



# Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

## BOLETÍN DE MACA

Marzo 2014

### PATENTES EXTRANJERAS

**Número de publicación:** AU2005207718A1

**Fecha de solicitud:** 2005-01-28

**Título:** Process for producing Maca extract

**Solicitante:** Suntory Limited,JP

**Abstract:** An effective extraction method for giving a Maca extract which can be taken over long period of time and has a highh safety and an excellent antiallergic effect; and a food, a drink, a cosnietic or a drug ha-ving an antiallergic effect to which the extract obtained above is applied. The extraction method is characterized in that an aqueous solution containing ethanol is added to -. Milled Maca, wherein the temperature of the liquid extract is from 20 to 75 0 C and the ethanol concentration in the aqueous solution BWcontainingethanol is from 20 to 100% by volume.

**Número de publicación:** CA2822182A1

**Fecha de solicitud:** 2011-12-22

**Título:** EXTRACT OF AERIAL PARTS OF MACA RICH IN POLYPHENOLS AND COMPOSITION COMPRISING SAME

**Solicitante:** LABORATOIRES EXPANSCIENCE, COURBEVOIE, FR

**Abstract:** The invention relates to an extract of aerial parts of Maca rich in polyphenols, and also to a composition comprising such an extract and, where appropriate, a suitable excipient. The invention also relates to a process for extracting an extract of aerial parts of Maca rich in polyphenols, and also to the extract that can be obtained by means of said process. The invention also relates to such a composition or such an extract for use thereof in preventing or treating disorders or pathological conditions of the skin, the mucous membranes or the superficial body growths and/or for use thereof in preventing and/or treating vascular disorders. Finally, the invention relates to a cosmetic care process for the skin, the superficial body growths or the mucous membranes, with a view to improving the condition thereof or the appearance thereof, which comprises the administration of such a composition or of such an extract.

**Número de publicación:** CH698986B1

**Fecha de solicitud:** 2007-03-12

**Título:** Maca food comprises a combination of ingredients of coffee, ingredients of maca plan e.g. *Lepidium peruvianum* Chacon and *Lepidium meyenii* Walp, and milk

**Solicitante:** MACA LOCA AG

**Abstract:** Maca food comprises a combination of at least ingredients of coffee (family of Rubiaceae, and genus of Coffea), ingredients of Maca plant (*Lepidium peruvianum*Chacon and *Lepidium meyenii*Walp) and milk. An independent claim is included for a process for preparing the maca food, comprising (a) performing an ethanolic extraction for the extraction of maca extract, in which dried and powdered tubers of maca plant are mixed with ethanol for several days, hours or days at room temperature, and extracted with constant stirring, (b) filtering the solids and collecting the ethanolic extract, (c) repeating the steps (a) and (b), where taste giving ingredients are added in ethanolic phase, (d) removing the ethanol using distillation at reduced pressure, (e) storing the obtained liquid extract for several days at less than 6[deg] C and filtering, (f) mixing the extract with purified, roasted and ground coffee, with a commercial coffee



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

extract or an aqueous extract of coffee, which is obtained by filtering method or pressure or high pressure method, and (g) adding milk.

**Número de publicación:** CNI00457085C

**Fecha de solicitud:** 2005-05-26

**Título:** Polyethylene glycol nanometer preparation comprising load maca or slip or ginger- race oil or ginseng oil

**Solicitante:** UNIV HUNAN

**Abstract:** The invention claims a polyethylene glycol nanometer preparation of the natural plant extract of ginger oil, maca, clip or ginseng oil, aiming at providing a polyethylene glycol nanometer preparation to increase the water solubility of the ginger oil, maca, a slip, a ginseng oil, which greatly improves absorptivity and bioavailability of the ginger oil, maca, a slip, a ginseng oil in body. Nano preparation of this invention is composed of ginger oil, maca, clip or ginseng oil and polyethylene glycol 6000 of eutectic powder nano-precursor solution, dissolving in pure water to form nano colloid.

**Número de publicación:** CNI01455367B

**Fecha de solicitud:** 2008-12-31

**Título:** *Lepidium meyenii* Walp. Health products

**Solicitante:** Institute Of Alpine Economic Plant Of Yunnan Academy of Agricultural Sciences,CN

**Abstract:** The invention provides a *Lepidium meyenii*. health product, which is made by uniformly mixing the raw materials of *Lepidium meyenii*., *rhodiola rosea* and Chinese angelica according the weight proportions of *Lepidium meyenii*. 15-30, *rhodiola rosea* 6-10 and Chinese angelica 3-6. The invention has the functions of adjusting human body immunity, improving sexual function, enriching blood, regulating blood, resisting oxidation and delaying aging, and is suitable for long term and proper amount taking.

**Número de publicación:** CNI01455741B

**Fecha de solicitud:** 2008-12-31

**Título:** A kind of maca healthcare wine

**Solicitante:** Institute Of Alpine Economic Plant Of Yunnan Academy of Agricultural Sciences,CN

**Abstract:** The invention claims a maca healthcare wine, the character is that wherein the maca, red ginseng are prepared according to following weight proportion: 15 to 30 of maca is 1 to 3 percent, red ginseng, 3 to 5 of alcohol is not less than 50 degrees of white spirit, 60 to 150 with cover soil jar sealing for more than 90 days. The invention exerts the medicine food dual purpose plant maca and the Chinese medicinal herb, the advantages of the small red and has the functions of tonifying blood and promoting blood circulation, improving immunity, improving sexual function and so on. Through rational and scientific preparing, the stable, mild conditioning both the symptoms and root causes.

**Número de publicación:** CNI01508944A

**Fecha de solicitud:** 2009-02-19

**Título:** A fermented maca wine and its preparation method

**Solicitante:** YANG Yong-wu,Beijing 100083,CN | LIU You-xian | MA Yu-xiang | PENG Xin- quan

**Abstract:** This invention claims a fermented maca wine and its preparation method, belonging to the field of wine



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

product. This method comprises: cutting fresh maca or dry maca into pieces and dipping the cut pieces into the alcohol extract for over three months to make steeping maca liquor, wherein the maca is added based on that 1 kg of fresh maca or 0.2 kg of dry maca is dipped into 1.5 L of alcohol extract which refers to distilled grape wine or liquor with an alcoholic strength of 50 to 67 degrees; and then blending the steeping liquor with fermented grape wine to obtain the maca wine; and in terms of weight percent, the ratio of steeping maca liquor is 1-35% and the fermented grape wine is 99-65%; the well blended maca wine can be of dry type with the sugar content of smaller than or equal to 4 g/L; semi-dry type with the sugar content of ranging from 4.1 to 12.0 g/L; semi-sweet type with the sugar content of ranging from 12.1 to 45.0 g/L; and sweet type with the sugar content of greater than 45 g/L. The maca wine prepared from this method reserves the nutritional ingredients of maca therefore it is an ideal drink, and a long term of drinking this maca wine is very beneficial to strengthen the human body and lengthen the service life.

**Número de publicación:** CNI01508945A

**Fecha de solicitud:** 2009-02-19

**Título:** A fermented maca wine and its preparation method

**Solicitante:** PENG Xin-quan | MA Yu-xiang | YANG Yong-wu, Beijing 100083,CN | LIU You-xian

**Abstract:** This invention claims a fermented maca wine and its preparation method. This method is a technology taking fresh ripe maca and fresh grape (white grape or red grape) as the raw materials and separately fermenting the materials, and then blending the two, specifically speaking, crushing the fresh maca and making it into pulp, then fermenting the pulp into the stock solution of maca liquor; then removing the stems of the fresh grapes and crushing them into pulp, then fermenting the pulp into the stock solution of wine; subsequently blending the two kinds of stock solution based on a volume ratio that the maca is 1-40% and the grape is 99-60% and obtaining maca wine with different sugar contents; finally performing steps of cold treatment or hot treatment, filtering, sterilizing, and packing into bottles to the wine to obtain the fermented maca wine. The maca wine prepared from this method largely reserves the nutritional ingredients of maca and grape, and a long term of drinking this maca wine is very beneficial to the human body.

**Número de publicación:** CNI01538516A

**Fecha de solicitud:** 2009-02-19

**Título:** Maca wine and preparation method thereof

**Solicitante:** YANG Yong-wu, Beijing 100083,CN

**Abstract:** The invention relates to a preparation method of maca wine, belonging to the field of wine product; the preparation method comprises steps as follows: making the fresh maca be the mashed fruit or adding 5 times of water into dried maca to make it be the mashed fruit; and removing the stem of the fresh grape (white grape or red grape) and crushing it to the mashed fruit; mixing them by the ratio of 1~35% of maca and 99~65% of grape; the maca wine is prepared after temperature-controlling fermenting, adding sugar, transit separating, purifying, cooling or heating, filtering and sterilizing; in the temperature-controlling fermenting process, the temperature should be controlled at 28~30 degrees centigrade (the fermenting temperature of mixing with the white grape should be controlled at 18~20 degrees centigrade); the product keeps the double nutrition and health care components of the maca and wine and has a good health care and medical treatment effect; the maca wine has a soft and rounded tasting and has a good aroma; and it has no component harmful to human body after detecting.



## Boletín de la Comisión Nacional contra la Biopiratería

 CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI01654640A

**Fecha de solicitud:** 2009-09-24

**Título:** Maca grape wine and preparation method thereof

**Solicitante:** LIU You-xian | YANG Yong-wu | MA Yu-xiang, Beijing 100083, CN | PENG Xin- quan

**Abstract:** The invention relates to a preparation method of Maca grape wine, belonging to the field of wine products. The preparation method is as follows: cutting the fresh Maca or dry Maca into pieces and putting 1kg fresh Maca (or 0.2kg dry Maca) into 1-2L of alcohol extracting solution (distilling grape wine or white spirit with the alcohol degree of 50-67 degrees) to be immersed for more than 3 months; then using the technique of fermenting and blending the grape wine to prepare the Maca grape wine; the weight ratios are as follows: 1-35% of Maca immersed wine and 99-65% of fermented grape wine; they are blended into dry type (the sugar degree is not more than 4g/L), semi-half type (sugar degree is 4.1-12.0g/L), semi- sweet type (sugar degree is 12.1-45.0g/L) and sweet type (sugar degree is more than 45.0g/L). The Maca grape wine sufficiently retains the double nutrition and health care ingredients of the Maca and it is an excellent drink; it is suitable for drinking for long time and it has important functions of body building and prolonging life.

**Número de publicación:** CNI01705173B

**Fecha de solicitud:** 2009-11-10

**Título:** Maca brandy and preparation method thereof

**Solicitante:** Beijing Qili Maka Technology Development Co. Ltd.,CN

**Abstract:** The invention relates to a preparation method for maca brandy and belongs to the field of wine products. The preparation method comprises the following steps of: removing stems of low-sugar degree white grapes or red grapes, crushing the grapes, separating out grape juice in a self flowing mode, and naturally fermenting the grape juice to prepare a raw grape wine, wherein the fermentation temperature is 29 to 32 DEG C; when the fermentation is completely finished, residual sugar is decreased to less than 3g/L, and the volatile acidity is less than or equal to 0.05 percent, stilling the raw grape wine into the raw brandy, wherein the alcoholic strength of the raw brandy is 39 to 45 degrees; ; and cleaning and slicing maca fruits, soaking 5 to 50 weight percent of fresh maca in 95 to 50 weight percent of raw brandy for over 6 months or soaking 1 to 15 weight percent of dry maca in 99 to 85 weight percent of the raw brandy for over 10 months to prepare raw maca brandy, and storing and filtering the raw maca brandy to prepare the maca brandy. The maca brandy prepared by the method fully maintains the nutritional and health care components of the maca and is a good drink.

**Número de publicación:** CNI01756965A

**Fecha de solicitud:** 2010-01-29

**Título:** Application of Maca imidazole alkaloid in preparation of cardiovascular drugs

**Solicitante:** Huazhong University of Science & Technology, Wuhan, Hubei 430074,CN

**Abstract:** The invention claims an application of Maca imidazole alkaloid that it is applied in preparation of cardiovascular drugs, comprising wholly or principally compounds with following chemical structural formulas alone or together as chemical formula (I), wherein R1 can be H or CH3, R2 can be H or OCH3. The invention discovers obvious medicinal activity of these compounds in reducing blood pressure and anti-arrhythmia at first time. Thus the Maca imidazole alkaloid made through the new technique according to the invention has an application of exploitations



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

of anti- cancer drugs and can be expectedly used as a medicine treating corresponding cardiovascular disease. The chemical formula (I) is FORMULA.

**Número de publicación:** CN101891833A

**Fecha de solicitud:** 2009-05-21

**Título:** Preparation method of carboxymethyl Maca polysaccharide

**Solicitante:** Shanghai University of Engineering Science,CN

**Abstract:** This invention claims a preparation method of carboxymethyl Maca polysaccharide, comprising the following steps of: regarding water and ethanol as the medium; extracting Maca polysaccharide from Maca dry powder; reacting the Maca polysaccharide with the chloroacetic acid and suitable superfluous sodium hydroxide isopropanol medium; carrying out substitution reaction for the hydroxide radical in the polysaccharide; and removing the protein therein and dialyzing to obtain the arboxymethyl Maca polysaccharide with high water-solubility. In comparison with the existing technology, the carboxymethyl Maca polysaccharide with high water-solubility obtained in this invention has the substitution degree of 0.618. This invention is featured with simple preparation method, convenient operation, low cost, fast reaction speed, easy control, and easy separation of product; and the obtained carboxymethyl Maca polysaccharide has high purity.

**Número de publicación:** CN101899381A

**Fecha de solicitud:** 2010-08-07

**Título:** Maca wine

**Solicitante:** Wuxi Xinde Lighting Technology Co. Ltd.,CN

**Abstract:** The invention claims a Maca wine prepared by adding Maca to highland barley liquor to soak. The Maca wine combines aroma and mellow smell and light sweet of Maca, such that the wine has better mouth feel and will not bring headache and thirsty feeling to the drinker. Since the present invention just uses Maca and highland barley liquor, it gives full play to many special medicinal healthcare value of Maca. Drinking 25-50ml of said wine each night can increase energy, resist fatigue, improve sexual function and improve fertility.

**Número de publicación:** CN101904360A

**Fecha de solicitud:** 2010-08-07

**Título:** Maca bovine colostrums tablet

**Solicitante:** Wuxi Xinde Lighting Technology Co. Ltd.,CN

**Abstract:** The invention claims a Maca bovine colostrums tablet, comprising dry Maca powder, bovine colostrums powder and cellulose, said dry Maca powder is 100% dry Maca powder, said bovine colostrums powder meets standard RHB602-2005 and immune globulin content is more than 35%, and the cellulose is natural fibre. The production process is simple, the carry is convenient; the product effectively improves immunity of the human body, and is suitable for the middle-aged and elderly people; the mouth taste is good, no side effect is formed, and it is natural and green health care product.

**Número de publicación:** CN101974396A

**Fecha de solicitud:** 2010-10-27

**Título:** Maca wine and production process thereof



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Solicitante:** HE Ming,CN

**Abstract:** This invention belongs to Maca wine and the production process thereof, wherein the Maca wine is formed by soaking and blending the following components in accordance with parts by weight: 100 parts of wine and 4-20 parts of *Lepidium meyenii*; the production process comprises: screening the raw materials, cleaning the *Lepidium meyenii*, slicing, drying, mixing, soaking, filtering and packaging; the wine has faint-flavour type and strong-flavour type, and it is sweet and toothsome and has efficacy for conditioning and nourishing sex gland, improving endocrine, increasing hormone and improving sub-health, and it is a novel variety of health-care wine for old and young.

**Número de publicación:** CNI02090245B

**Fecha de solicitud:** 2010-10-22

**Título:** Cultivation method for plant Maca

**Solicitante:** ZHU Xiao-xi,CN

**Abstract:** The invention relates to a cultivation method for plant Maca, comprising the following steps of: processing by seeds, sinking the seeds to accelerate germination, sowing by a tray, management in seedling period, transplanting, discharging water, fertilizing, intertill weeding, harvesting and storing. The nutrient components of the Maca obtained by the method of the invention exceed the nutrient components of the Maca produced in Peru and Yunnan; the dry Maca contains as high as 16.8% of protein and 12.6% of polysaccharide; and the invention provides new way for planting the Maca in high height above sea level, high latitude and dry whether.

