282 • • *Nicotiana* L.
- 65/284 • • *Capsicum* L.
- 65/30 • *Stellera* L.
- 65/32 • *Stemona* Lour.
- 65/34 • plants containing volatile oil not covered by preceding groups

**Annex 2:**

A01N65/00 Biocides, pest repellants or attractants, or plant growth regulators containing plant material, e.g. derris root or extracts thereof (containing compounds of determined constitution A01N27/00 to A01N59/00) [3]

**65/02 • Umbelliferae(apiaceae) e.g. Cnidium monnieri**

PR - JP19790099183 19790803

PN - JP56022709 A 19810303 DW198117 000pp

- JP57048089B B 19821014 DW198245 000pp

PA - (AKUS-I) AKUSAWA U

IC - A01N65/00

TI - Fungicide for agricultural use - contains extract of Japanese angelica root, *Cnidium officinale*, *Aurantii nobilis pericarpium*, powdered cork tree bark, etc.

AB - J56022709 Fungicide for agricultural and horticultural purposes contains as the principal ingredients the extract of Japanese angelica root, *Cnidium officinale*, *Aurantii nobilis pericarpium*, powdered cork tree bark, powdered red pepper, powdered ginger, and powdered *Scutellaria*.

- The fungicide, contg. no synthetic chemicals, has excellent control effect against various diseases caused by pathogenic fungi of various crops being cultivated in farms, and permits the repeated cultivation of the same crops in the same farm with increased yield of crops without affectin

**65/04 • Compositae(asteraceae)**

TI - New antimicrobial ONL-1, 2 and 3 - extracted from damaged *Xanthium canadense*

PA - (KOND-I) KONDO S

- (SHKJ) SHINGIJUTSU KAIHATSU JIGYODAN

PN - JP4169594 A 19920617 DW199231 C07G11/00 006pp

IC - A01N65/00 ; A61K35/78 ; C07G11/00

AB - J04169594 Antimicrobial agents ONL-1, 2 and 3 are new. Their physical and chemical properties together with UV, IR, 1H-NMR, 13C-NMR spectra are claimed. - Epoigeal parts of *Xanthium canadense* (Compositae) are struck with a wooden hammer and extracted with water. The aq. extract was treated with ethyl acetate. The organic layer was washed with satd. NaHCO<sub>3</sub>, 1/50N HCl and condensed under reduced pressure to give a total extract. The extract was purified with column chromatography and thin layer chromatography to give fractions ONL-1, 2 and 3. They inhibited the growth of *Piricularia oryzae* and *P. sasakii* at concn. of 1000 ppm. - USE/ADVANTAGE - Antimicrobial substances ONL-1, 2 and 3 are extracted from *Xanthium canadense* (Compositae) (Dwg.0/0)

**65/06 • • Artemisia L.**

TI - Compsns. for modifying the behaviour of, or killing, insects - comprises extracts of aromatic plants (such as mint or sagebush) prepd. using supercritical carbon dioxide.

PA - (RERE-N) RES & DEV INST INC

PN - US5591435 A 19970107 DW199708 A01N65/00 030pp

IC - A01N65/00

AB - US5591435 Compsn. capable of (i) modifying the behaviour of insects or (ii) killing insects comprises: (a) a compsn. made by a process of preparing a solid supercritical carbon dioxide extract of dried leaves of mixts. of two or more aromatic plants selected from the mint family, the sagebrush genus *Artemisia*, *Geranium viscosissimum* and *Balsamorhiza sagittata*; and (b) vapours of the compsn. described in (a). - The supercritical carbon dioxide extract comprises, e.g., alpha-pinene, camphene, sabinene, 8-cineole, artemisole, cis-p-menth-2-en-1-ol, alpha-thujone, myrtenal, camphor, pinocarvone, - USE- The compsns. may be used to control insects in, e.g., households, stored goods (such as harvested goods), feed mills, etc. They may be used for soil fumigation. - ADVANTAGE- The compsns. do not involve the use of petroleum-based chemicals. - (Dwg.0/16)

**65/08 • Celastus L. e.g. Celastrus angulatus Maxim.**

TI - Celastrus angulatus insecticidal anti-feedant.

PA - (WUHA-N) WUHAN PLANT INST CHINESE ACAD SCI

PN - CN1081570 A 19940209 DW199522 A01N65/00 000pp

IC - A01N65/00

AB - CN1081570 The present invention discloses a celastrus angulatus insecticidal anti feedant, and the molecular formula of celastrus angulatus root peel ester I is C<sub>34</sub>H<sub>41</sub>NO<sub>23</sub>, and the molecular formula of celastrus angulatus seed ester I is C<sub>34</sub>H<sub>39</sub>NO<sub>11</sub>. The celastrus angulatus seeds, stem and leaves or root peel are pulverised, and their active material is extracted by means of solvent circulation, and then that is dissolved into dimethylbenzene and can be up into emulsion by adding emulsifying agent, or the active material can be made into the wettable powder by adding wood powder, talcum powder and wood sodium sulphonate.

**65/09 • Tripterygium Hook. f.**

TI - Tripterygium insecticide and its preparing process

PA - (RESE-N) RES & SERVICE CENT NON POLLUTION AGRIC C

PN - CN1289540 A 20010404 DW200141 A01N65/00 000pp

IC - A01N65/00

AB - CN1289540 NOVELTY - A tripterygium insecticide in the forms of wettable powder, emulsified oil, emulsion and microemulsion is prepared from the root bart of tripterygium . Its advantages include high effect and selectivity, low residual poison, not generating resistance easily for pests and low cost.

**65/10 • Ericaceae e.g. Rhododendron molle**

PR - CN19990125621 19991125

PN - CN1252224 A 20000510 DW200043 A01N65/00 000pp

PA - (WANG-I) WANG L

IC - A01N65/00

TI - Chinese herbal grains fumigating pesticide

AB - CN1252224 Grains fumigating pesticide is compounded with Chinese herbal medicine manchurian rhododendron leaf and pricklyash leaf as well as methanol as assistant.

- USE - It is used to treat wheat moth, corn weevil and other grains pests, and has high pesticidal effect. Rattus and rabbit experiments show that it has no irritation, low toxicity and high safety.

**65/12 • Leguminosae(fabaceae)**

1 ) PR - US20000231749P 20000911; US20010951013 20010911

PN - US2002031538 A1 20020314 DW200253 A01N25/00 005pp

PA - (SCAR-I) SCARMOUTZOS L M

IC - A01N65/00

TI - Compositions containing botanical extracts exhibit enhanced pesticidal activity when exposed to light for use in household or agricultural applications

AB - US2002031538 NOVELTY - Utilisation of the activity-enhancing quality of light on certain pesticidal botanical extracts is new.

- DETAILED DESCRIPTION - Pesticidal compositions (I) contain one or more extracts of plants from the groups Umbelliferae, Rutaceae, Leguminosae, Moraceae, Hypericaceae, Compositae, Berberidaceae, Rubiaceae, Simaroubaceae, Guttiferae, Polygonaceae, Asteracea, Apiaceae, Araliaceae, Campanulaceae or Solanaceae.

- USE - (I) are useful in the home, workplace or in agricultural situations where pests need to be eradicated. (I) are active against bacteria, viruses, insects, rodents and weeds.

- ADVANTAGE - (I) are natural products which have a very low impact on the environment and on public health.

2 ) PR - JP19890052559 19890303  
PN - JP2231405 A 19900913 DW199043 000pp  
PA - (SEIB-N) SEIBUTSU KAGAKU SAN  
IC - A01N65/00

TI - Method of killing weeds - using extract obtd. from plant of genus *Mucuna* or *Stizolobium*

AB - J02231405 An extract obtd. by extracting a plant of the genus *Mucuna* or *Stizolobium* of the family Leguminosae under the condition of pH 7.0 or lower is used for killing weeds.

- The plants are typically *Mucuna pruriens*, *M. biplicata*, *M. cochichinensis*, *M. deeringiana*; and *Stizolobium deeringianum* and *S. hassjoo*.

- USE/ADVANTAGE - The herbicidal effect of the extract is free from crops of corn, rice or bean plants. Additionally, the extract is safe and non-toxic to human and domestic animals.

- In an example, stems and leaves of *Mucuna pruriens* (5 kg) were extracted with an aq. soln. (10 litres) contg. ascorbic acid (100 ppm) and having pH of 4.5 in a milk mixer at 5000 rpm for 20 minutes. The resulting extract was dried and powdered to obtain a powdery extract (930 g). This was proved effective for killing weeds in a farm field without damaging the crops (*Manihot*) cultivated.

#### 65/122 • • Derris L.

1 ) PR - CN19940100790 19940223  
PN - CN1107293 A 19950830 DW199732 A01N65/00 000pp  
PA - (ZHEN-I) ZHENG S

TI - Multifunctional emulsified insecticide

IC - A01N65/00

AB - CN1107293 Biochemical emulsified insecticide comprises derris resin containing e.g. elliptone and phoxim, synergist e.g. turpentine, sesamin and capsaicin, and emulsifier. The insecticide has high activity against many kinds of agricultural pests with less toxic side effects.