**Número de publicación:** CNI02181354B

**Fecha de solicitud:** 2011-03-31

**Título:** Maca wine and manufacturing method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The purpose of the invention is to provide a kind of simple production technique, good healthcare effect and slightly sweet taste is mellow maca wine and its preparation method. Firstly the maca cleaning, drying, crushing, pasting, a bitter taste of maca removing, the port of the sweetener is more prominent, by pasting the maca spraying by ultrasonic crushing method to crush, forming superfine fog state so as to improve the extracting rate, using 95% of edible alcohol as extracting agent to extract, extracting the effective component, using yellow wine and distilled water is 18 to 20 by yellow wine to maca to distilled water is 15: 1, blending the alcohol concentration, a sterile board filter method for medicinal liquo for sterilizing: filling the medicinal liquor before filtering and sterilizing by sterilizing plate, at last.

**Número de publicación:** CNI02210337A

**Fecha de solicitud:** 2011-06-23

**Título:** Maca walnut cookie and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a maca walnut cookie with good taste and high nutritional value and a preparation method thereof,wherein the preparation method comprises the following steps: cleaning, drying and crushing maca leaves and stalks firstly;softening unsalted cream at a room temperature; respectively adding black sugar, salt and whole eggs according to a dosing proportion; stirring the mixture uniformly by a stirrer and whipping the mixture rapidly to be



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

even cream paste;screening flour, baking powder, maca leaf and stalk powder, crushed walnut and raisin according to the dosing proportion; grabbing the mixture to even paste by hands; adding enough water according to soft and hard degree of the paste;taking about 25 g of paste; rubbing the paste to be ball-shaped lightly by hands; putting the paste on a baking tray directly; flattening the paste to have the diameter about 5 cm; putting several pumpkin seeds on the paste, wherein the distance between the cookies is about 3 cm;preheating the paste at about 160 degrees centigrade in a roaster; and baking the paste for 22-25 min until the surface is golden yellow.

**Número de publicación:** CNI02220201A

**Fecha de solicitud:** 2011-05-27

**Título:** Maca port wine and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims maca port wine which has delicate fragrance taste and builds body and preparation method thereof.At first, the maca is cleaned, dried, crushed and gelatinized to remove the bitter taste of maca, so that the sweet taste of the maca is strong; then the gelatinized maca is crushed by an ultrasonic spraying crushing method to form ultra-fine mist state to improve the extraction efficiency; 95% of edible alcohol is taken as an extracting agent to extract and refine the effective component to prepare maca essence; then the port wine (red or white) and the maca essence are mixed according to the ratio of port wine to maca essence of 40: 1; the medicinal liquor is sterilized by a bacterium plate via a filterin sterilization method; and the wine is filled lastly.

**Número de publicación:** CNI02220213B

**Fecha de solicitud:** 2011-04-11

**Título:** Healthcare white spirit with peruvian ginseng

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** This invention claims a healthcare white spirit with peruvian ginseng, which fuses faint and mellow scent, coolness and purity of Xiaoqu wine, sweetness and special aroma of peruvian ginseng. The healthcare white spirit with peruvian ginseng is prepared by cleaning peruvian ginseng, air-drying and rough-crushing peruvian ginseng; pasting peruvian ginseng, removing bitterness of peruvian ginseng, and making the sweetness of the peruvian ginseng more prominent; crushing the pasted peruvian ginseng by ultrasonic spraying crushing method, forming fog- shaped super-fine state so as to improve extracting efficiency; taking 95% of edible alcohol as extracting agent to extract the peruvian ginseng, extracting the active component; using Xiaoqu wine, peruvian ginseng extracting solution and distilled water in the ratio of 5:1:adequance, mixing till the concentration of the alcohol is 42 degrees; sterilizing the medicinal liquor by a bacteria plate sterilizing method; filtering and sterilizing the medicinal liquor before canning through a bacteria removing plate; and finally canning the medicinal liquor.

**Número de publicación:** CNI02229872A

**Fecha de solicitud:** 2011-06-13

**Título:** Fermented wine suitable for women drinking and brewing method thereof

**Solicitante:** WANG Guo-jun,CN

**Abstract:** The invention claims a novel fermented wine suitable for women drinking and brewing method thereof, wherein it is prepared by mixing and fermenting the fermentation of tomato and radish maca, and fermented wine



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

whose alcoholic strength is between 5 and 20 degrees according to a certain weight ratio. The fermented wine suitable for women drinking of this invention does not contain any medicine components, and is in accordance with all kinds of national standards of fermented wines; the rich lycopene in the fermented wine can resist aging, regulate the internal secretion, nourishing ovary, skin care, and also can excite the activity of female.

**Número de publicación:** CNI02239982A

**Fecha de solicitud:** 2011-04-29

**Título:** Maca lozenge and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited, CN

**Abstract:** The invention claims maca lozenge and a preparation method thereof, wherein the optical basic dosing composition of the maca lozenge is: 3% of maca extract, sorbitol and maltitol with the proportion of 3:1 and use level of 80%, 0.4% of citric acid, 0.4% of menthe, and 16.2% of isomalto-oligosaccharide; the method comprises: firstly cleaning and drying maca and crushing roughly; gelatinizing maca and crushing maca; extracting with edible alcohol to prepare maca extract; crushing and screening sorbitol, maltitol and isomalto-oligosaccharide; putting all the materials into a mixer for mixing according to the dosing proportion; after uniformly mixing, adding wetting agent to prepare the soft material; putting the soft material into a granulator for prilling; and crushing and granulating with a 20-mesh screen; locating the wet particles in a drying box for drying, wherein the drying would be finished when the particle moisture is reduced to 1%-3%; adding lubricating agent into the dried particles and sending into a tablet machine for tableting; locating the pressed tablet under ultraviolet for radiating 30 min and sterilizing and packaging to prepare the finished product.

**Número de publicación:** CNI02242041A

**Fecha de solicitud:** 2011-05-31

**Título:** Maca rice wine and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited, CN

**Abstract:** The invention relates to a maca rice wine for enhancing physique and improving sleep and a preparation method thereof, wherein the preparation method is as follows: cleaning the maca, drying, crushing coarsely and pasting to remove the bitterness of the maca; crushing the pasted maca in ultrasonic spray crushing way to obtain the mist ultra-thin state; extracting the maca by using 95% edible alcohol as the extractant to obtain the maca essence; cleaning the sticky rice, soaking for 4-6 hours with water, stewing by a steamer, spreading, stirring the sticky rice with the distilled water along the same direction and putting the wine cube powder into the sticky rice uniformly, in which nearly 250 g of rice needs a small bowl of water; putting the sticky rice into a clean container, processing a hole in the middle, scattering the wine cube, covering and laying at the place with proper temperature; checking after 24 hours, adding the distilled water to the rice wine and maca essence, blending under the condition that the ratio of the rice wine to maca essence to water is 40:1:10, adding sweet-scented osmanthus and encapsulating.

**Número de publicación:** CNI02246958A

**Fecha de solicitud:** 2011-05-27

**Título:** Maca-leaf pill

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited, CN





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** This invention claims a maca-leaf pill; the diameter of the maca-leaf pill is less than 1.5mm. The pill is the micro-pill; the leaf stem of the maca is the main raw material; the xiaoqu wine is made as the wetting agent. According to the formula, 30 parts of the maca leaf dried powder are mixed with 70 parts of maca stem dried powder (part by weight). The main process procedure comprises the following steps: preparing medicine and auxiliary material, filming the medicine and auxiliary material, pilling the medicine and auxiliary material, covering the medicine and auxiliary material, drying the medicine and auxiliary material, selecting the pills, lagging cover, checking the quality and packaging the medicine and auxiliary material. The preparation method comprises the following steps: cleaning, drying and crushing the maca leaf and stem. Feeding the fine powder of the maca leaf and the fine powder of the stem and xiaoqu wine into the pill continuous foaming machine and lagging machine, mixing, filming, pilling, covering, lagging, and drying the materials in the same machine; checking the quality and packaging the product.

**Número de publicación:** CNI02260620B

**Fecha de solicitud:** 2011-06-13

**Título:** Brewed wine for male health and brewing method thereof

**Solicitante:** NING Cheng-guo, CN

**Abstract:** The invention claims a brewed wine for male health and brewing method thereof, it is made by mixing the fermentation of carrot and maca carrot and brewed wine with the alcoholic strength of between 5 to 20 degrees according to a certain weight matching. The brewed wine for male health claimed by the invention does not contain any medicine components, which is fit for all kinds of national standard fermented wine standard, it is rich in protein, fatty acid, carbohydrate, dietary fibre and other ingredients, wherein the protein contains plenty of essential amino acids need in human body, such as arginine, aspartate, glutamic acid and lysine and so on; the Maca carrot is rich in unsaturated fatty acid (linoleic acid 18.5%, linolenic acid 8.87%), in addition, the brewed wine further comprises potassium, calcium, iron and other trace elements, which can eliminate the male fatigue, and can enhance male activity by drinking for a long time with defined amount.

**Número de publicación:** CNI02319280A

**Fecha de solicitud:** 2011-07-27

**Título:** Maca tablet and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited, CN

**Abstract:** The invention claims a maca medicine tablet and preparation method thereof for treating and improving male prostate disease, wherein the maca tablet is composed of the constituents as follows: 30% of maca essence, 20% of maca residue powder and 50% of starch; the preparation method comprises the steps as follows: firstly cleaning the maca, roughly crushing, pasting the maca; crushing the pasted maca by ultrasonic spraying crushing method, extracting by 95% of edible alcohol, obtaining maca extract solution, extracting for 2-3 times, mixing the extract solution; drying the maca residue after extracting the essence, passing through 100 mesh sieve, passing the starch through 100 mesh sieve, adding the material into a mixer according to the proportion; obtaining soft material; putting the soft material into a shaking particle machine to granulate, crushing the particle by 20 mesh sieve, drying the wet particle into a 60 degrees centigrade of drying box, preferably reducing the water content in the particle to 1-3%; adding magnesium stearate as lubricant in the dry particles, uniformly mixing, tableting, coating film is irradiated for 30 min under the ultraviolet to sterilize, packing to obtain the finished product.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02335220A

**Fecha de solicitud:** 2011-10-09

**Título:** Maca sea queen anticancer enhancing immunity preparation

**Solicitante:** ZHU Xiao-xi,CN

**Abstract:** The invention relates to a maca sea queen anticancer enhancing immunity preparation, wherein the raw material comprises 1-7 parts of maca, sea cucumber, 2-5 parts of worm grass, 1-7 parts of radix astragali, 2-5 parts of pilose antler, 1-5 parts of the invention is featured with strong kidney and strengthening yang, nourishing internal organs, beautifying and improving the digestive system, a bidirectional adjusting function for blood pressure, a bidirectional adjusting and balancing the blood sugar, to adjusting organism metabolism, anti-aging, anti-tumour, anti-fatigue and enhancing immunity, has obvious effect for cardiovascular and cerebrovascular diseases, chronic, senile dementia and climacteric syndrome.

**Número de publicación:** CNI02362685B

**Fecha de solicitud:** 2011-10-24

**Título:** Maca compound beverage and preparation method thereof

**Solicitante:** Zhejiang Academy Of Medical Sciences,CN

**Abstract:** The invention claims a maca compound beverage according to 800 kg to 1200 kg, it is prepared by the following raw materials: 10 kg to 20 kg of maca, okra 10 kg to 30 kg, male silkworm moth 1 kg to 5 kg, arginine 0.1 kg to 0.5 kg, potassium sorbate 0.1 kg to 0.5 kg, citric acid 1 kg~3.5 kg, 0.05 kg~0.15 kg trichlorosucrose and the proper amount of water. The maca compound sugar-free beverage, low calorie, resisting fatigue and relieving pressure, strengthening body, increasing health care function of male. The invention also claims the preparation method of the maca compound beverage, the main raw material is maca, okra, male silkworm moth, arginine, citric acid, sucralose, potassium sorbate, formed by enzymolysis, extracting, mixing and filtering process, the operation is simple and is suitable for industrial production.

**Número de publicación:** CNI02367409A

**Fecha de solicitud:** 2011-09-27

**Título:** Maca kaoliang spirit and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a maca kaoliang spirit with simple production technique, exquisite mouthfeel, and cleaning flavour and quietness and a preparation method thereof. The method comprises the following steps: firstly, cleaning maca, sunning, roughly crushing; crushing the roughly crushed maca by using an ultrasonic spray crushing method, forming a fog-shaped ultra-fine state so as to improve the extraction efficiency; blending 60-degree kaoliang spirit with purified water to obtain 45-degree kaoliang spirit, then, placing for about one month, completely combining spirit molecules together with water molecules; extracting maca kaoliang spirit according to the ratio of the spirit and the maca powder which is 35:1, wherein the maca kaoliang spirit is about 42 degrees; firstly, roughly filtering, then, precisely filtering; sterilizing drug spirit by using a bacterial plate filtering sterilizing method; and filtering and sterilizing the drug spirit before the packaging by using a bacterial plate, finally, packaging. The invention completely yields multiple medical healthcare values of the kaoliang spirit and the maca, reinforces the human energy, enhances the human immunity, treats and improves the male prostate function, eases the female climacteric syndrome, and functions in resisting depression and anemia.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02367410A

**Fecha de solicitud:** 2011-09-27

**Título:** Maca Daqu liquor and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a Maca Daqu liquor and preparation method thereof with simple production technology and rich nutrition. Firstly cleaning maca, drying and crushing, crushing the crushed maca by ultrasonic spray crushing method to form fog superfine state so as to improve the extracting efficiency. 60 degrees of Daqu spirit is added with pure water for blending into 45 degrees Daqu liquor, placing for about one month, fully mixing the wine molecule and water molecule. Extracting Maca liquor according to the ratio of liquor: Maca powder = 35: 1, now the maca liquor has 42 degrees centigrade. Firstly coarse filtering and fine filtering then filtering with bacterial plate for sterilizing medicinal liquor: filtering with bacterial plate for sterilizing, finally canning. Gamma Daqu liquor has the scent of Daqu liquor and has the fragrance of maca, drinking 200-300 ml each day , it helps the blood circulation, the cold gas, the temperature, obviously improves the immunity of human body, strengthening spirit, has great help for improving male prostate function.

**Número de publicación:** CNI02430038A

**Fecha de solicitud:** 2011-12-07

**Título:** Composition for improving blood testosterone, preparation and preparation method thereof

**Solicitante:** Beijing Competitor Sports Technology Co. Ltd.,CN

**Abstract:** The invention relates to a composition for improving blood testosterone, a preparation and a preparation method thereof, wherein the composition is composed of Maca powder, yam extract, eurycoma longifolia extract, the composition of the invention can obviously improve the testosterone level of athletes during training, which can effectively reduce high serum cortisol level during strength training, ensures the good testosterone metabolism of athletes in training process; and the invention is very suitable for active people, especially for the athletes working on endurance projects.

**Número de publicación:** CNI02489229A

**Fecha de solicitud:** 2011-12-06

**Título:** Shell-core nanoparticles coating plant extract, and preparation method thereof

**Solicitante:** LIU Dong,CN

**Abstract:** The invention claims a shell-core nanoparticle coating plant extract, containing a core substance which is the plant extract, wherein a core film is polylactic acid which coats the plant extract to serve as the inner core of the shell-core nanoparticle; the surface of the polylactic acid is surrounded by single-layer soybean lecithin into which distearoyl phosphatidyl ethanolamine-carboxyl polyethylene glycol penetrates to jointly serve as a shell of the nanoparticle. A preparation method comprises steps as follows: using the polylactic acid having good biocompatibility as a carrier, using the soybean lecithin and the distearoyl phosphatidyl ethanolamine-carboxyl polyethylene glycol as emulsifiers to prepare the polylactic acid-phospholipid-carboxyl polyethylene glycol shell-core nanoparticle coating the plant extract by a one-step ultrasound synthesis method.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02499342A

**Fecha de solicitud:** 2011-10-31

**Título:** Maca steamed corn bread and its manufacturing method

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a Maca steamed corn bread and its manufacturing method.

The raw material of the Maca steamed corn bread is Maca slag, 1 parts of rice powder, 3 parts of sweet corn flour, soy flour 1 parts of soda, 0.01 parts of water. Make maca dreg, rice sweet corn flour, soybean flour, saleratus into the pot according to the proportion, gradually adding warm water uniformly, kneading the dough flexible full of energy. Dough kneading uniformly kneading straightly, and picking to surface agent. Before the kneading socket head, a right hand firstly dipping point cold water, the upper part on the left hand, kneading in case of sticky taking the lower surface agent on the left hand, kneading for several right fingers, making the dried skin kneading, and using two hands kneading ball, putting still in left hand. . The right arm sticking point cooling water, wherein 1 of small hole of ball middle drill, rotary finger, left hand thumb and middle finger at the same time collaborative purse. Making upper end head after moulding tip is pinched to the thickness of 0.3, and the inner wall surface until the socket head are smooth on the drawer fire for 20 minutes.