2 ) PR - CN19940103072 19940316  
PN - CN1108474 A 19950920 DW199733 A01N65/00 000pp  
PA - (ZHAN-I) ZHAN G

TI - "Shamieling"-an agrochemical without environmental pollution

IC - A01N65/00

AB - CN1108474 "Shamieling" an agricultural chemical for crops, in particular, a plant pesticide which does not pollute the environment, consists of chinaberry bark, derris trifoliata and teaseed cake. The ingredients are pulverized and sieved. Said pesticide uses the medicinal plants to kill insects, but is safe for animals and humans.

#### 65/124 • • Gleditsia L.

1 ) PR - CN19950115505 19950819  
PN - CN1141722 A 19970205 DW200053 A01N65/00 000pp  
IC - A01N65/00

TI - Insecticide of traditional Chinese medicine and preparation method thereof

AB - CN1141722 NOVELTY - The Chinese medicine insecticide is made up by using Chinese medicinal materials of datura, yellow azalea, raw pinellia tuber, stemona root, zanthoxylum husk and copper rust, etc. according to a certain proportion, which are passed through such processes as pulverizing, decocting with water and filtering, thus the obtained filtrate is the invented insecticide. A Chinese medicinal intensifying agent made by soaking datura, yellow azalea, raw pinellia tuber, toad venom and gleditsia fruit, etc. in alcohol also

can be added to said insecticide. It has the advantages of broad-spectrum insecticidal property, high efficiency, low toxicity and free from environmental pollution, etc. Its preparation process is simple and cost is low.

2 ) PR - CN19940119398 19941219

PN - CN1125049 A 19960626 DW199748 A01N65/02 000pp

IC - A01N65/02

TI - Pure natural Yanshensu plant pesticide for use in e.g. controlling plant diseases

AB - CN1125049 Pure natural plant Yanshensu pesticide (I) comprises tobacco leaves, flavescens sophora root, stemona root and gleditsia fruit. (I) is prepared by subjecting the ingredients to extraction and other processes.

- USE - (I) is useful for controlling plant diseases and pests in e.g. field crops, horticultural crops and fruit trees.

- ADVANTAGE - (I) is a non-toxic broad-spectrum pesticide.

#### **65/126 • • Sophora Linn. e.g. S. flavescens Ait.**

1 ) PR - CN19940119397 19941219

PN - CN1107654 A 19950906 DW199732 A01N65/00 000pp

IC - A01N65/00

TI - Preparation of plant-based insecticide with broad spectrum activity

AB - CN1107654 Plant-based insecticide comprises chinaberry, flavescens sophora, tobacco leaf, moxa leaf and honey-locust.

- ADVANTAGE - The insecticide is non-toxic, possesses broad spectrum, potent and long lasting effects and reduces resistance of pests.

2 ) PR - JP19980042041 19980224

PN - JP11240814 A 19990907 DW199947 A01N65/00 004pp

IC - A01N65/00

TI - Insect repellent - useful for evasion of insect pests

AB - JP11240814 NOVELTY - An insect repellent contains a liquid of *Sophora flavescens* which is melted in water.

- USE - The insect repellent is used to evade insect pests like house termites. In agriculture and forestry, the repellent is used to evade nematodes, mites, insects, mice and moths.

- ADVANTAGE - The repellent is safe for human existence and does not contaminate the environment. Since a hydrophilic solvent is used, pest repellence improves. A wide range of insects are repelled.

#### **65/14 • Cupressaceae**

PR - JP19920215539 19920721

PN - JP6040831 A 19940215 DW199412 A01N65/00 005pp

PA - (TAIC ) TAIYO KAGAKU KK

IC - A01N65/00

TI - Control and prevention of diseases of lawn grass - comprises using extract of particles cupressaceae

AB - J06040831 Control and prevention of diseases of lawn grass using Cupressaceae plants, partic. particles or extract. Also claimed particular eight plants and 12 diseases. -

Cupressaceae plants are pref. crushed to pieces or extracted with an organic solvent or steam distilled and the prods. are dispersed to lawn grass at 10-5,000 g/m<sup>2</sup> as wt. of plant.



**- USE/ADVANTAGE - Control and prevention of diseases of lawn grass, partic. against Pellicularia filamentosa, Ceratobosidum cornigerum, Pythium torulosum and Pythium venterpoolii.**

**65/15 • Berberis Linn., e.g. Berberis paraspecta**

PR - JP19990342953 19991202

PN - JP2001158009 A 20010612 DW200204 B27K3/34 008pp

- JP3326148B2 B2 20020917 DW200268 B27K3/34 009pp

PA - (TAKE ) TAKEDA CHEM IND LTD

IC - A01N65/00 ; B27K3/02 ; B27K3/34

TI - Timber insect pest protectant for controlling termite, comprises treated substance obtained from plant, such as containing diuretic effect component, or Berberis

AB - JP2001158009 NOVELTY - Timber insect pest protectant comprises a treated substance obtained from a plant containing diuretic effect component, or Berberis, Epimedium, Pelargonium, Humulus, Lavandula or Raphanus.

- DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for timber insect pest control method.

**65/16 • Zanthoxylum L.**

1 ) PR - CN19970108644 19970821

PN - CN1209273 A 19990303

PA - LI DEAN (CN)

IC - A01N65/00

TI - Pollution-free plant mosquito-fly-killing agent

AB - The innocuous plant insecticide for killing mosquito, fly and other house injurious insects comprises (wt%) 6-8% of plant extract, 4-6% of aromatic hydrocarbon modifier, 0.5-1% of KF-88, 0.5-1% of EDTA, 0.5-1% of essence and 83-88.5% of water. Said plant extract mainly contains the extracts extracted from the Chinese medicinal materials of flavescent sophora, flowery knotweed, cayratia trifolia, picrasma quassioides, agrimony, thunder god vine, carya cathayensis and **zanthoxylum** simulans.

2 ) PR - JP19850133058 19850620; JP19850133057 19850620

PN - JP61291506 A 19861222 DW198705 004pp - JP4082128B B 19921225 DW199304 A01N65/00 003pp

PA - (HASE ) HASEGAWA CO LTD

IC - A01N65/00

TI - Cockroach repellent which is safe to humans - contg. herb (extract) from gp. comprising gardenia, panax Japonicum, Asiasarum, **Zanthoxylum**, akebia and silex

AB - J61291506 Cockroach repellent contains as active component at least one herb selected from gp. comprising Gardenia, Panax japonicum, Asiasarum, **Zanthoxylum**, Akebia and Silex or extract of herb or mixt. of herbs. - Herbs are available in powdered or cut form, and these can be used as repellent as it is. Extract of herbs can also be used as repellent. Extract is obtd. by dipping herb in organic solvent and/or water at 10-90 deg.C for 0.5-5 hrs. Organic solvents are e.g., methanol, ethanol, acetone, methylethylketone, etc. Use amt. of solvent is 1-20 times wt. of herb. It is possible to use repellent by adsorbing it on suitable carrier, mixing repellent with carrier or by dispersing repellent in carrier. Carriers are e.g., diatomaceous earth, alumina, white carbon, wood flour, kaolin, bentonite, activated carbon,

silica, etc. It is also possible to use repellent by kneading with synthetic resin. Repellent can be formulated as oil, emulsion, wettable powder, dust, tablet, spray, etc. by mixing with emulsifying agent, dispersing agent, suspending agent, spreader, wetting agent, stabiliser, etc. It can be added to repellent insecticides, synergists, other repellents, aromas, fungicides, etc. - ADVANTAGE - Repellent is safe to humans, and shows higher repelling effect and longer lasting effect than known cockroach repellents. Since small of repellent is weak, its restriction for use can be avoided.

#### **65/18 • Cymbopogon Spreng**

PR - JP19910285670 19911004

PN - JP5097618 A 19930420 DW199320 A01N65/00 004pp

PA - (OSAS-N) OSAKA SEIYAKU KK

IC - A01N65/00

TI - Control agent for insect pests for fabric - comprising essential oil from Juniperus, Cymbopogon, Thujopsis, Cassia, Pimento, Canangium, Thymus and/or Chamaecyparis spp.

AB - J05097618 Insect pest control agent contains one or more essential oils of Juniperus rigida, Cymbopogon sp., Thujopsis dolabrata, Cassia sp., Pimento officinalis, Canangium odoratum, Thymus vulgaris and Chamaecyparis obtusa. - The essential oils are adsorbed singly or in combination in sheets of paper, bonded fibre fabrics, and fabrics at ratios of 0.05-5 g/m<sup>2</sup> and placed at suitable places. - USE/ADVANTAGE - The insect pest is controlled without chemical injury to human beings. - In an example, the essential oils adsorbed in a sheet of filter paper prevented damage by biting 92.4-100, 46.0-100 and 37.6-100% at 5.0, 0.5 and 0.05 g/m<sup>2</sup>, respectively, and death rate of 70-100, 20-80 and 0-50% at 5.0, 0.5 and 0.05 g/m<sup>2</sup>, respectively 5.0 g/m<sup>2</sup>. Partic. essential oil of Juniperus rigida completely inhibited biting at 0.05 gm<sup>2</sup>, and that of Thymus vulgaris showed death rate of 50% at 0.05 g/m<sup>2</sup>.

#### **65/20 • Mentha L.**

1 ) PR - JP19920194560 19920630

PN - JP3121683B2 B2 20010109 DW200104 A01N65/00 004pp - JP6016515 A 19940125 DW199408 A01N65/00 004pp

PA - (NIPK ) NIPPON KAYAKU KK

IC - A01N65/00

TI - Domestic mite repellent flavour - contains plant essential oils, esp. of vetiver, patchouli, clove, ginger or lemon grass, etc

AB - J06016515 Flavour contains plant essential oil(s), partic. at least one essential oil of vetiver, patchouli, cananga, clove, cajuput, citronella, nutmeg, pepper, sandalwood, bark, gurjun, ginger, camphor, cubeb, lemon-grass, corn mint, anise, lung, cinnamon, mace, palmarosa, fennel, calamus, thyme and neem. - Pref., at least 1 essential oil is used to prepare conventional repellent compsns. e.g. lotion, emulsion, oil prepn., creams, and aerosols. - USE - Used for control of domestic mites. - In an example, in 65 pts. of a mixt. of xylene and methyl-naphthalene, 10 pts. of vetiver oil and 25 pts. of a mixt. of nonylphenol-ethylene oxide condensate and Ca dodecyl benzenesulphonate (8:2) were added to give an emulsion. The emulsion can be used as it is or diluted with water to 10-1,000-times diluted soln. and used as dispersing or spreading gent. Vetiver or patchouli oil was spread on a sheet of paper at a rate of 0.2 mg/m<sup>2</sup>, respectively. Both sheets exhibited 100% repellent effect against Tyrophagus putrescentiae and Dermatophagoides fari-nae after 16 hrs. and 80 and 40% effect after 24 hrs., respectively.(Dwg.0/0)

2 ) PR - CN20020100807 20020124

PN - CN1382380 A 20021204

PA - YUE XIUMEI (CN)

IC - A01N65/00

TI - Composite chemical for preventing and treating bark rot of tree

AB - A composite chemical for preventing and treating bark rot of tree is composed of chemical A for coating it on the bark of tree and chemical B for burying it in soil around the tree root. The said chemical A is prepared from oriental wormwood 15-25 wt%, platycodon root 20-25 wt% and stemona root 50-65 wt.% through proportional decocting. The said chemical B is prepared from 9 Chinese-medicinal materials including **mint** 5-15 wt%, liquorice root 5-25 wt%, ledebouriella root 0-10%, etc. through crushing, parching and mixing. Its advantages are high effect and no environmental pollution.

#### 65/22 • Lauraceae

PR - JP19900027234 19900208

PN - JP3232807 A 19911016 DW199148 000pp

PA - (HASE ) HASEGAWA CO LTD

IC - A01N65/00

TI - Long lasting cockroach repellent - contains oils of Jatamansi and/or Sugandha Kokila, for putting on sugar cube

AB - J03232807 Cockroach repellent contains essential oils of Jatamansi and/or Sugandha Kokila. Oil of Jatamansi, Valerianaceae, Nardostachys jatamansi, spikenard is extracted from leaves and roots and essential oil of Sugandha Kokila, **Lauraceae**, Cinnamomum cecidodaphne, cinnamon tree is extracted from fruits by conventional methods. The extracts are mixed with carriers. The oils are applied by spraying or painting soln. or suspension or by placing the carrier contg. the oils at concn. of about 0.01 mg/cm<sup>2</sup> ore esp. 0.05-5 mg/cm<sup>2</sup>.  
USE/ADVANTAGE - Safe and long lasting repellent against cockroach. - In an example, two pieces of sugar cube sugar were placed on two sheets of filter paper, respectively, contg. 0.32 mg/cm<sup>2</sup> essential oil of Jatamansi in a plastic case, 40 cm W x 25 cm D x 28 cm H, and 50 cockroaches were released in the case. The case was kept at 25-28 deg C for 2-3 hrs., relative humidity of 50-60% for six days. The repellent effect was determined by the consumed amt. of sugar. The repellent effect was 92.4 and 93.0% after two and six days, respectively, compared with those of the control.

#### 65/222 • • Cinnamomum Trew

PR - KR20000081256 20001223

PN - WO02051247 A 20020704

PA - KIM SOON-IL (KR); KIM YOUNG-SOO (KR); AHN YOUNG-JOON (KR); KIM HYUN-KYUNG (KR); NATUROBIOTECH CO LTD (KR)

IC - A01N65/00

TI - COMPOSITION WITH ACARICIDAL ACTIVITY DERIVED FROM PLANTS

AB - The present invention relates to an acaricidal compositor isolated from plants, and more particularly, to an acaricidal composition comprising one and more compounds selected from a group consisting of Paeonia suffruticosa, Cnidium officinale, **Cinnamomum** cassia, cinnamon, mustard and horseradish. Also, the present invention provides an acaricidal composition of one or more compounds selected from a group consisting of trans-cinnamaldehyde, cinamyl alcohol, salicylaldehyde, allyl isothiocyanate and salicylaldehyde have are blended, they have a synergic effect.