**Número de publicación:** CNI02511396A

**Fecha de solicitud:** 2011-12-22

**Título:** Medicinal plant Maca isolated rapid breeding method

**Solicitante:** Xinjiang Uighur Autonomous Region Institute of Traditional Chinese Medicine National Drug,CN

**Abstract:** The invention claims a medicinal plant Maca isolated rapid breeding method, comprising steps of preparing culture medium, preparing aseptic seedling, bud induction and rooting culture. The invention takes stems with bud of seedling as culture material, so it is of low mutation rate and stable heredity; besides the proliferation times can be more than maximally 10 times; as seedlings grow well, the invention can keep original plant characters.

**Número de publicación:** CNI02524465A

**Fecha de solicitud:** 2012-02-22

**Título:** Method for manufacturing Maca healthcare Pu-er tea paste

**Solicitante:** Hongyun Honghe Tobacco (Group) Co. Ltd.,CN

**Abstract:** The invention claims a method for manufacturing Maca healthcare Pu-er tea paste, belonging to the technical field of food and drug. The Pu-er ripe tea aged 10 years and 20 years and the Pu-er raw tea are used as the main materials of the tea paste by a reasonable proportion. The taste superiority in the tea leaf of different years is made good use, and the monotonous taste of Pu-er tea paste made by a single raw material is overcome, thus the taste of the tea paste is mellower and the fragrance is more aromatic. The active ingredients can be effectively extracted, and then the active ingredients are added into the tea paste in a suitable proportion. While the taste of tea paste is enhanced, the healthcare function of tea paste is also enriched.

**Número de publicación:** CNI02526161A

**Fecha de solicitud:** 2012-02-10

**Título:** Preparation method of highly active lepidium meyenii extract

**Solicitante:** Chinese Academy of Sciences Institute of Process Engineering,CN



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** The invention claims a preparation method of highly active *lepidium meyenii* extract, comprising steps as follows: breaking fresh or dry *lepidium meyenii* root, using water as a solvent to perform first ultrasonic reinforced extraction under a condition of controlling a certain liquid/solid ratio at 20-50 degrees centigrade, performing solid-liquid separation, and concentrating clear liquid at low temperature; performing second ultrasonic reinforced extraction of filter residue by alcohol-water solution under the condition of controlling a certain liquid/solid ratio at 20-50 degrees centigrade, performing the solid-liquid separation, and concentrating the clear liquid at low temperature; combining concentrated liquid of the two times; drying at low temperature or at fast speed to obtain the powdered *lepidium meyenii* extract. The invention is fast and efficient, extracting functional elements completely, preventing breaking a thermal sensitivity function of the *lepidium meyenii*, achieving high activity of the extract by low energy consumption and low cost. The *lepidium meyenii* extract of the invention is easy to dissolve in water, white spirit, grape wine, yellow millet wine, beer, fruit juice and liquid milk, capable of eliminating fatigue, resisting against compression, improving immunity, relieving climacteric syndrome, resisting against benign prostatic hyperplasia and reinforcing sexual function.

**Número de publicación:** CNI02559458A

**Fecha de solicitud:** 2012-01-16

**Título:** Maca coconut wine and its preparation method

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The purpose of the invention is to provide a maca coconut wine and its preparation method which can obviously improve the immunity of human body, strengthen human body, mouth feel and elegant fragrance. Gamma \* coconut wine of specific manufacturing method is as follows: the cleaned, aired coffee, crushing. Base wine selected coconut wine 50 degrees left and right, the Maca powder in coconut wine leaching, ratio Maca powder = 40: 1 as base wine. The base wine degree is low, the leaching time can be prolonged. Leaching temperature is controlled at 20- 25 °C, the leaching time is 30 days, if the temperature is lower than 20-25 °C must be extended leaching time, the effective ingredients of the maca adequately; Then roughly filtering, fine filtering; Finally filling, sterilizing. Each day for 200-300, through the circulation, the cold gas, drinking can obviously improve the immunity of human body, strengthen human body, improving male prostate function, improving female climacteric syndrome.

**Número de publicación:** CNI02573523A

**Fecha de solicitud:** 2010-08-11

**Título:** Dietary supplement, feed and pharmaceutical composition containing chia seed and maca, and preparation method thereof

**Solicitante:** KIM YOUN-JIN,KR

**Abstract:** The present invention relates to a dietary supplement, a food additive, a feed, a feed additive, and a pharmaceutical composition containing chia seed and maca, and a preparation method thereof. The dietary supplement and the like of the present invention contains chia seed and maca derived from a plant, and a powder or extract thereof as main ingredients, may further contain germanium, selenium or dietary zinc, if necessary, and has remarkable effects of preventing and improving disorders of the intestinal function, the sexual function or the liver function, such as weight reduction, fatigue relief, endurance increase, blood circulation improvement, cholesterol reduction, inflammation reduction, immunity enhancement, sex hormone increase, skin care, hangover relief, nicotine elimination, halitosis removal, body odor removal, analeptic effect or sterility treatment from biological and biochemical aspects.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

The present invention relates to a dietary supplement, a food additive, a feed, a feed additive, and a pharmaceutical composition containing chia seed and maca, and a preparation method thereof. The dietary supplement and the like of the present invention contains chia seed and maca derived from a plant, and a powder or extract thereof as main ingredients, may further contain germanium, selenium or dietary zinc, if necessary, and has remarkable effects of preventing and improving disorders of the intestinal function, the sexual function or the liver function, such as weight reduction, fatigue relief, endurance increase, blood circulation improvement, cholesterol reduction, inflammation reduction, immunity enhancement, sex hormone increase, skin care, hangover relief, nicotine elimination, halitosis removal, body odor removal, analeptic effect or sterility treatment from biological and biochemical aspects.

**Número de publicación:** CNI02578653A

**Fecha de solicitud:** 2012-01-16

**Título:** Maca functional drink and preparation method thereof

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a Maca functional drink capable of obviously enhancing the immunity of human body, easing fatigue, replenishing energy and reinforcing human vigour and preparation method thereof, wherein the formula proportion of the Maca functional drink is as follows: 500g of drinking water, 3-5g of Maca essence, sorbitol and sugar; the preparation method of the Maca functional drink is as follows: cleaning the Maca, drying, coarse crushing, smashing the coarse crushed Maca with ultrasonic wave atomizing method, forming vaporific superfine powder so as to improve the extraction efficiency, using the edible alcohol to extract, refining the effective components, preparing the Maca essence, mixing the materials according to ratio, canning, sterilizing. The invention is a simple recipe product, being natural and green food without adding chemical additives, wherein people are not addicted to the drink if they drink for long time, and the drink has the functions of building body and resisting fatigue.

**Número de publicación:** CNI02579547A

**Fecha de solicitud:** 2012-03-26

**Título:** Method for extracting effective component of lepidium meyenii walp

**Solicitante:** ZHANG Li-qin,CN

**Abstract:** The invention relates to a method for extracting effective component of lepidium meyenii walp, belonging to the technology field of the extraction of effective components of the natural plant. The method specifically comprises the following steps: a, selecting the non-rotten and non-moldy dry root or fresh root of the lepidium meyenii walp, to be ground to powder and passed through 80 to 100 meshes of sieve; b, adding the powder being passed through 80 to 100 meshes of sieve in the extraction tank, wherein 95% ethanol is taken as the extraction agent, the addition of 95% ethanol is 6 to 8 times of the weight of the powder, extracting for 2 to 4 hours at 60 degrees centigrade, separating the extract liquor for 5 to 10 min by the tubular high-speed centrifugal machine at 1000 to 3000 rpm; d, performing vacuum concentration to the centrifugate at 30 to 35 degrees centigrade and 0.02 to 0.08 Mpa of vacuum degree for 4.5 to 6 hours; e, performing micro-wave drying to the concentrated solution at 40 to 55 degrees centigrade for 45 to 60 min, then obtaining the extractive of effective component of the lepidium meyenii walp. The device of the method is purchased on market. The invention has advantages that the method is easily operated and the efficiency is high, the effective component of the extractive cannot be damaged and without pollution, the extractive is exquisite and the effective component content is high.



## Boletín de la Comisión Nacional contra la Biopiratería

 CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02599513A

**Fecha de solicitud:** 2012-03-26

**Título:** Maca cordyceps healthcare food

**Solicitante:** ZHANG Li-qin,CN

**Abstract:** A maca cordyceps healthcare food belongs to health food technology field. The mass percent of the invention are as follows: 15 -70% of maca effective component extract, normal technique to prepare 5-35% of worm grass effective component extractive, and the rest is auxiliary material; Maca effective component extract obtained by the following steps: selecting non-rotten and maca trunk or fresh root of variable, crushing into powder of 80 to 100-mesh sieve; Adding powder to 95% of ethanol as the extracting agent in extracting tank, the adding amount of 95% of ethanol for 6 to 8 times weight of Momordica dioica protein dry powder, the temperature of 60 °C degrees centigrade for 2 to 4 hours, extracting solution by high speed centrifuge tube is 10000 to 30000 in rotating speed of under the condition of separating for 5 to 10 minutes; d. Centrifuging solution is 0.02 to 0.08Mpa degree, the temperature is 30 to 35 °C under vacuum concentrated for 4.5 to 6 hours; And drying for 45 to 60 minutes to obtain the maca effective composition at a temperature of 45 to 55 °C under condition of micro-wave extract is from Aspalathus linearis. Worm grass effective component extractive preparation according to normal technology. Auxiliary material is emblic leafflower fruit fine powder or starch. Gamma food with rich nutrition, convenient eating, increase the physique of the advantages.

**Número de publicación:** CNI02599514A

**Fecha de solicitud:** 2012-03-26

**Título:** Maca truffle healthcare food

**Solicitante:** Zhang Li-qin

**Abstract:** Maca truffle healthcare food belongs to healthcare food technical field, which comprises the following materials according to percentage: 15-70% of Maca effective content extractives, 5-35% of truffle flavor powder and the rest of auxiliar materials by the following steps: choosing non-rotten, non-mildew Maca dry root or fresh root, shattering into 80-100 meshes fine powder; adding the fine powder into extracting jar with extracting agent of 95% ethanol, the adding amount of 95% ethanol is 6-8 times of the powder weight, extracting it under 60 centigrade for 2-4 hours; separating the extracting liquid for 5-10 minutes through the tubular high- speed centrifuge under the condition of 10000-30000 shift/minutes shift speed; vacuum concentrating the centrifugate for 4.5-6 hours under vacuum degree of 0.02-0.08Mpa and 30-35 centigrade; microwave drying the extracting for 45-60 minutes under 45-55 centigrade, and then get the Maca effective content extractives. Truffle flavor powder is prepared by conventional processing. The auxiliary material is phyllanthus emblica flavor powder or starch. Maca truffle healthcare food is particles, powder agent, troche or capsule. Maca truffle food has the advantages of abundant nutrition, is convenient to eat and invigorates health effectively.

**Número de publicación:** CNI02604800A

**Fecha de solicitud:** 2012-03-21

**Título:** Maca healthcare wine

**Solicitante:** GUO Xiang-yang,CN

**Abstract:** Maca healthcare wine, comprising the following steps: the original Maca powder and yeast according to the proportion (50~200): 1 are mixed uniformly and fermented by solid diastatic; during the fermenting process, constant



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

temperature 13 to 18 °C for 5 to 10 days, the fermented maca base material according to 1: (10~40) ratio is placed in the base for 30 to 60 days. The invention original Maca powder via solid diastatic fermentation; dry Maca powder nutrient active component is activated, which greatly improves the maca healthcare wine nutrient component, and the smell is sweet and mellow. Not only it has the style of our country liquor and more with healthcare effect.

**Número de publicación:** CNI02613555A

**Fecha de solicitud:** 2012-03-30

**Título:** Maca powder ginseng composition and preparation method thereof

**Solicitante:** ZHONGQI PHARMACEUTICAL TECHNOLOGY (SHIJIAZHANG) CO. LTD., CN

**Abstract:** The invention claims a Maca powder ginseng composition and preparation method thereof, comprising the following raw materials of weight parts: 2.5-8.5 parts of ginseng extractive, 10-30 parts of *Rhodiola rosea* extractive, 10-30 parts of *herba epimedii* extractive, 6-18 parts of *fructus lycii* extractive and 75-250 parts of Maca powder, Maca powder ginseng composition is manufactured by sieving and mixing uniformly the above drugs. The Maca powder ginseng composition manufactured by the invention is featured by natural raw materials, edible safety, and notable efficacy; the Maca powder ginseng composition can manufacture traditional Chinese medicine health food with enhancing immunity and releasing physical fatigue efficacy.

**Número de publicación:** CNI02626171A

**Fecha de solicitud:** 2012-03-30

**Título:** Healthcare food with maca and production technique thereof

**Solicitante:** Institute Of Alpine Economic Plant Of Yunnan Academy of Agricultural Sciences,CN

**Abstract:** This invention claims a healthcare food with maca and production technique thereof; each component and the mass ratio thereof is as follows: 60 to 75 percent of maca powder, 20 to 35 percent of coffee, and 1 to 5 percent of natural spice or sugar or vegetable fat powder. The technique comprises the steps such as raw material preparation, proportioning according to a certain ratio, mixing, vacuum packaging, sterilization, and warehousing of finished product. The maca coffee product prepared by the steps keeps the natural nutrient components of maca, the product is convenient in eating, and the product solves the problem of craving for the maca food by urban and rural residents while the maca food is difficult in making. In terms of function, the invention only uses maca and coffee, so that multiple special medicinal and edible values of health care of maca are fully exerted, the food is taken for 30 to 40 g in every day; the food is with the efficacies such as increasing energy, fatigue resistance, promoting sexual function, improving fertility, and regulating endocrine.

**Número de publicación:** CNI02630991A

**Fecha de solicitud:** 2012-05-02

**Título:** Functional health-care drink with maca and preparation method thereof

**Solicitante:** Chinese Academy Of Medical Sciences Medical Plant Research Institute Yunnan Branch,CN

**Abstract:** The invention relates to a functional health-care drink with maca and preparation method thereof, wherein the drink is mainly constituted by maca extract, taurine, vitamin C, vitamin B1, inositol, L-lysine hydrochloride, aspartame, artificial pigmen sodium carboxymethyl cellulose, benzoic acid and citric acid; and the process flow is as follows: raw material maca, extracting, filtering, cooling, clarifying, filtering, preparing, filtering, sterilizing, filling, sealing, sterilizing, cooling, checking the finished product. The functional health-care drink is provided with improving sexua





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

activity and anti-fatigue effect, has good mouth feel, obvious effect by functional health beverage obtained by the method.

**Número de publicación:** CNI02697039A

**Fecha de solicitud:** 2012-05-31

**Título:** Preparation method of maca active extract

**Solicitante:** Kunming University of Science and Technology, CN

**Abstract:** The invention claims a preparation method of maca active extract, comprising the following steps: firstly taking pretreating the fresh root and dry root of maca, then processing by pre-heated mixed solvent before carrying out percolation twice, adding additive to concentrated solution and then freezing and drying to obtain the maca active extract. The method of the invention is simple and easy to operate, fully and completely collects the nutrient content and active maca to prevent the active enzyme, and effectively prevent nutrient content and loss and damage of the active ingredient. The product can be instant edible, and it can be made into tablet, capsule and so on as raw material health preserving food, or adding all kinds of food in the application as additive.

**Número de publicación:** CNI02703295A

**Fecha de solicitud:** 2012-07-03

**Título:** Maca wine and production method thereof

**Solicitante:** XU Yong-nan, CN

**Abstract:** The invention claims a health wine. That is maca wine and its production method. It donkey kidney, ginseng, pilose antler, medlar, Chinese date, longan pulp composed of Maca powder, deer penis, dog kidney, honeysuckle of, or a combination of rock candy, distilled spirit and water. Production method of maca wine, wherein the steps are as follows: (1) percolation extraction Maca powder. (2) deer penis, dog kidney, donkey kidney, ginseng, pilose antler, medlar, Chinese date, longan pulp or honeysuckle can be mixed or percolating and extracting; (3) combining the extracting solution in the step (1), (2) extracting liquid with the rest of kaoliang spirit, rock candy, water, adjusting alcohol degree, storing in sealed, standing for 20 to 30 days, and the wine water-insoluble substances out, condensing the supernatant, filtering, bottling and packing to obtain 32% of Maca wine is 52% alcoholic strength. The wine is provided with improving sexual function, increasing fertility, adjusting internal secretion, delay climacteric, strengthening immunity, relieving fatigue and so on.