**65/224 • • Litsea Lam.**

1 ) PR - CN19920106964 19920613

PN - CN1080120 A 19940105

PA - HE YITING (CN)

IC - A01N65/00

TI - LONG-ACTING BIOCIDES COMPOUNDING AND ITS PREPARATION

AB - The said biocide consists of Chinese herbal medicines and chemicals, i.e., **litsea** cubera seed 15-25%, castor leaf 40-50%, phendona 5-15% nobisomisone 5-15% and alcohol 10-20%. The distillate of **litsea** cubera seed and castor leaf is extracted, phendona and nobisomisone is dissolved by alcohol, and the distillate and the solution are mixed and diluted with distilled water to form the said biocide product. The said biocide has wide-spectrum killing effect and can be used to kill mosquito, fly, roach, ant and other pest completely.

2 ) PR - JP19990352732 19991213

PN - JP2001163716 A 20010619 DW200166 A01N65/00 009pp

PA - (NISB ) JAPAN TOBACCO INC

IC - A01N25/00 ; A01N65/00

TI - Repellent for deathwatch beetles found in store rooms and warehouses, comprises oil of perilla, savory, cassia, peppermint, spearmint, coriander, lemon, nutmeg, lime and/or celery seed, as active ingredient

AB - JP2001163716 NOVELTY - A deathwatch beetle repellent comprises oil of perilla, savory, cassia, peppermint, anise, lemon, pimento, citronella, nutmeg, lime, marjoram, fennel, star-anise, mint, cumin, sage winter green, mace, clary sage, pennyroyal, bergamot, geranium, rose, ajowan, Croton eluteria, pine needle, clove, oregano, cardamom, carrot seed, Angelica root, hyssop and/or celery seed, as active ingredient. - DETAILED DESCRIPTION - The deathwatch beetle repellent comprises oil of perilla, savory, cassia, peppermint, **Litsea** cubeba, spearmint, coriander, lemon grass, petit grain, anise, lemon, pimento, citronella, nutmeg, lime, marjoram, fennel, Anisi stellati, mint, cumin, sage, winter green, mace, clary, pennyroyal, bergamot, geranium, rose, ajowan, Croton eluteria, pine needle, clove, juniper berry, orange, Majorana hortensis, cardamom, carrot seed, Angelica root, hyssop, Eucalyptus citriodora and/or celery seed, as active ingredient.

**65/24 • Meliaceae**

PR - DE19924229815 19920907

PN - EP0591674 A 19940413

PA - SCHAETTE GEB KG (DE)

IC - A01N65/00

TI - Use of meliaceae plants or parts of these plants as plant protecting agent with fungicidal activity.

AB - Described is the use of plants or parts of plants of the **Meliaceae** neem tree (*Antelaea azadirachta*, synonym: *Melia azadirachta* L., synonym: *Azadirachta indica* A.Juss.) or Persian lilac (*Melia azedarach* L., synonym: *M. sempervirens* Sw., synonym: *M. japonica* Don.) as active ingredient components in plant protection products (plant protecting agents) with fungicidal activity for inhibiting attack of crop plants by phytopathogenic fungi. It is preferred to use the seeds of the neem tree or the fruits of Persian lilac, preferably in the form of aqueous or alcoholic extracts of the seeds of the neem tree, or the fruit of Persian lilac. However, it is also possible to use parts of the plants such as leaves, pulp, bark, wood directly in suitable use form, for example dried and ground as a powder. Particularly effective compositions can be achieved by processing the seeds of the neem tree, or the fruits of

Persian lilac, by means of repeated extraction. The active substance concentrates according to the invention can either be incorporated into the coating substances for the seeds of the plants to be protected, by the incrusting process, as a protection of the plants against attack by seed- or soil-borne pathogenic fungi. Alternatively, the active substance concentrates according to the invention can also be applied directly to the crop plants to be protected in aqueous form, as spray mixtures, so as to protect against attack or to reduce the damage caused by attack. The neem tree extracts according to the invention have proved to be particularly effective for controlling root rot in beet, scab and mildew in fruit growing, downy and powdery mildew in viticulture, rot in viticulture and in strawberries and ornamentals.