**Número de publicación:** CNI02742840A

**Fecha de solicitud:** 2012-07-16

**Título:** Maca cordyceps mouth lozenge and preparation method thereof

**Solicitante:** Tibet Rankang Technology Co. Ltd., CN

**Abstract:** The invention relates to a maca cordyceps mouth lozenge and a preparation method thereof, belonging to the technical field of natural healthcare product production. The maca cordyceps mouth lozenge comprises 40-60 parts of maca, 10-20 parts of cordyceps, 10 to 20 parts of American ginseng, 10 parts of lucid ganoderma, 5-10 parts of an adhesive and 0.5-2 parts of a flavoring agent. Prepared by vacuum freezing and drying, microwave sterilizing and so on, the effective components of the product can be effectively absorbed to give play to the maca and reduce the side effect of the maca; the raw materials can be utilized efficiently, the loss of the effective components is reduced in the



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

preparation process, the components in the prescription can be adsorbed by the human body better, and the function thereof can be obviously enhanced.

**Número de publicación:** CNI02754682A

**Fecha de solicitud:** 2011-09-23

**Título:** Method for passivating myrosinase activity of peruvian ginseng

**Solicitante:** Research Institute of Resources Insects of the Chinese Academy of Forestry,CN

**Abstract:** The invention claims a method for passivating myrosinase activity of peruvian ginseng, comprising: subjecting peruvian ginseng to microwave irradiation treatment, namely, placing fresh peruvian ginseng under a microwave irradiation condition for inhibiting or inactivating the myrosinase activity in peruvian ginseng. The method of the invention is high in inactivation efficiency of the peruvian ginseng myrosinase, low in myrosinase activity, can extend the storage period of the peruvian ginseng or can extend the quality guarantee period of the product; moreover, the peruvian ginseng prepared by the method of the invention is high in content of glucosinolate in the peruvian ginseng, keeps the bioactivity of the peruvian ginseng and keeps the original nutritional ingredients and the appearance quality of the peruvian ginseng in a better manner; thirdly, the method of the invention is simple and easy, saves the energy, is low in cost, good in work environment and sanitary environment and is free from pollution.

**Número de publicación:** CNI02757880A

**Fecha de solicitud:** 2012-07-25

**Título:** A maca healthcare wine and preparation method thereof

**Solicitante:** Beijing Zhongke Jianyu Biological Technology Co. Ltd.,CN

**Abstract:** A maca healthcare wine and preparation method thereof, comprising the following steps: functional Maca extract, 2-10 parts by weight, the root of kudzu vine extract, 0.1-5 parts of functional wine 85-97.9 shares. Maca is and kudzu root as raw material, using normal-temperature ultrasonic extracting technology to prepare maca and total flavone of radix puerariae functional extract, extract is solid powder or concentrated solution according to ratio into the wine, filtering, sterilizing and filling. The method is suitable for preparing maca healthcare wine, the production technique in white spirit, yellow wine, wine, beer, fruit wine is simple, effective component amount can be controlled at the same time give play to maca several health-care effects, the effective ingredient radix puerariae reduce alcohol to human body; The invention prepared the maca healthcare wine capable of alleviating fatigue, anti-pressure, anti-radiation, enhancing immunity, improving sexual function, adjusting internal secretion, improving sleeping, reducing blood fat, delaying aging, protecting liver and so on. Maca and radix puerariae functional extract improves the each functional component of the biological utilization degree therefore, maca healthcare wine for preventing and improving sub-health has wide application prospect.

**Número de publicación:** CNI02763742A

**Fecha de solicitud:** 2012-07-25

**Título:** Maca instant tea and production method thereof

**Solicitante:** Beijing Zhongke Jianyu Biological Technology Co. Ltd.,CN

**Abstract:** The invention claims a maca instant tea and a production method thereof, belonging to the technical field of deep processing of the maca, comprising specific follows: respectively crushing the maca and a tea raw material into



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

powder, performing ultrasonic reinforced extraction by water at 20-40 degrees centigrade, filtering, concentrating the extract liquid, performing spray drying to obtain maca extract and instant tea powder, mixing maca extract with the instant tea powder according to 10-30% of the maca extract and 70-90% of the instant tea powder, sterilizing and bagging to obtain the maca instant tea. This invention not only keeps the flavor of the tea, but also makes full use of Maca has to eliminate fatigue, resisting radiation and improving immunity, balancing hormone, resisting against benign prostatic hyperplasia and enhancing sexual function and so on; the maca extract increases the biological utilization of the functional elements of the maca; therefore, the maca instant tea has brilliant application prospect in preventing and improving sub-health.

**Número de publicación:** CNI02763752A

**Fecha de solicitud:** 2012-07-25

**Título:** Maca functional instant coffee and its preparation method

**Solicitante:** Beijing Zhongke Jianyu Biological Technology Co. Ltd.,CN

**Abstract:** This invention claims a maca functional coffee and its preparation method, comprising the following parts by mass of components: 5-40% of maca functional extracts, 50-80% of instant coffee powder, 1-10% of white sugar, 0.5-5% of non- dairy creamer, 1-10% of zinc lactate and 0.1-2% of vitamin B1. This invention keeps the mouth feel of coffee, and at the same time plays the functions of maca that it can remove fatigue, resist radiation, improve immune, balance hormones, resist benign prostatic hyperplasia and strengthen functionality, the maca functional extract improves the bioavailability of maca functional components, therefore, the maca functional coffee has a broad application prospects in preventing and improving sub-health and so on.

**Número de publicación:** CNI02763878A

**Fecha de solicitud:** 2012-07-25

**Título:** Maca functional health beverage and preparation method thereof

**Solicitante:** Beijing Zhongke Jianyu Biological Technology Co. Ltd.,CN

**Abstract:** The invention relates to a Maca functional health beverage and preparation method thereof, wherein the mass of each component is as follows: 1-5 parts of Maca extract, 1-3 parts of asparagus extract, 3-6 parts of composite vitamin and minerals, 0.5-1 part of flavouring agent, 2-4 parts of compound amino acid powder, 81-92.5 parts of water. The Maca functional health beverage of the present invention has the functions of alleviating fatigue, anti-stress, anti-radiation, enhancing immunity, improving sexual function, regulating endocrine as well as improving sleep, reducing blood lipid and anti-aging. The Maca functional extract improves bioavailability of Maca functional ingredients, so Maca functional health beverage has a wide application prospect in preventing and controlling, improving sub-health.

**Número de publicación:** CNI02764339A

**Fecha de solicitud:** 2012-08-01

**Título:** Maca composition for improving sexual dysfunction and preparation method and application thereof

**Solicitante:** CHEN Yan-wen,CN

**Abstract:** The invention claims a maca composition for improving sexual dysfunction and preparation method and application thereof. The composition is calculated as follows according to parts by weight as raw materials: maca 30 to 75 parts, herba epimedii 10 to 55 parts, morinda officinalis 5 to 50 parts, shizandra berry 10 to 55 parts, medlar 0 to 45



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

parts, wherein the maca composition is prepared by extracting the maca, herba epimedii and fructus schizandrae for several times with alcohol, filtering to obtain filtrate and filter residue, concentrating the filtrate to obtain the extract, then extracting the filtrate, morinda officinalis, medlar for several times, filtering, concentrating the filtrate to obtain the water extract, uniformly mixing the two extract, then drying to powder to obtain the maca composition. The maca compound has good effect of tonifying the kidney, benefiting qi and warming yang for sexual dysfunction, improving sexual function and relieving fatigue various symptoms with obvious improving effect, its effect is obviously better than the maca extract of traditional Chinese medicine raw material, it has good application prospect.

**Número de publicación:** CNI02787062A

**Fecha de solicitud:** 2012-09-08

**Título:** Okra maca wine and preparation method thereof

**Solicitante:** Tonghua Wanjia Biological Technology Inc., CN

**Abstract:** The invention claims a health wine. That is okra maca wine and a preparation method thereof. The wine comprises maca powder, okra, penis cervi, Cornu Cervi Pantotrichum Blood, medlar, longan pulp, ligamentum cervi, crystal sugar and base wine and water according to a proportion. The invention has the functions of improving sexual function, increasing fertility, adjusting internal secretion, delaying climacteric, strengthening immunity, relieving fatigue and so on. Using method is 100 ml per day, once or twice.

**Número de publicación:** CNI02823684A

**Fecha de solicitud:** 2012-09-29

**Título:** Maca-cordyceps militaris instant tea and preparation method thereof

**Solicitante:** Chuxiongzhou Baicaoing Pharmaceutical Co. Ltd.,CN

**Abstract:** The invention claims maca-cordyceps militaris instant tea and preparation method thereof, wherein the maca is-cordyceps militaris instant tea is powder obtained by using maca, cordyceps and tea as raw material, soaking, extracting circularly, separating, concentrating and drying. The preparation method comprises the following steps: crushing the maca till passing a 40-60 mesh sieve, taking 3-5 parts of maca, 1-2 parts of cordyceps militaris and 2-4 parts of tea according to the weight ratio to mix, adding water counting for 1-40 times as weight ratio into mixture raw material, soaking for 45-75 min at 30-40 degrees centigrade; extracting the soaked raw material circularly for 2-4h at 50-70 degrees centigrade, and then obtaining extracting solution; filtering the extracting solution to obtain separating solution; concentrating the separating solution in vacuum at 30-45 degrees centigrade till relative density is 1.0-1.3, then drying for 45-75min at 40-50 degrees centigrade to obtain the maca-cordyceps militaris instant tea. The invention uses processes of circularly extracting in low temperature region, concentrating in vacuum and drying via microwave to efficiently extract the effective component which is not damaged easily; the maca-cordyceps militaris instant tea of the invention retains original taste and flavour of the tea and contains rich active ingredients of maca and cordyceps militaris.

**Número de publicación:** CNI02823798A

**Fecha de solicitud:** 2012-09-11

**Título:** Maca tablet and preparation method thereof

**Solicitante:** Shandong Yibao Biological Products Co. Ltd.,CN



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** Maca tablet and preparation method thereof. The invention claims health products technology field, especially relates to a kind of maca, comprising the following raw materials in terms of proportioning by weight as follows: Maca powder, 581.84 g of microcrystalline cellulose, 56.48 g of lactose, 30.4 g of polyvinylpyrrolidone 78.56 g, magnesium stearate 15.12 g, starch 37.6 g, weight of the povidone is 2000 relative molecular mass. Mixing the each raw material uniformly, spraying 90% ethanol solution to make it wet, granulating, drying, middle inspection, granulating, tableting, each raw material according to claim 800 g 456.5 g ethanol solution.

Maca piece, effective component dissolution of the invention is quick, high biological utilization degree, it can give play to the effective composition of the maca, reduce cost. The invention comprises the function of alleviating physical fatigue, improve sexual function, improve the fertility, adjusting internal secretion and so on, especially for alleviating physical fatigue and improving sexual function best.

**Número de publicación:** CN102827750A

**Fecha de solicitud:** 2012-09-21

**Título:** Maca healthcare wine improving immunity and sexual activity

**Solicitante:** LI Guang,CN

**Abstract:** The invention claims a maca healthcare wine improving immunity and sexual activity, wherein it comprises the following parts by weight: 5-20 parts of ginseng, 2-6 parts of maca, 4-8 parts of medlar, 4-8 parts of herba epimedii, 1-5 parts of pilose antler, 5-10 parts of radix astragali, 5-8 parts of rhizoma polygonati, 3-10 parts of herba cistanche, 100-200 parts of white spirit, white spirit is grain wine, the alcoholic strength is 48-68 degrees, wherein the traditional Chinese medicine powder to powder after steaming, soaking, percolating and extracting method to obtain the product. The prescription in the traditional Chinese medicine theory, on the basis of the maca, increasing air supply and nourishing blood, nourishing yin and invigorating yang, taste and obvious effect, suitable for people of diabetes patient.

**Número de publicación:** CN102836196A

**Fecha de solicitud:** 2012-09-29

**Título:** A maca extract and preparation method thereof

**Solicitante:** Chuxiongzhou Baicaoing Pharmaceutical Co. Ltd.,CN

**Abstract:** The invention claims a maca extract and preparation method thereof, wherein the maca extract of maca extract as raw material to maca, extracting by circulation, purifying, concentrating, drying at normal pressure and drying, wherein the weight ratio of fatty acid total amount is 30 to 40%, acid benzyl ester is 18 to 25%, maca and maca ethylenically is 13 to 20%. The method is selecting no rot, mildew, no naked eyes it is clear that external impurity of maca, drying and carrying out a fine crushing, crushing granularity is to pass through 60 to 100 mesh sieve, then crushing the raw materials into extracting tank, adding 7 to 9 times of 50% to 90% alcohol solution and extracting for 2 to 5h at 45 to 55 degrees centigrade, to obtain the extracting solution, extracting solution into depositing tank naturally precipitating for 6 to 10h, carrying out vacuum filtering, filtrate by high speed centrifuge with rotating speed of 10000 to 40000r/min centigrade, taking filter liquor and concentrating to the relative density 1.0 to 1.3 at 40 to 55 degrees centigrade, drying at 40 to 55 degrees centigrade to obtain the maca extract.

The invention extraction rate of maca extract is greatly improved, the purity of the product is improved, the activity is good.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02846693A

**Fecha de solicitud:** 2012-09-13

**Título:** Composition with the function of relieving sports fatigue and preparation method and application thereof

**Solicitante:** Beijing Competitor Sports Technology Co. Ltd.,CN

**Abstract:** The invention claims a method for relieving sports fatigue, and preparation method and application thereof. The composition comprises the following active components: maca extract and tribulus terrestris extract. This invention uses maca extract and tribulus terrestris extract, can improve the serum testosterone level, relieve or eliminate back. Give a reasonable one. It has a synergistic effect, relieve or eliminate the effect of exercise-induced fatigue is maximized, which is good for improving the sport competition ability, and the preparation method is simple, using auxiliary material is reasonable, and can play the role of extract, cost is low, the technique in accordance with the production of preparation standard, a dosage form is easy to take, which is beneficial for a human body, good for popularization and application on industry, it has great economic benefit.

**Número de publicación:** CNI02870912A

**Fecha de solicitud:** 2012-09-22

**Título:** A kind of maca leaf tea

**Solicitante:** Wuxi Led-trust Photoelectron Technology Limited,CN

**Abstract:** The invention claims a kind of can enhance the physique, improve energy of maca leaf tea. Fresh maca leaves after selecting taking high-quality maca leaf, cleaning, water, dehydrating and drying, adopt the special vegetable dryer and nutrient content and colour retention of the maca to the utmost extent, the drying temperature is not more than 70 °C. Then using ultraviolet radiation sterilization to maca leaf and tea as raw material according to the proportion of 1: 2-3 is prepared by mixing together. The proportion can be changed according to need. Maca leaf has high nutritional value, some nutrient composition even higher than the maca. Such as: protein, amino acid, VB1 and so on. The tea can be green tea or black tea, oolong tea, white tea, yellow tea, dark tea; Manufacture is simple, storing amplifier. The invention solves the problem that the maca leaf is easy to rot, it is not easy to store and transport; and improves the economic value of the maca.

**Número de publicación:** CNI02884935A

**Fecha de solicitud:** 2012-11-02

**Título:** Plant maca is planting method of low altitude area

**Solicitante:** Kunming Dianran Biotechnology Co. Ltd.,CN

**Abstract:** The invention claims a kind of plant maca is planting method of low altitude area, the method comprising seed to water and sterilizing treatment, seedling, transplanting and turning aeration drying, carrying out field management of the professional is at last harvesting and so on in the greenhouse, the invention the maca planting method is simplified, strong operability, one bud and percent of pass is high, the invention of the method steps of the improved and standard of the maca according to planting the altitude from the origin of 3500 to 4000 to 2600 to 3600, which greatly expands the range of plant maca, and provides a whole set of effective planting method, maca to suitable area and planting to accelerate maca industry, the more people enjoy the maca, it has good economic benefit and social benefit.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02885302A

**Fecha de solicitud:** 2012-09-29

**Título:** A kind of maca compound and its preparation method and preparation

**Solicitante:** Chuxiongzhou Baicaoing Pharmaceutical Co. Ltd.,CN

**Abstract:** The invention claims a maca and preparation composition and preparation method thereof, wherein the composition is maca maca, cordyceps and ginseng as raw material, soaking, extracting, separating, concentrating, drying, crushing, mixing, tableting. The method is as follows: the crushing maca, cordyceps, ginseng, adding weight ratio of 4 to 10 times of water, soaking for 45 to 75 min at 30 to 40 °C degrees centigrade; after extracting for 2 to 4h and filtering to obtain separated liquid, separating liquid by vacuum concentrating and drying to obtain the maca. The preparation for the medicine composition is added with pharmaceutically acceptable auxiliary material to prepare powder, capsule, granule, tablet or pill. The invention uses low temperature section circulate extracting, concentrating in vacuum and microwave drying, the effective component can effectively extract active ingredient and is not easy to be damaged. The composition of the maca invention keeps the maca, cordyceps, artificially planted ginseng of the original taste and flavour, and contains rich maca and cordyceps militaris, artificial planting active ingredient of ginseng.