**65/26 • Eucalyptus L'Herit**

PR - CN20000126690 20001120

PN - CN1353939 A 20020619

PA - LUO K Aidong (CN)

IC - A01N65/00

TI - Plant yield-increasing and quality-improving agent

AB - The present invention relates to a plant yield-raising and quality-improving agent. Its composition contains (wt%) linoleic acid 2-8%, elaeostearic acid 20-40%, citral, 1-5%, **eucalyptus** oil 1-5%, xylene 35-55% and special emulsifier. It can obviously promote absorption of nutrients, growth and development of crops, improve soil and raise yield and quality of crops.

**65/28 • Solanaceae**

PR - WO1998IE00037 19980520

PN - EP1085812 A1 20010328 DW200118 A01N65/00 Eng 000pp - WO9959414 A1 19991125 DW200006 A01N65/00 Eng 048pp - AU7671598 A 19991206 DW200019 A01N65/00 000pp

PA - (IRTR-N) ENTERPRISE IRELAND TRADING AS BIORESEARC - (UYCO-N) UNIV COLLEGE CORK - (IRBI-N) ENTERPRISE IRELAND T/A BIORESEARCH IRELA

IC - A01N65/00

TI - Hatch inactive stimulating agent for controlling potato cyst nematodes

AB - WO9959414 NOVELTY - Hatch-inactive stimulating agent is obtained from plants of the **Solanaceae** family which is capable of stimulating hatching factor-induced hatch potato cyst nematode.

**65/282 • • Nicotiana L.**

1 ) PR - CN20020122505 20020529

PN - CN1387766 A 20030101

PA - TUERXUNGULI AIBIBULA (CN)

IC - A01N65/02

TI - Insecticide for preventing and controlling scale insect and its making process

AB - The present invention relates to agricultural pesticide for pest control, in particular, relates to pesticide for preventing and treating coccid and its manufacturing method, **tobacco** powder and yellow artemisia powder are mixed according to certain proportion, then added into boiling water in heating container, after thoroughly mixed and decocted, it is naturally cooled and filtered, the filtered clear liquid is packed and sealed for use. When using, the raw liquid is diluted with water and sprayed. Its pest control effect against coccid can be up to 93%, it is non poisonous and harmless to man, animal and tree and is safety for use.

2 ) PR - US20010908450 20010717; US20000218772P 20000717

PN - US2002076454 A 20020620

PA - (BART-I) BARTELMO D

IC - A01N65/00

TI - Natural insecticide

#### 天然杀虫剂

AB - The Natural Insecticide includes an aqueous solution of **tobacco**- extracts and a soap mixture which is able to eliminate a wide variety of insects. The Natural Insecticide is completely biodegradable and non-toxic to invertebrates at the usage concentration required. Natural Insecticide is able to prevent the introduction of high levels of insecticide into the environment by remaining effective over a period of time, thereby avoiding the need for numerous applications.

#### 65/284 • • Capsicum L.

1 ) PR - US19980124724 19980729; CA19952148338 19950501; US19960639771  
19960429

PN - US6159474 A 20001212

IC - A01N65/00

TI - Animal repellent containing oils of black pepper and/or **capsicum**

AB - A repellent composition for repelling both domesticated and wild animals which comprises between 0.05% and 2% by weight of an essential oil of either black pepper or **capsicum** and between 0.1% and 10% by weight of an oleoresin of either black pepper or **capsicum** and an antioxidant in an amount sufficient to stabilize the oleoresin. Preferably, the carrier is a finely divided inert solid material and the composition includes a binder such as lard. The composition can be spread on the ground and maintains its effectiveness over an extended period of time.

2 ) PR - WO1997JP02812 19970811

PN - WO9907226 A 19990218

PA - JAPAN SOCIAL MEDICAL LAB YK (JP); WATANABE TADAHIKO (JP)

IC - A01N65/00

TI - VEGETABLE-BASE SOIL FUNGICIDES, MYCELIAL PLANT REGULATORS,  
AND METHOD FOR REGULATING SOIL

AB - Vegetable-base soil fungicides characterized by containing *Gardenia jasminoides* ELLIS fruit, *Mentha arvensis* L. var. *piperascens* MALINVAUD (Japanese peppermint) leaf and *Myrica rubra* SIEB. et ZUCC. bark optionally together with **Capsicum** annum L. fruit and *Phellodendron amurense* RUPR. bark; plant regulators prepared by mixing the above-mentioned soil fungicides with mycelial fertilizers wherein fungi such as actinomycetes are supported on porous carriers; and a method for regulating soil characterized by applying the soil fungicides and the mycelial fertilizers to the soil. Owing to the synergism of the effects of the soil fungicides in inhibiting the growth of pathogenic soil fungi while promoting the growth of beneficial fungi and the effect of the mycelial fertilizers in reducing pathogenic soil fungi, pathogenic soil fungi can be controlled while elevating the yields of crops even in continuous cropping. Also, these fungicides and fertilizers cause no environmental pollution and thus are appropriate as soil disease preventives and fertilizers for daily use.