**Número de publicación:** CNI02885311A

**Fecha de solicitud:** 2012-10-19

**Título:** A kind of health food composition with the function of relieving physical fatigue and preparation method thereof

**Solicitante:** China Sciences Group Leren (beijing) Technology Co. Ltd.,CN

**Abstract:** The invention claims a healthy food for alleviating physical fatigue and preparation method thereof. The composition includes: Maca powder, Paecilomyces hepiali Chen, medlar extract and L-arginine hydrochloride. The invention further claims the preparation method of said healthy food. Health food composition of the invention shows that it has the function of relieving physical fatigue and has no toxic and side effect through animal experiment.

**Número de publicación:** CNI02895281A

**Fecha de solicitud:** 2012-11-05

**Título:** A kind of extracting maca effective composition air outlet method

**Solicitante:** Jiangsu Nucell Bio-Technology Co. Ltd.,CN

**Abstract:** The invention claims a maca extract effective component of, a stem as raw material, drying by vacuum to gamma, wall of the powders, wet granulation, using supercritical carbon dioxide extracting and separating to obtain the maca is fat- soluble active substance, then extract the maca residue by hot water extraction Maca polysaccharide, the invention adopts supercritical carbon dioxide extraction technology to extract functional activity of the factor of maca, extracting the maca extraction of polysaccharide residue by hot water extraction, from the crude extract, the active components effective part, separating and screening are combined with the method of the maca in high raw material and extract the effective components;

**Número de publicación:** CNI02898534A

**Fecha de solicitud:** 2012-10-16

**Título:** A kind of Maca polysaccharide extracting refining method

**Solicitante:** Chenguang Biotech Group Tianjin Co. Ltd.,CN



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** The invention claims a Maca polysaccharide extracting and refining method, comprising the following steps: (1) extracting: at normal temperature, 200 degrees centigrade to 500MPa degrees centigrade, washing the maca root to extract to obtain crude extract solution, (2) concentrating the crude extract solution, (3) the primary flocculation; (4) secondary flocculation of impurity removing, (5) spraying and drying: the obtained in step (4) the filtrate after spray drying to obtain the Maca polysaccharide. The invention uses extra-high tension method to extracting raw material by extruding effect, high permeability and to expand when the pressure relief rate, and normal temperature leaching, reduces the energy consumption.

Using water-absorbing resin to process the extracting solution and saves energy consumption to avoid the filter is difficult, and the cost is high. Use bentonite and modified starch flocculating agent composite to remove impurity, completely removing impurities, low loss of the polysaccharide, is energy-saving and environment-friendly, without secondary pollution, simple operation is easy to control, the production cost is low. Obtain the stable quality of the product, purity is high.

**Número de publicación:** CN102907663A

**Fecha de solicitud:** 2012-10-26

**Título:** A kind of health food composition with the function of relieving physical fatigue and preparation method thereof

**Solicitante:** China Sciences Group Leren (beijing) Technology Co. Ltd.,CN

**Abstract:** The invention claims a health preserving food for alleviating physical fatigue and preparation method thereof, wherein the health food composition as active ingredient is prepared as follows: Maca powder, cordyceps, cistanche salsa and L- arginine hydrochloride. The invention further claims the preparation method of said healthy food. By animal experiment, health food composition of the invention has the function of relieving physical fatigue, and it has no poison and side effect.

**Número de publicación:** CN102934680A

**Fecha de solicitud:** 2012-10-19

**Título:** A kind of inhibiting maca black mustard seed activity

**Solicitante:** Research Institute of Resources Insects of the Chinese Academy of Forestry,CN

**Abstract:** This invention claims a method for inhibiting maca black mustard seed enzyme activity, comprising a steam for a short time heat treatment of maca, fresh maca in high temperature steam blanching process so that the black mustard seed activity of maca is inhibited or inactivated. Maca black mustard seed enzyme inactivation method of the invention has high efficiency, black mustard seed enzyme activity is low, maca can prolong the storage period, or extend shelf life goods, and, wherein maca prepared by the method of the invention to mustard oil glycoside kept high to keep the maca biological activity and good keep the nutrient content and the appearance quality of the original Maca, the third, The method of the invention is simple and easy, energy saving and low cost, good working environment and sanitation environment is good, and there is no pollution.

**Número de publicación:** CN102948900A

**Fecha de solicitud:** 2012-11-01

**Título:** A kind of maca beverage and preparation method thereof

**Solicitante:** Shanghau Zhonghai New And High Technology Research Institute,CN





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** The invention claims a maca beverage and preparation method thereof, prepared by the following raw materials in percentage by weight as follows: Maca juice 0.5 to 1%, honey 1~2%, citric 1~2%, high fruit syrup, 4~6% of purified water 89~93.5%. This invention maca beverage not only has good taste but also can have the maca healthcare effect. Wherein an integrated beverage with health care and beverage for the first body.

**Número de publicación:** CNI02949430A

**Fecha de solicitud:** 2012-11-01

**Título:** A kind of maca capsule and preparation method thereof

**Solicitante:** Shanghau Zhonghai New And High Technology Research Institute,CN

**Abstract:** The invention claims a maca capsule and preparation method thereof, wherein the capsule is 100% maca nanometer powder. The preparation method of the maca nano-capsule is as follows: 1) making the fresh maca to clean and dry, then put into dryer for drying completely, 2) then the dried gamma \* of fresh product to less than 100nm particles by a crusher. 3) Putting into a capsule of Maca powder after crushing. This invention of the maca capsule, compared with the traditional health care plant capsule, the product uses advanced nano crushing technology to replace the traditional particle crushing technology so that the plant particles is smaller, which is more helpful for active ingredient; Maca capsule to take it to a human body, and taking process is very simple.

**Número de publicación:** CNI02949431A

**Fecha de solicitud:** 2012-11-01

**Título:** A kind of maca buccal tablet and preparation method thereof

**Solicitante:** Shanghau Zhonghai New And High Technology Research Institute,CN

**Abstract:** The invention claims a maca buccal tablet and the preparation method thereof, wherein the maca tablet, each 1000 g chip by the following raw materials according to part by weight: fresh maca 300-400 parts by weight, sugar 400-500 weight parts of pregelatinized starch, 150-200 parts by weight of acidity regulator, 1-2 parts by weight. The invention of the maca tablet, compared with the traditional buccal tablet, overcomes the buccal tablet contains sucrose is diabetes patient, and advanced nano crushing technology to replace the traditional organic extraction technology, which avoids the chip contained in the organic extraction agent; Maca tablet of the maca grinding to a powder in the manufacturing process, and it is very good for the release of maca most active ingredient, it is convenient for human body to absorb. At the same time the product adopts advanced buccal tablet manufacturing technology, it does not need to use a directly contained in it in the mouth, it is convenient to take.

**Número de publicación:** CNI02952741A

**Fecha de solicitud:** 2012-11-01

**Título:** A maca healthcare wine and preparation method thereof

**Solicitante:** Shanghau Zhonghai New And High Technology Research Institute,CN

**Abstract:** The invention claims a maca healthcare wine and preparation method thereof, prepared by the following raw materials in percentage by weight: fresh maca, 0.5 to 1% of honey, 1~2% of white wine, 97~98.5%. A liquor of the ethanol is a good solvent for a plurality of natural material, the can in the maca most active ingredient extracted for a human body, the maca wine is made capable of effectively improving the use value. Otherwise wine in the wine taste is capable of improving maca healthcare to locust honey one aspect, the active ingredient and the active ingredient in the maca in on the other hand locust honey can act on human body, it further increases the maca healthcare effect.



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** CNI02952878A

**Fecha de solicitud:** 2012-09-28

**Título:** A kind of goods identifying maca, pseudo product maca and ITS sequence and method for doping maca

**Solicitante:** Chinese Academy of Sciences Institute of Process Engineering,CN

**Abstract:** The invention relates to a kind of goods identifying maca, pseudo product maca and ITS sequence and method for doping maca. The invention claims a rDNAITS sequence of a certified maca and the sequence identifying the true and false of the maca, comprising extracting total DNA as the template, using ITS region primer, recycling the purified product, connected with carrier and screening positive clone, sequencing, sequence comparison, maca true and false. The invention can effectively detect the true and false maca, wherein maca powder is doped with other possible counterfeit. The turnip, radish, corn and potato and so on, and stably and efficiently for identifying the goods maca, product maca and maca.

**Número de publicación:** CNI02960810A

**Fecha de solicitud:** 2012-12-05

**Título:** Maca beverage

**Solicitante:** Shanghai Puwei Health Food Co. Ltd.,CN

**Abstract:** The invention claims a maca beverage, it is prepared by the formulation comprises the following raw materials: 0.02 %-0.1% of Maca powder, 0.3 to %-1.0 of ginseng, 0.02 to %-0.1 of Chinese yam, 0.2 to %-0.6 of chrysanthemum, 0.2 %-0.6% of honeysuckle, 0.04 %-0.06% of Guarana extract, 0.01 %-0.1% of soybean peptide, 0.01 to %-0.04 of coffee extract, 0.4 to %-0.6 of taurine, 0.06 to %-0.12 of inositol, 2.0 to %-3.0 of vitamin B1, 0.4 to %-1.2 of vitamin B6, and proper amount of flavour regulator, and the rest is water. Maca beverage of this invention is provided with refreshing, anti-fatigue, fast replenishing energy, recovering physical strength and clearing away heat;

**Número de publicación:** CNI02972766A

**Fecha de solicitud:** 2012-12-05

**Título:** Blueberry flower mm. food or health products

**Solicitante:** SHEN Xiao-ling,CN

**Abstract:** The invention claims a blueberry flower mm. food or health products, mainly blueberry anthocyanin extract and maca extract as raw materials, the body has no toxic and side effect, the preparation method is simple, and it is convenient to eat and nutrient;

**Número de publicación:** CNI02987366A

**Fecha de solicitud:** 2012-10-29

**Título:** Maca fine piece and preparation method thereof

**Solicitante:** LIN Jun-lin,CN

**Abstract:** The invention claims a maca essence tablet and a preparation method thereof, comprising the following steps: crushing maca dry fruit of the maca ultra-micro powder, extracting effective component, effective component manufacture powder, mixing, mixing, drying, tableting, packaging microorganism. Compared with the existing technology, the invention has advantages as follows: the preparation method is, the maca essence sheet is convenient to



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

take, convenient for absorption, obvious effect, good anti-fatigue function, normal edible capable of moistening skin and beautifying, nourishing Yin and nourishing stomach; the effect of hormone is the human body, has the function of improving male sperm survival rate.

**Número de publicación:** CNI03039264A

**Fecha de solicitud:** 2013-02-05

**Título:** Efficient maca cultivation method

**Solicitante:** LIJIANG BAIJIFANG BIOTECHNOLOGY CO LTD

**Abstract:** The invention provides an efficient maca cultivation method. The method comprises the following steps of raising of maca seedlings in a greenhouse, soil preparation and moisture, transplanting, field management and harvesting. The method is characterized in that film mulching is adopted during the transplanting of the maca seedlings, and 500 times liquid of fish protein is sprayed for 2-3 times at a time interval of 6-8 days in the most vigorous period of maca leaves. By adoptin the film mulching during the transplanting of the maca seedlings, weeds are decreased, a great deal of intertillage weeding work is avoided, and the production cost is reduced; besides, the nutrient demand in an expansion period of rootstocks is fully satisfied and the output and the quality of the maca are improved because of the topdressing in the most vigorous growth period of the maca leaves; and moreover, the revenue of the maca per Mu is enhanced while the cost of the maca per Mu is reduced, and the effects of excellent quality, high output and high efficiency of maca production are achieved.

**Número de publicación:** CNI03039265A

**Fecha de solicitud:** 2013-02-05

**Título:** Culture method for improving appearance quality of maca rootstocks

**Solicitante:** LIJIANG BAIJIFANG BIOTECHNOLOGY CO LTD

**Abstract:** The invention provides a culture method for improving appearance quality of maca rootstocks. The culture method comprises the steps of soil preparation and moisture, seed treatment, seeding, seedling management and field management. The culture method is characterized by directly and uniformly sowing treated maca seeds onto the moist ground according to 0.2-0.3 kilogram of maca seeds per Mu, and thinning the seedlings according to a planting space of 15cm\*20cm when the maca seedlings grow to have eight leaves and one core. According to the culture method provided by the invention, the roots of the transplanted maca seedlings are protected from being destroyed and bent, the rootstocks of the maca seedlings can grow longitudinally, and the forfication and branching of the maca seedlings are avoided; and compared with a maca product cultured by a seedling transplanting method, the maca product provided by the invention has the advantages in appearance, the main root of the maca product is clear and free from branches, and the root of the maca product has few fine hairs, so that the appearance quality of the maca rootstock is obviously improved, the processing of the maca product is benefited and the processing cost of the maca product is reduced.

**Número de publicación:** CNI03040895A

**Fecha de solicitud:** 2013-01-05

**Título:** Maca powder with bioactivity fully reserved, and preparation method and preparation of maca powder

**Solicitante:** SPACE AQUA TECH CO LTD

**Abstract:** The invention discloses maca powder with bioactivity fully reserved, and a preparation method and a



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

preparation of the maca powder. The maca powder is prepared by conducting refrigerating, freeze drying and smashing on fresh maca; moisture content of the maca powder is below 5%; and the maca powder contains glucosinolate accounting for 1.1-2.75wt% of the total weight of the maca powder. The preparation method comprises the processes of preparing materials, refrigerating, conducting freeze drying, and smashing. The preparation is characterized in that the maca powder is matched with auxiliary materials accepted in the field of pharmacy, and prepared into a tablet, power, dissolved medicine or a capsule. The preparation method adopts a vacuum freeze drying technology, and the activity of myrosinase in the maca is inhibited during the course of storage and drying; a hydrolysis reaction condition for myrosinase and glucosinolate is destroyed by crystallization of moisture in the maca; oxidation of active components of the maca is reduced due to the low-temperature drying; and characteristic substances-glucosinolate, the bioactive components such as protein, and other volatile components are reserved to the greatest extent.

**Número de publicación:** CNI166387C

**Fecha de solicitud:** 2001-12-20

**Título:** Maca effective component extracting method

**Solicitante:** Huazhong University of Science and Technology | Maya Bioengineering (Hubei) Co. Ltd.

**Abstract:** Maca effective component extract method, belongs to the field of natural product chemistry and pharmaceutical chemistry field, especially claims a method for extracting from plant rhizome, concentrating effective components. The step for the fresh maca by a vacuum drying, crushing into powder for further use, the Maca powder is a CO

**Número de publicación:** CNI194605C

**Fecha de solicitud:** 2003-07-01

**Título:** Maca one seedling propagation method

**Solicitante:** UNIV HUANZHONG SCI & TECHNOLOGY,CN

**Abstract:** Maca (MACA) seedling breeding method, belonging to the biological engineering and biological technology for realizing the rapid propagation of maca. The steps are as follows: obtaining explant, inducing callus, differentiation of the adventitious bud, rooting culture, after rooting treatment, after seedling. Culture medium adopts MS or the improved culture medium, and cultivating in different stage, using different concentration of 6-benzylamino purine (6BA) and rhodofix (NAA).

Seedling cultivating short time, good quality, and rate of height, seedling and can be the important economic crops maca large scale planting provides high quality seedling.

**Número de publicación:** CNI357370A

**Fecha de solicitud:** 2001-12-20

**Título:** Method for extracting effective component of maca

**Solicitante:** UNIV CENT CHINA SCI & TECHNOLOGY,CN

**Abstract:** Method for extracting effective component of maca, belonging to the field of natural product chemistry and pharmaceutical chemistry field, especially claiming a method for extracting from plant root, the concentration of effective component.

Where in the step for the fresh maca is by a vacuum drying, crushing into powder for use, preparing of Maca powder



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

uses CO<sub>2</sub> + entrainer of supercritical CO<sub>2</sub> extraction technology extracting, obtaining extracting liquid, extracting vacuum evaporating and concentrating the solution into water and emulsifier, homogenizing after spray drying granulation. The invention improves the raw material utilization ratio and effective ingredients and advanced technology, preparing process specification, standard, simple operation, effective ingredients of high content, stable effect, easy to dissolve, which is convenient to eat, transport and store.

**Número de publicación:** CNI390476A

**Fecha de solicitud:** 2002-07-30

**Título:** Health care food comprising maca and preparation method thereof

**Solicitante:** YANG Y,CN

**Abstract:** The invention relate to a kind of contain maca healthcare food and a preparation method thereof. Where in comprising 15 in the health food to maca is 85%, comprising 5% of Chinese medicinal herb 70%, comprising 0 of taurine and 10-30 parts of auxiliary material of 20%. The manufacturing method is, the maca and crushing the Chinese herbal medicine by 60-mesh sieve, then preparing according to the ratio and adding auxiliary material, preparing it into powder or capsule product. The advantages of the invention lie in, simple process, and can fully give play to maca, Chinese herbal medicine and synergistic effect of taurine, for removing fatigue and enhancing immunity of the organism and improving sexual function, it has obvious assistant function.

**Número de publicación:** CNI416734A

**Fecha de solicitud:** 2002-11-21

**Título:** An anti-fatigue healthy food

**Solicitante:** CHEN W,CN

**Abstract:** The invention relates to a healthy food, especially relates to an anti-fatigue health food, which comprises the following components mainly(MACA) plant root, honey and fruit juice. Daily at regular time quantitative eating, making all the fatigue effect the effective rate up to 92.2%, without side effect, which is good for health.

**Número de publicación:** CNI473465A

**Fecha de solicitud:** 2003-07-01

**Título:** Maka seedling reproducing method

**Solicitante:** HUANZHONG UNIV OF SCIENCE AND

**Abstract:** The present invention relates to plant biological engineering and biological technology, and is fast reproduction of Maka seedling. The reproduction of Maka seedling includes the steps of: obtaining explant; inducing callus; differentiating adventitious bud; rooting culture; post-rooting treatment; and transplanting after hardening seedling. MS or improved MS culture medium is adopted and in different culture stages, 6-benzyl aminopurine (6BA) and naphthalene acetic acid (NAA) in different concentration and compounding ratio are used. The present invention makes it possible to provide high quality test tube seedlings for large-scale plantation of Maka as a kind of important economic crop.

**Número de publicación:** CNI473594A

**Fecha de solicitud:** 2003-07-01

**Título:** Extract of Maka root



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Solicitante:** CENTRAL CHINA UNIV OF SCIENCE

**Abstract:** The present invention aims at extracting, separating and purifying the active components of Maka as one natural plant to obtain extractive with several medicinal and health care values. Fresh or dried Maka root material is extracted and separated to obtain active components and extracted residue. The active components includes glucosinolate and its decomposed product isothiocyanate in 10-90 wt%,Maka amide and Maka olefin 5-70 wt% and sterol 2-30 wt%. The active components may be further prepared into capsule, tablet, and delayed releasing forms, and the prepared medicine and health food have the functions of treating climacteric syndrome, strengthening male's and female's sexuality, improving sexual function, etc.

**Número de publicación:** CNI615965A

**Fecha de solicitud:** 2004-09-24

**Título:** Maca nano liposome and preparation method thereof

**Solicitante:** UNIV HUNAN, CN

**Abstract:** The invention claims a maca nano liposome and preparation method thereof, aiming at providing a kind of simple technique, high utilization rate, stable physical property, and can obviously improve the maca main component water soluble nano liposome and its preparation method. Wherein the maca nano liposome is as follows: the surface is phospholipids double molecule layer, the hydrophilic group layer forms a hydrophilic cap crown, the hydrophilic group layer is composed of an inner water phase, the hydrophobic group between double molecular layer produce a hydrophobic region, a nanometre liposome can be embedded hydrophobic component and a hydrophilic component, wherein the maca is hydrophobic, and embedded in a liposome in nanometre level of phospholipids double layer, so as to the said epidium meyenii walp hydrophilic component and loaded into the aqueous phase. The preparation method is of good compatibility with soybean lecithin is carrier, as a dispersion medium is glucose solution, using rotating film evaporation method comprises carrier solution to plant medicine kibbling is kibbling nano liposome.

**Número de publicación:** CNI644605A

**Fecha de solicitud:** 2004-12-28

**Título:** Package plant extracts of poly lactic acid or polyethylene plant extract lactide lactide nano particle and preparation method thereof

**Solicitante:** UNIV HUNAN,CN

**Abstract:** The invention claims a covered plant extract of polylactic acid PLA or poly lactide lactide PLGA nanometre particle and preparation method thereof, aiming at providing a kind of simple manufacturing technology, low manufacturing cost, and can increase the maca, a slip, a ginger oil and plant extract main component water, which greatly improves the plant extract in the machine body for absorption and bioavailability of polylactic acid PLA or polyethylene lactide lactide PLGA nanometre particle and a preparation method thereof.Spherical particle material is nanometer level covered characteristic of PLA or PLGA nanometre particle of plant extract is as follows: shell film is PLA or PLGA to plant extract is used as the core material covered;The preparation method is as carrier with biological compatibility is PLGA or PLA, PVA polyvinyl alcohol as emulsifier, using solvent volatilization method to prepare the carrier solution to plant extract of PLA or PLGA nanometre particle.

**Número de publicación:** CNI690214A

**Fecha de solicitud:** 2004-04-19



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** Maca ferment liquid and preparation method thereof

**Solicitante:** CUI J,CN

**Abstract:** The invention relate to a kind of Maca ferment liquid is prepared by the following steps: A, adding the maca dehydrating and drying, crush to maca powder inoculating strain for fermenting, separating fermentation liquor. The ferment liquid can be used for enhancing sexual function, and triggering of the, improving sexual ability, increase sexual pleasure for middle-aged person frequently feels tired, male number is low, erectile dysfunction, sexual deficiency, female sterility (organic lesion), adult mental deficiency, chronic preventing, anti-cancer, old, and improve the fertility, fast recovering physical strength, anti-fatigue and enhancing activity and intelligence, strengthen immune function, relieving pressure, whitening and beautifying effect.

**Número de publicación:** CN1939387A

**Fecha de solicitud:** 2006-09-25

**Título:** A composite maca panax notoginseng preparation

**Solicitante:** ZHAO Yan-lin,Mudanjiang, Heilongjiang 157000,CN

**Abstract:** The invention claims a composite maca panax notoginseng preparation, a medicine for curing cerebral thrombosis and cerebral hemorrhage as well as treating cardiovascular diseases. It is made by mixing 20%~ 50% panax notoginseng powder, 25%~ 60% maca powder and 10%~ 45% kudzu root powder. It has the advantages of obvious effects of curing cerebral thrombosis and cerebral hemorrhage as well as treating cardiovascular diseases, and fewer side effects.

**Número de publicación:** CN202186638U

**Fecha de solicitud:** 2011-06-25

**Título:** Maca wine bottle

**Solicitante:** HE Ming,CN

**Abstract:** This utility model belongs to a kind of Maca wine bottle, wherein it is in the glass bottle is provided with 1-5 gamma, and the dry maca glass is smaller than diameter of the wet glass is larger than diameter of the maca wine bottle, maca number, head size of, directly and is not easy to counterfeit, the user does not easily when, can purchase, wherein maca wine has ideal.

**Número de publicación:** CN202552034U

**Fecha de solicitud:** 2012-04-12

**Título:** Maca chocolate

**Solicitante:** LI Xiang,CN

**Abstract:** This utility model claims a Maca chocolate, comprising maca and chocolate, wherein the maca fruit 1 is preserved in the chocolate 2. This utility model not only improves the taste and Maca chocolate, the nutrient content is more complete, and the complementary, and merge the maca and chocolate, the rigid softness, connection of wall, and the " black " cultural connotation.

**Número de publicación:** CN2256624Y

**Fecha de solicitud:** 1996-04-02

**Título:** Water anti-leakage anti-reverse flower pot



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Solicitante:** Li Jun-hua

**Abstract:** This utility model is composed of flowerpot, composed of lepidium meyenii walp as flower pot bottom of pot 2 is bump, the bump is hollow, body 1 of the lower part of the side wall of the water circularly 1 with plate 3, lepidium meyenii walp 7 is reversed-U shape, and the middle is convex and the bottom pot 2 bulge hollow shape. Is provided with flower pot is soil planting flower, storage, fertilizer, the residual can be unloaded, plant growth, does not pollute the ground, clean and sanitary, capable of preventing the external force, so as to avoid accident. Widely applied to family, office and so on.

**Número de publicación:** CZ297984B6

**Fecha de solicitud:** 2004-08-26

**Título:** Foodstuff supplement based on silymarin

**Solicitante:** NATURPRODUKT CZ SPOL S R O

**Abstract:** In the present invention, there is disclosed a silymarin-based foodstuff supplement contributing to improvement of diet with positive effect on reduction of civilization diseases. As active components, it contains a mixture of 10 to 90 percent by weight of a standardized fraction of flavon-lignates prepared of *Cardui mariae fructus extractum siccum* and 90 to 10 percent by weight of galenically treated *Lepidium meyenii Walpers*, Brassicaceae hypocotyls.

**Número de publicación:** EPI180006A2

**Fecha de solicitud:** 2000-03-03

**Título:** COMPOSITIONS AND METHODS FOR THEIR PREPARATION FROM LEPIDIUM

**Solicitante:** Pure World Botanicals Inc., South Hackensack, NJ, US, 100203914

**Abstract:** The invention relates to compositions that can be isolated from *Lepidium* plant material and to methods for their isolation. The compositions are useful for treating and preventing cancer and sexual dysfunction.

**Número de publicación:** EPI536787A2

**Fecha de solicitud:** 2003-08-12

**Título:** IMIDAZOLE ALKALOIDS FROM LEPIDIUM MEYENII AND METHODS OF USAGE

**Solicitante:** Pure World Botanicals Inc., South Hackensack, NJ 07606, US, 03060451

**Abstract:** The present invention relates to novel imidazole alkaloid compounds that have been isolated as a form of chloride salt from a root extract of *Lepidium meyenii* Walp, with the common name Maca, and identified below as 1,3-bis(phenylmethyl) 4,5-dimethyl-1H-imidazolium chloride and 1,3-bis(phenylmethyl)-2,4,5-trimethyl-1H imidazolium chloride, compounds (1) and (2) respectively. The present invention further relates to the use of these novel compounds (1) and (2) to treat proliferative diseases, such as but not limited to cancer.

**Número de publicación:** EPI714635A1

**Fecha de solicitud:** 2005-01-28

**Título:** PROCESS FOR PRODUCING MACA EXTRACT

**Solicitante:** SUNTORY LIMITED, Osaka-shi, Osaka 530-8203, JP, 00423902





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** The present invention provides an efficient extraction method of Maca extract having safe anti-allergic effects enabling long-term intake, and a food and beverage product, a perfumery and a cosmetic as well as a pharmaceutical preparation comprising thus obtained Maca extract showing anti-allergic effect.

In the provided extraction method of Maca extract, the temperature of extracting solution is from 20°C to 75°C when Maca extract is extracted by adding aqueous solution containing ethanol being ethanol concentration of from 20 to 100 by volume%.

**Número de publicación:** JP04578759B2

**Fecha de solicitud:** 2002-04-26

**Título:** The composition for a sterility treatment

**Solicitante:** BAMEN K,JP | GU Y,JP

**Abstract:** 1. *Jatropha macrantha* ("MACHO") and/or its extract, *Lepidium meyenii* Walp ("Maca") and/or its extract and *Epimedim koreanum* ("Epimedium grandiflorum"), and/or its extract are contained, Pharmaceutical composition for a sterility treatment of the female characterized by the above-mentioned.

**Número de publicación:** JP04578760B2

**Fecha de solicitud:** 2002-04-30

**Título:** The composition for a menopausal-disorders treatment, the composition for a sex hormone raise

**Solicitante:** BAMEN K,JP | GU Y,JP

**Abstract:** 1. *Jatropha macrantha* ("MACHO") and/or its extract, *Lepidium meyenii* Walp ("Maca") and/or its extract and *Epimedim koreanum* ("Epimedium grandiflorum"), and/or its extract are contained, Pharmaceutical composition for a menopausal- disorders treatment of the female characterized by the above-mentioned. 2. It is the pharmaceutical composition for a menopausal-disorders treatment of the female of Claim 1, Comprising: Pharmaceutical composition for a menopausal- disorders treatment of the female characterized by the following. The said menopausal disorders are climacterium malaises. 3. *Jatropha macrantha* ("MACHO") and/or its extract, *Lepidium meyenii* Walp ("Maca") and/or its extract and *Epimedim koreanum* ("Epimedium grandiflorum"), and/or its extract are contained, Pharmaceutical composition for a female hormone raise characterized by the above-mentioned. 4. It is the pharmaceutical composition for a female hormone raise of Claim 3, Comprising: Pharmaceutical composition for a female hormone raise characterized by the following. The said female hormones are an estradiol and/or a progesterone.

**Número de publicación:** JP04731888B2

**Fecha de solicitud:** 2004-11-22

**Título:** The improving agent of the malaise accompanying autonomic imbalance

**Solicitante:** NIPPON MENARD KESHOHIN KK,JP

**Abstract:** 1. The extract and royal jelly of a Maca are contained, The improving agent of the malaise accompanying the autonomic imbalance characterized by the above- mentioned. 2. It is a form which converts the extract of a Maca into a dry Maca and can carry out the 0.01-10g /day ingestion of a 0.01-10g /day and the royal jelly, the improving agent of the malaise accompanying the autonomic imbalance of Claim 1.

**Número de publicación:** JP05064714B2

**Fecha de solicitud:** 2006-04-21



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** Anti- stress composition

**Solicitante:** NIPPON MENARD KESHOHIN KK,JP

**Abstract:** I. The proteolytic enzyme-treated material and Maca extract of royal jelly are contained, The glucocorticoid density|concentration raise inhibitor in blood characterized by the above-mentioned.

**Número de publicación:** JP2000316528A

**Fecha de solicitud:** 1999-05-06

**Título:** NUTRITION SUPPLEMENTING FOOD FOR ENHANCING REPRODUCTIVE FUNCTION | Generative function increase|augmentation nutraceutical product

**Solicitante:** FUJII TAKESHI

**Abstract:** PROBLEM TO BE SOLVED: To provide a safe nutrition supplementing food for enhancing reproductive function which can enhance reproductive functions of human male and female without causing side effects. SOLUTION: Power prepared by pulverizing dried axial roots and hypocotyl parts of a root vegetable belonging to Cruciferae Lepidium which is cultivated in Andean region in Peru and called Lepidium Meyenii waip, a zinc-containing yeast, the powder prepared by pulverizing seeds of a plant of Paullinia cupana which natively grows in the Amazonian valley in South America and powdery placenta prepared by extracting from placentas of lactate animals are mixed. COPYRIGHT: (C) 2000, JPO&Japio SUBJECT of the Invention This invention relates to a safe generative function increase|augmentation nutraceutical product without the side effect for improving human man and woman's generative function. PROBLEM to be solved The tap root and the embryo|germ axial part of a plant which are popularly called Maca (Scientific name: Lepidium Meyenii waip) by the root vegetables of Brassicaceae Lepidium genus grown in the Peru Andes area are dried. The powder placenta by which extraction processing was carried out from the placentas of what pulverized the fruit of the plant guarana (Scientific name: Paullinia cupana) which makes native what was powdered, the yeast containing zinc, and the South America Amazonian watershed, and a 哺乳 animal is mixed.