**65/30 • Stellera L.**

1 ) PR - CN20020100771 20020125

PN - CN1362021 A 20020807

PA - YANGLING DADI CHEMICAL CO LTD (CN)

IC - A01N65/00

TI - Chinese **stellera** extract pesticide

AB - The present invention of wolf toxic pesticide comprises (by weight percentage) the wolf toxic active material as 0.1-1.0%, OP-10 as 3.0-10%, Tween 80 as 1.0-10.0%, pingpingjia as 1.0-10% and to supplement water up to 100%. The present invention has a good result in control of the pests of cabbage caterpillar, pieria rapae and cotton bollworm and it has low toxic to the human being and animal, low pollution to the environment and not easy to create a drug-resistance by the pests as the present invention is an agriculture chemical made by using the plant materials.

2 ) PR - CN20020100771 20020125

PN - CN1362021 A 20020807 DW200338 A01N65/00 000pp

PA - (YANG-N) YANGLING DADI CHEM CO LTD

IC - A01N65/00

TI - Chinese **stellera** extract pesticide for the control of pests, e.g. cabbage caterpillar, comprises wolf toxic active material, OP-10, Tween 80, pingpingjia and water

AB - CN1362021 NOVELTY - Chinese **stellera** extract pesticide comprises (wt. %): - (1) wolf toxic active material (0.1-1.0); - (2) OP-10 (3.0-10); - Tween 80 (RTM; polysorbate) (1.0-10.0); - (3) pingpingjia (1.0-10); and - (4) water (to 100). ACTIVITY - Pesticide; Insecticide.

**65/32 • Stemona Lour.**

PR - CN20020100807 20020124

PN - CN1382380 A 20021204

PA - YUE XIUMEI (CN)

IC - A01N65/00

TI - Composite chemical for preventing and treating bark rot of tree

AB - A composite chemical for preventing and treating bark rot of tree is composed of chemical A for coating it on the bark of tree and chemical B for burying it in soil around the tree root. The said chemical A is prepared from oriental wormwood 15-25 wt%, platycodon root 20-25 wt% and **stemona** root 50-65 wt.% through proportionate decocting. The said chemical B is prepared from 9 Chinese-medicinal materials including mint 5-15 wt%, liquorice root 5-25 wt%, ledebouriella root 0-10%, etc. through crushing, parching and mixing. Its advantages are high effect and no environmental pollution.

**65/34 • plants containing volatile oil not covered by preceding groups**

1 ) PR - US20000203787P 20000512; US20010853362 20010510

PN - US2001055628 A1 20011227 DW200221 A01N65/00 008pp

PA - (CHAN-I) CHANG C - (HSUH-I) HSU H J

IC - A01N65/00

TI - Combination of volatile oil and non-volatile oil having a synergistic effect, useful as a natural pesticide

AB - US2001055628 NOVELTY - A concentrated natural pesticide comprises - (a) a volatile oil; and - (b) a non-volatile oil. - The ratio of a:b is 1:10-10:1 (by weight). The pesticide is diluted with water. - ACTIVITY - Pesticide; Plant Antibacterial; Miticidal. -

MECHANISM OF ACTION - None given. - USE - As a natural pesticide (claimed). -  
ADVANTAGE - The combination of (a) and (b) exhibits improved pesticidal effectiveness than if either (a) or (b) were used alone. The combination improved spreading, coating and penetration of the surface of plants upon which it is applied increasing effectiveness in control of pests and/or plant diseases.

2 ) PR - JP20000143077 20000516

PN - JP2001322907 A 20011120 DW200228 A01N65/00 005pp

PA - (TPER ) TAIYO PERFUMERY CO LTD

IC - A01M29/00 ; A01N65/00

TI - Western flower thrips repellent in agricultural field, contains essential oil obtained from herbs such as basil, cinnamon, clove, garlic, ginger, mint, and/or thyme, as active ingredients

AB - JP2001322907 NOVELTY - A western flower thrips (*Frankliniella occidentalis*) repellent contains essential oil obtained from herbs such as basil, cinnamon, clove, garlic, ginger, mint, pepper, thyme, sage, worm wood, camomile, eucalyptus, hyssop, caraway, coriander, lavender, lemon balm, camphor, tea tree, citronella, lemon grass, catnip, and/or rosemary, as active ingredient(s). - DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for controlling western flowers thrips using the herb essential oil as active ingredient.

[End of Annex and of document]