**Número de publicación:** JP2001039854A

**Fecha de solicitud:** 1999-07-30

**Título:** SKIN PREPARATION FOR EXTERNAL USE | Skin external preparation

**Solicitante:** SANKO BUSSAN KK

**Abstract:** PROBLEM TO BE SOLVED: To obtain a skin preparation for external use capable of exhibiting bleaching, humectant and improving and preventing effects on skin roughening and useful as a cosmetic, a quasi-drug for external use and a medicine for external use by including an extract from a plant of the genus Lepidium of the family Cruciferae. SOLUTION: This skin preparation for external use is obtained by including an extract from a plant of the genus Lepidium of the family Cruciferae. The plant is a root vegetable plant naturally growing or cultivated in the Andes district, mainly in a highland in Peru, e.g. Lepidium Meyenii W alp. The extract is obtained by using, e.g. a bulbar part thereof, directly dipping the bulbar part in an extracting solvent (e.g. water or a hydrophilic organic solvent such as ethanol or 1,3-butylene glycol or a mixed liquid thereof) or, as necessary, cutting and pulverizing the bulbar part and dipping the cut and pulverized bulbar part therein and carrying out the extraction. The extract is preferably contained in an amount of usually 0.001-10 wt. % expressed in terms of a dried material (dried solid content of the extract). COPYRIGHT: (C) 2001, JPO&Japio SUBJECT of the Invention Provision of skin external preparations equipped with a useful effect in some numbers, such as whitening, skin|surface roughening improvement and the prevention, a moisture



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

keeping, etc. for which it conventionally desires by the field, such as cosmetics, a quasi-drug, and a pharmaceutical. PROBLEM to be solved The skin external preparation containing the extract of a Brassica campestris (Cruciferas) family Lepidium (Lepidium) genus plant, especially a maca (Lepidium meyenii Walp) is used.

**Número de publicación:** JP2001354526A

**Fecha de solicitud:** 2000-06-13

**Título:** HAIR RESTORATION OR HAIR TONIC | Hair generation|occurrence|production or a hair restorer

**Solicitante:** NAKAZAWA NOBUHIKO | NAKAI YOSHIAKI

**Abstract:** PROBLEM TO BE SOLVED: To obtain a hair occurrence or hair tonic having excellent effects on hair growth, hair restoration promotion or hair nutrition and high safety. SOLUTION: This hair restoration or hair tonic comprises one or more kinds of crude medicines selected from Lepidium meyenii Walp and Uncaria tomentosa, crude medicines produced in Andes in South America or their active ingredient. COPYRIGHT: (C) 2001, JPO&Japio SUBJECT of the Invention While exhibiting the outstanding hair restoring, hair growth acceleration|stimulation, or the hair restoring effect, hair generation|occurrence|production or a hair restorer with high safety|security is provided. PROBLEM to be solved The hair generation|occurrence|production or the hair restorer containing 1 type chosen from the crude drug, Maca, and Una de Gato (the English name, Cat's Claw) which are produced in the South America Andes mountain range area, or 2 types of crude drugs, or those active ingredients.

**Número de publicación:** JP2002034507A

**Fecha de solicitud:** 2000-07-25

**Título:** HEALTH ASSISTING FOOD | Health supplement

**Solicitante:** WANDAA KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a health assisting food having improved activity promoting effect and nourishing effect and easily takable by anyone. SOLUTION: A health assisting food formulated with maca powder is further formulated with snapping turtle powder in an amount of 70-130 wt. %, preferably 100 wt.% based on the maca powder. It may be further formulated with guarana powder in an amount of 30-70 wt.%, preferably 50 wt.% based on the maca powder. COPYRIGHT: (C) 2002, JPO&Japio SUBJECT of the Invention Anyone enables it to ingest easily while heightening a vital-force enhancing effect, the nutritional fortification effect, etc. PROBLEM to be solved The health supplement formed by mix|blending a Maca end|powder WHEREIN: It is 70-130 weight% with respect to the compounding quantity of a Maca end|powder, A 100 weight% soft-shelled turtle end|powder is mix|blended desirably. Furthermore, it adds to such a soft-shelled turtle end|powder, and is 30-70 weight% with respect to the compounding quantity of a Maca end|powder, A 50 weight% guarana end|powder can be mix|blended desirably. [MAT\_IMAGE 000002]

**Número de publicación:** JP2002161043A

**Fecha de solicitud:** 2000-11-27

**Título:** SKIN CARE PREPARATION | Skin external preparation

**Solicitante:** TS AASU KK

**Abstract:** PROBLEM TO BE SOLVED: To obtain a safe skin care preparation having normalizing effects on skin immunity and further having ameliorating effects on skin roughening, ameliorating effects on firmness and wrinkles of the skin and ameliorating effects on adhesion of makeup. SOLUTION: This skin care preparation comprises one or more



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

kinds of extracts from a tuber of *Harpagophytum procumbens* and a thickened root of *Lepidium meyenii* W used therein. COPYRIGHT: (C) 2002, JPO&Japio SUBJECT of the Invention Obtain the skin external preparation which is safe, and has the skin immunity normalization effect, and also has chapped skin improving effect, skin vitality, the wrinkles improvement effect, and the improvement effect of the paste|nori\_seaweed of makeup|decoration. PROBLEM to be solved the said subject was solved by using the 1 or more types of extract of a devil's claw and a Maca.

**Número de publicación:** JP2003155213A

**Fecha de solicitud:** 2001-11-16

**Título:** COSMETIC COMPOSITION, AND FACEWASH, PACK PREPARATION AND BATH PREPARATION EACH COMPRISING THE SAME | A cosmetics composition and its face washing agent, a pack agent, and a bath agent

**Solicitante:** SHIYAROOONE KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a cosmetic composition giving skin surface smooth touch feeling without excessively removing the essential proteins on the epidermis, efficiently removing dirt on the epidermal surface (epidermal corneous layer), besides, expressing the effects of preventing and ameliorating wrinkles, fleckles (pigment spots) and rough skin, inducing no deterioration of prophylactic or immunological function against external excitation, and affording skin beautifying effect.

SOLUTION: This cosmetic composition is obtained by homogeneously blending papaya powder treated with papain as a protease having a proteolytic activity of  $\geq 40,000$  Pa.U.N./g and maca powder treated with the same papain with substantially moisture-free powder or oily liquid and the above same papain. COPYRIGHT: (C) 2003, JPO&Japio SUBJECT of the Invention A smooth feel is brought to a skin surface by prescription of one. However, the necessary protein of an outer\_skin|epidermis is not removed too much and the dirt on the surface|faceside of an outer\_skin|epidermis (outer\_skin|epidermis horny layer) is removed efficiently, In addition, effects, such as prevention of wrinkles, blotches|liver\_spots (pigment spots), and skin roughness and improvement, are expressed, It is providing the cosmetics composition with which a reduction of the defense ability with respect to the irritation|stimulation from an external field or an immunofunction is not caused, either, but the beautiful-skin effect's is acquired. PROBLEM to be solved I t is the cosmetics composition uniformly mixed with the papain of the protease which has the active mass of the powder which does not contain a water|moisture content for the papaya powder processed by the papain of the protease which has the active mass of 40000Pa.U.N./g or more protein decomposition|degradations, and the Maca powder processed by the papain of the protease which has the active mass of 40000Pa.U.N./g or more protein decomposition|degradations substantially or an oil-based liquid, and 40000Pa.U.N./g or more protein [MAT\_IMAGE 000002]

**Número de publicación:** JP2003313137A

**Fecha de solicitud:** 2002-04-19

**Título:** COMPOSITION FOR TREATING OSTEOPOROSIS | The composition for an osteoporosis treatment

**Solicitante:** BAMEN KENICHI | GU ZENWA

**Abstract:** PROBLEM TO BE SOLVED: To obtain a composition having high therapeutic effect on osteoporosis and takable not only as a pharmaceutical but also as a food. SOLUTION: This composition for treating osteoporosis contains *Jatropha macrantha* and/or its extract. COPYRIGHT: (C) 2003, JPO&Japio SUBJECT of the Invention The therapeutic effect with respect to osteoporosis is a high composition, Comprising: The composition which can be



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

ingested also as foodstuffs not only as a pharmaceutical is provided. PROBLEM to be solved the composition for an osteoporosis treatment based on this invention contains *Jatropha macrantha* and/or its extract. [MAT\_IMAGE 000002]

**Número de publicación:** JP2003321382A

**Fecha de solicitud:** 2002-04-26

**Título:** COMPOSITION FOR TREATING INFERTILITY | The composition for a sterility treatment

**Solicitante:** BAMEN KENICHI | GU ZENWA

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition which exhibits high treatment effects on infertility and can be ingested not only as a pharmaceutical but also as a food. SOLUTION: The composition for treating infertility contains *Jatropha macrantha* and/or its extracts. COPYRIGHT: (C) 2003, JPO&Japio SUBJECT of the Invention The therapeutic effect with respect to a sterility is a high composition, Comprising: The composition which can be ingested also as foodstuffs not only as a pharmaceutical is provided. PROBLEM to be solved The composition for a sterility treatment based on this invention contains *Jatropha macrantha* and/or its extract.

**Número de publicación:** JP2003321383A

**Fecha de solicitud:** 2002-04-30

**Título:** COMPOSITION FOR TREATING CLIMACTERIC DISTURBANCE AND COMPOSITION FOR INCREASING SEX HORMONE | The composition for a menopausal-disorders treatment, the composition for a sex-hormone raise

**Solicitante:** BAMEN KENICHI | GU ZENWA

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition which exhibits high treatment effects on climacteric disturbance and can be ingested not only as a pharmaceutical but also as a food. SOLUTION: The composition for treating a climacteric disturbance contains *Jatropha macrantha* and/or its extracts. COPYRIGHT: (C) 2003, JPO&Japio SUBJECT of the Invention The therapeutic effect with respect to menopausal disorders is a high composition, Comprising: The composition which can be ingested also as foodstuffs not only as a pharmaceutical is provided. PROBLEM to be solved The composition for a menopausal-disorders treatment based on this invention contains *Jatropha macrantha* and/or its extract.

**Número de publicación:** JP2004000171A

**Fecha de solicitud:** 2003-03-24

**Título:** FUNCTIONAL FOOD PRODUCT CONTAINING MACA | The functional food containing a Maca

**Solicitante:** TOWA CORP

**Abstract:** PROBLEM TO BE SOLVED: To obtain a functional food product which increases blood levels of growth hormones and stamina and is therefore considered to be effective for preventing the increase of wrinkles or gray hair and decrease in physical strength and reproductive function. SOLUTION: This food product contains a 60-80% water-containing alcohol extract of dried maca root and increases the blood levels of the growth hormones and stamina. When reduced secretion of the growth hormones results in the decreased blood levels, aging may be inhibited by continuously taking the food product for  $\geq 5$  weeks. COPYRIGHT: (C)2004, JPO&Japio SUBJECT of the Invention The functional food which has the amount raise effect[action] of phytoamines in blood and the increase effect[action] in tenacity which are considered to be effective in a reduction of the increase in wrinkles or white hair, physical strength, and the generative function is provided. PROBLEM to be solved The water-containing-alcohol extract of 60-80% of the dried product of the root of a Maca is contained. It has the amount raise effect[action] of phytoamines in blood, and an increase



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

effect|action in tenacity. Secretion of a phytamin decreases, When the amount of phytamins in blood reduces, it continues five weeks or more and ingests. Suppression of senility is expectable. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2004049060A

**Fecha de solicitud:** 2002-07-17

**Título:** CUTTLEFISH INK-CONTAINING FOOD COMPOSITION | Sepia – containing foodstuffs composition

**Solicitante:** FANCL CORP

**Abstract:** PROBLEM TO BE SOLVED: To provide a simple masking technique having an active ingredient discoloration-preventing effect in a food composition. SOLUTION: Cuttlefish ink is used as a masking agent. The cuttlefish ink exhibits an excellent masking effect due to its comprehensive properties comprising good particle fineness, good dispersibility not dissolved in water, oils and fats, and strong durability against light and heat. Since having excellent dispersibility and stability, the cuttlefish ink does not cause problems such as the separation and coagulation of the pigment, and can persist the masking effect for a long period. Examples of the active ingredient include vegetable sterol and a rice bran extract. COPYRIGHT: (C)2004,JPO&Japio

SUBJECT of the Invention Provide the convenient masking technique of having the color-change preventing effect of an active ingredient in a foodstuffs composition. PROBLEM to be solved Sepia is used as a masking reagent. Sepia exhibits the outstanding masking effect with synthetic character of the fineness of particle|grain, the dispersibility which is not dissolve|melted in water and fats and oils, and the strong resistance with respect to light or a heat|fever. Sepia is excellent in a dispersibility and stability, Therefore A problem, such as isolation|separation or aggregation of a pigment|dye, does not arise but the masking effect can be maintained over long period. A phytosterol and a Maca extract are mentioned as an active ingredient component. SELECTED DRAW INGS Absence

**Número de publicación:** JP2004224784A

**Fecha de solicitud:** 2003-01-22

**Título:** ESTHETIC CLINIC FOR INFERTILITY USING LEPIDIUM MEYNII WALP | Maca infertility aesthetics

**Solicitante:** YAMAZAKI MISUZU

**Abstract:** PROBLEM TO BE SOLVED: To make Lepidium Meyenii walp absorb through the mucous membrane, instead of dosing, by solving such a problem that health foods attract attention because it is feared that conventional remedies for gynecological diseases have side effects, but some people, nevertheless, resist administering the Lepidium Meyenii walp as the healthy food. SOLUTION: A remedy for the gynecological diseases comprises fuming the Lepidium Meyenii walp efficacious against the gynecological diseases to form smoke and making the smoke absorb into the body through the mucous membrane. COPYRIGHT: (C) 2004,JPO&Japio SUBJECT of the Invention We are [ conventional|gynecology type|system|group treatment ] anxious about a side effect, and health food attracts attention, However, there are some persons who have a resistance in taking. PROBLEM to be solved It becomes the treatment of a gynecology type|system|group by smoking the Maca which has effect in a gynecology type|system|group, and making the inside of the body absorb smoke. SELECTED DRAWINGS Absence

**Número de publicación:** JP2005143397A

**Fecha de solicitud:** 2003-11-14

**Título:** METHOD FOR PRODUCING ROOT VEGETABLE TABLET, AND THE RESULTANT



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

ROOT VEGETABLE TABLET | The root-vegetable tablet manufactured by the manufacturing method of a root-vegetable tablet, and its method

**Solicitante:** SANSBIN UNYU KK

**Abstract:** PROBLEM TO BE SOLVED: To obtain 100%-purity tablets wholly containing maca powder. SOLUTION: The tablets are obtained by the following four consecutive steps: A step 1 comprising adding water to maca powder stock followed by mixing together under agitation, a granulation step 2 comprising vibrating the mixture while drying to effect granulation, a sieving step 3 comprising excluding granules with a size of 40 mesh or greater, and a compression step 4 comprising hot-pressing granules with a size of smaller than 40 mesh together to effect mutual binding into the objective tablets. In the above process, nothing is added except water. COPYRIGHT: (C) 2005, JPO&Japio SUBJECT of the Invention The tablet of 100 % of purity which was able to enclose the powder of a Maca wholly is manufactured. PROBLEM to be solved At the hydration hydrolysis process 1, water is added and stir-mixed to the powder raw material of a Maca, A vibration is given and granulated at the continuing granulation process 2, making it dry, Next, it sifts out and the granule of 40 or more meshes is excluded at process 3, At the making-tablets process 4, the heating heated press of the granules of 40 or less meshes is carried out at the last, It is made to mutually bind conclude and is set as a tablet, Nothing is added but water. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2005306754A

**Fecha de solicitud:** 2004-04-19

**Título:** TESTOSTERONE-INCREASING COMPOSITION, TESTOSTERONE-INCREASING FOOD, TESTOSTERONE-INCREASING SKIN CARE PREPARATION FOR EXTERNAL USE AND TESTOSTERONE-INCREASING MEDICINE | The testosterone-increasing composition, the testosterone-increasing foodstuffs, the t

**Solicitante:** TOWA CORPORATION KK

**Abstract:** PROBLEM TO BE SOLVED: To obtain a testosterone-increasing composition, to provide a testosterone-increasing food, a testosterone-increasing skin care preparation for external use, and a testosterone-increasing medicine. SOLUTION: The testosterone-increasing composition is characterized by comprising either of a benzyl glucosinolate and a benzyl isothiocyanate and having a blood testosterone-increasing action. The testosterone-increasing composition has learning ability-improving, its maintaining and degradation-depressing actions in a growth period or mature period to an old period in a rat which took *Lepidium meyenii*-Walp, Cruciferae: Maca in an immature period to a growth period. The testosterone-increasing composition has also a male sexual function-recovering action. The testosterone-increasing composition can also be applied to functional foods, cosmetics, skin care preparations for external use, and medicines. COPYRIGHT: (C) 2006, JPO&NCIPI SUBJECT of the Invention The increase composition in testosterone, the increase foodstuffs in testosterone, the increase skin external use in testosterone, and the increase drug in testosterone are provided. PROBLEM to be solved The Maca which has a benzyls glucosinolate and a benzyls isothiocyanate is contained. A blood testosterone value is raised. It has the improvement of the learning ability of senectitude, a maintenance, and a reduction inhibitory effect from the growth phase thru|or the period of maturity in the rat made to ingest a Maca in a growth phase from an immaturity term. It also has a male reproductive-function recovery effect|action. It is made also to a functional food, cosmetics, a topical product, and a pharmaceutical. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2005328803A

**Fecha de solicitud:** 2004-05-21



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** VITALITY-PROMOTING AND AGING-PREVENTING FOOD AND METHOD FOR PRODUCING THE SAME | Vital-force promotion \* ageing prevention foodstuffs and a method of manufacturing the same

**Solicitante:** TOWA KAGAKU KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a vitality-promoting and aging-preventing food having great effect in physical strength restoration and physical strength enhancement regardless of sex and age, enabling overcoming the bad condition in each kind of physical conditions and growing out of physical constitution depending on various kinds of medicines, and free from anxiety about side-effects of medicines. SOLUTION: The vitality-promoting and aging-preventing food is obtained by providing a soluble pharmaceutical preparation of water-soluble coenzyme Q 10, adding water to and heating one kind or a plurality of kinds selected from agar, gelatin and konnyaku to obtain a dispersed base agent, stirring and mixing maca powder with the base agent, adding the coenzyme Q10 soluble pharmaceutical preparations while cooling the obtained base agent added with the maca powder and hermetically filling the product in a container. COPYRIGHT: (C) 2006,JPO&NCIPI SUBJECT of the Invention An effect can be very high to physical strength recovery and physical strength improvement regardless of man-and-woman age, the bad condition of various condition can be conquered, it can be molt peeled from the constitution depending on various pharmaceutical, and worries about a drug-induced-damage side effect obtain unnecessary vital- force promotion \* ageing prevention foodstuffs. P ROBLEM to be solved The fusible soluble formulation of water soluble coenzyme Q 10 is obtained, A hydration hydrolysis \* heating is performed for 1 type or multiple types chosen from agar thru/or gelatin, or a konnyaku jelly, and a dispersion distribution mother agent is obtained, A Maca powder is stir-mixed to this dispersion distribution mother agent, A said coenzyme Q 10 fusible soluble formulation is added cooling the dispersion distribution mother agent which added the obtained Maca powder, sealing filling is carried out at a container, and vital-force promotion \* ageing prevention foodstuffs are obtained. SELECTED DRAW INGS Absence

**Número de publicación:** JP2006069970A

**Fecha de solicitud:** 2004-09-02

**Título:** COMPOSITION FOR PREVENTING MALE CLIMACTERIC DISORDER AND BEVERAGE AND FOODS INCLUDING THE SAME | The composition which prevents male menopausal disorders, and food/beverage products containing it

**Solicitante:** HIROSE YUKIHIRO

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition that can prevent male climacteric disorder and beverages and foods including the same. SOLUTION: The extracts of soybean, and the extracts of one or a plurality of plants selected from plants including maca and triterpenoid saponin, plants including steroid saponin are collected and fermented with bacillus natto and the resultant component is used as a composition for preventing male climacteric disorder. Further, an extract from Igusa rush is added to the extracts of soybean, one or a plurality of kinds of plants including maca and triterpenoid saponin and of plants including steroid saponin and the resultant extract mixture is fermented with bacillus natto and the fermented component is used as an essential component for the composition for preventing male climacteric disorders. This invention also provides beverages and low alcohol beverage including these compositions. COPYRIGHT: (C) 2006,JPO&NCIPI SUBJECT of the Invention This invention tends to provide the composition which prevents male menopausal disorders, and the food/beverage products containing it. PROBLEM to be solved The component which consists of a liquid which fermented the extract which consists of any 1 type of a soybean and a Maca, the plant containing triterpenoid saponin, and the plants containing a steroid saponin or multiple types with





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

the *Bacillus natto* is contained as an essential component, The composition for prevention of the male menopausal disorders characterized by the above- mentioned. The component which consists of a liquid which added the extract of a rush to the extract which consists of any I type of a soybean and a Maca, the plant containing triterpenoid saponin, and the plants containing a steroid saponin or multiple types, and fermented it with the *Bacillus natto* further is contained as an essential component, The composition for prevention of the male menopausal disorders characterized by the above-mentioned. Those compositions are contained, The drink or low-alcohol drinks characterized by the above-mentioned. SELECTED DRAWINGS Absence

**Número de publicación:** JP2006143664A

**Fecha de solicitud:** 2004-11-22

**Título:** IMPROVING AGENT OF INDEFINITE COMPLAINT ACCOMPANYING WITH AUTONOMIC IMBALANCE

| The improving agent of the malaise which accompanies autonomic imbalance

**Solicitante:** NIPPON MENAADE KESHOHIN KK

**Abstract:** PROBLEM TO BE SOLVED: To provide an improving agent of an indefinite complaint accompanying with autonomic imbalance, capable of being used continuously in every day, and showing safe and sufficient effectiveness. SOLUTION: This improving agent of the indefinite complaint such as fatigue feeling, malaise, tremble, heat sensation on face, headache, dizziness, melancholic feeling, irritation, breathlessness, palpitation, insomnia, anorexia, diarrhea, perspiration, stiff shoulders, cool feeling of the limbs, pain of the limbs, nausea, etc., accompanying with the autonomic imbalance is characterized by containing *Lepidium meyenii* extract and royal jerry. It is possible to provide the agent in forms of tablets, granules, capsules, troches, internal liquid agents, beverages, etc. COPYRIGHT: (C)2006,JP&NCIPI SUBJECT of the Invention I t can use continuously daily and the improving agent of the malaise which accompanies the autonomic imbalance which shows safe and sufficient effect is provided. PROBLEM to be solved The extract and royal jelly of a Maca are contained, It is the improving agent of malaises, such as the fatigue which is characterized by the above-mentioned and which accompanies autonomic imbalance, the malaise, shaking, the heat of a face, headache, the vertigo, a melancholy feeling, irritation, breathlessness, a palpitation, sleeplessness, an anorexia, a diarrhea, perspiration, stiff neck-and-shoulder, a cold feeling of hand and foot, a pain of hand and foot, and nausea. It can provide with the form of a tablet, a granule, a capsule, the trochiscus, an internal use liquid agent, a drink, etc.

**Número de publicación:** JP2006204210A

**Fecha de solicitud:** 2005-01-28

**Título:** COMPOSITION CONTAINING BENZYL GLUCOSINOLATE, METHOD FOR IMPROVING TASTE AND DRINK CONTAINING BENZYL GLUCOSINOLATE | Benzyl glucosinolate -containing composition, The taste improvement method And a benzyl glucosinolate -containing beverage

**Solicitante:** TOWA CORPORATION KK

**Abstract:** PROBLEM TO BE SOLVED: To provide maca extracts containing much benzyl glucosinolate, capable of improving taste. SOLUTION: Benzyl glucosinolate contained in maca extracts has pungent taste, bitterness and astringency. A taste- improving composition containing at least one of sugar alcohols, edible acids, monosaccharides having  $\geq 0.1$  but  $\leq 0.7$  time sucrose sweetness and disaccharides having  $\geq 0.1$  but  $\leq 0.7$  time sucrose sweetness is added in the maca extracts. The unpleasant tastes of the maca extracts are effectively improved with the taste- improving composition. The maca extracts containing much benzyl glucosinolate, improved in maca extract taste and having excellent properties such as good aftertastes, comprehensive good tastes and appetite of iterative drinking can be



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

obtained with simple operations at a low cost without effecting on the effective components in the maca extracts.  
COPYRIGHT: (C)2006,JPO&NCIPI

SUBJECT of the Invention It aims at providing the Maca extract benzyl glucosinolate highly containing goods which can improve taste. PROBLEM to be solved The benzyl glucosinolate currently contained in the Maca extract has a hot taste, bitterness, and astringency. A Maca extract is made to contain the taste improvement composition with which a sugar alcohol, edible acids, and sweetness contain the monosaccharide of the 0.1-0.7 times of a sucrose, and sweetness contains more than at least any one for the disaccharide of the 0.1-0.7 times of a sucrose. The unpleasant taste which a Maca extract has with a taste improvement composition can be improved effectively. While being able to improve the taste of a Maca extract, without affecting the active ingredient in a Maca extract, inexpensively, aftertaste is good and can obtain synthetic tastiness and the Maca extract benzyl glucosinolate highly containing goods which have the outstanding characteristic of wanting to drink repeatedly at convenient operation. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2006206509A

**Fecha de solicitud:** 2005-01-28

**Título:** METHOD FOR PRODUCING MACA EXTRACT | The manufacturing method of a Maca extract

**Solicitante:** TOWA CORPORATION KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a method for producing a Maca extract, capable of efficiently extracting the Maca extract containing a benzyl glucosinolate from Maca (*Lepidium meyenii*). SOLUTION: This method for producing the Maca extract comprises extracting an extract liquid from the Maca by water or a water-containing alcohol. The extract liquid is passed through a high porous-type synthetic polymer adsorption resin. The Maca extract containing the benzyl glucosinolate is obtained from an adsorption fraction which is adsorbed on the high porous-type synthetic polymer adsorption resin. It is preferable that the Maca extract is obtained by passing the extract liquid through the high porous-type synthetic polymer adsorption resin, after removing insoluble matter from the extract liquid extracted from the Maca and then concentrating the liquid. A concentration of the benzyl glucosinolate is made to be higher, while the insoluble matter is removed from the Maca extract. COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention The manufacturing method of a Maca extract which can extract the Maca extract containing a benzyl glucosinolate from a Maca efficiently is provided. PROBLEM to be solved Water or a water-containing alcohol extracts an extract from a Maca. An extract is poured to high porous type|mold synthetic-macromolecule adsorption resin. The Maca extract containing a benzyl glucosinolate is obtained from the adsorption|suction fraction adsorbed|sucked to high porous type|mold synthetic- macromolecule adsorption resin. After removing the insoluble matter in the extract extracted from the Maca and concentrating, it pours to high porous type|mold synthetic-macromolecule adsorption resin, and a Maca extract is obtained. A benzyl glucosinolate density|concentration can be made higher, removing an insoluble matter from a Maca extract. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2006298886A

**Fecha de solicitud:** 2005-04-25

**Título:** AQUEOUS SOLUTION INCLUDING NITROGEN-CONTAINING COMPOUNDS | Aqueous solution containing a nitrogen compound

**Solicitante:** TOYO SHINYAKU KK



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** PROBLEM TO BE SOLVED: To provide an aqueous solution including in high content, the nitrogen-containing compounds contained in plants of Brassicaceae. SOLUTION: The aqueous solution including the nitrogen-containing compounds is obtained by immersing the plants of Brassicaceae in an aqueous solution and extracting under an acidic condition. Since the nitrogen-containing compound can efficiently be extracted from the plant body of Brassicaceae by the above method, the compound specific to the above plant such as alkaloids can be obtained in high content. The plant preferable to obtain such aqueous solution is genus Lepidium, Brassicaceae, more preferably maca. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention Provide the aqueous solution which carries out the high content of the nitrogen compound contained in a Brassicaceae plant. PROBLEM to be solved The aqueous solution containing the nitrogen compound contained in a Brassicaceae plant is provided. More specifically, a Brassicaceae plant is immersed to aqueous solution, It is obtained by extracting in acidic condition. Since a nitrogen compound can extract the aqueous solution containing this nitrogen compound from the plant body of a Brassicaceae plant efficiently in a solution (for example), it can carry out the high content of the nitrogen compound peculiar to Brassicaceae plants, such as alkaloid. In order to obtain such aqueous solution, the plant of a Brassicaceae Lepidium genus is preferable, more preferably, it is a Maca. SELECTED DRAWINGS Absence

**Número de publicación:** JP2006327976A

**Fecha de solicitud:** 2005-05-25

**Título:** COLLAGEN PRODUCTION PROMOTING COMPOSITION, COLLAGEN PRODUCTION PROMOTING FOOD, COLLAGEN PRODUCTION PROMOTING DERMAL EXTERNAL APPLICATION, COLLAGEN PRODUCTION PROMOTING AGENT AND COLLAGEN PRODUCTION PROMOTING COSMETIC | A collagen production enhancement-ef

**Solicitante:** TOWA CORPORATION KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a collagen production promoting composition having collagen production promoting action. SOLUTION: The composition contains at least Maca (*Lepidium meyenii*-Walp, Cruciferae) extract powder, has concentration-dependent collagen production promoting action by ingestion, is expectable of dermal elasticity decrease improving action such as improving action for wrinkles and slack of the skin and is usable as functional foods such as a supplement, dermal external applications, medicines and cosmetics. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention The collagen production enhancement-effect composition which has a collagen production enhancement effect is provided. PROBLEM to be solved Maca extract powder is contained at least. It has a concentration-dependent collagen production enhancement effect by ingestion. The resilience reduction improvement effect of skin, such as a wrinkle of skin and an improvement effect of a sag, is expectable. It can use as functional foods, such as a supplement, skin external use and a drug, and cosmetics. SELECTED DRAWINGS Absence

**Número de publicación:** JP2007031371A

**Fecha de solicitud:** 2005-07-28

**Título:** AMELIORANT FOR SLEEP DISTURBANCE | Sleep disorder improving agent

**Solicitante:** SUNTORY LTD | HIROSHIMA UNIV

**Abstract:** PROBLEM TO BE SOLVED: To obtain an ameliorant for sleep disturbance, which has excellent effect on symptoms such as sleep disorder or sleep induction disturbance, sleep regulation action (regulation of period of REM sleep and non- REM sleep and amelioration of arousal dysfunction) on promotion of natural sleep and security of deep



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

sleep and no adverse effect. SOLUTION: The ameliorant for sleep disorder having action on sleep promotion/sleep regulation comprises an extract of a plant of the genus *Lepidium* of the family Cruciferas. Concretely, the plant of the genus *Lepidium* of the family Cruciferas is *Lepidium meyenii* Walp.

The ameliorant for sleep disorder comprises an extract of *Lepidium meyenii* Walp as an active ingredient. The liquors or the food or beverage having action on sleep promotion/sleep regulation comprises any of the ameliorants for sleep disorder. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI

SUBJECT of the Invention To symptom, such as sleeplessness or a falling- asleep damage|failure, there is no side effect and provide the sleep disorder improving agent which has promotion of the natural falling asleep which was excellent in the effect, and the effect|action (Adjustment of the period of a REM sleep and non REM sleep, improvement of an awakening damage|failure) of the sleep adjustment which ensures still deeper sleep. PROBLEM to be solved The extract of the *Brassica campestris* (Cruciferas) family *Lepidium* (*Lepidium*) genus plant is contained, It is a sleep disorder improving agent which has a falling-asleep promotion \* sleep adjustment effect|action characterized by the above-mentioned, Specifically, they are a sleep disorder improving agent whose *Brassica campestris* (Cruciferas) family *Lepidium* (*Lepidium*) genus plant is Maca (*Lepidium meyenii* Walp), and liquor which has a falling-asleep promotion \* sleep adjustment effect|action containing the extract of a Maca further. SELECTED DRAWINGS FIG. I [MAT\_IMAGE 000002]

**Número de publicación:** JP2007097545A

**Fecha de solicitud:** 2005-10-07

**Título:** MACA EXTRACT-CONTAINING BEVERAGE OR FOOD BLENDED WITH ACETIC

ACID OR EDIBLE VINEGAR | Maca extract containing food and drink which mix|blended the acetic acid or the vinegar

**Solicitante:** SUNTORY LTD

**Abstract:** PROBLEM TO BE SOLVED: To provide an easily taking beverage or food containing a maca extract having various excellent activities by reducing a peculiar flavor of the maca extract. SOLUTION: This maca extract-containing beverage or food containing acetic acid or edible vinegar together with the maca extract, especially the maca-extract containing  $\geq 8\%$  weight ratio of the acetic acid to the maca extract (based on solid material) is provided by reducing the peculiar flavor of the maca extract and taking concretely the forms of an alcoholic beverage, a non-alcoholic beverage and a carbonate beverage. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention Food and drink containing the extract of the Maca which has the various outstanding effect|action WHEREIN: The characteristic flavor of a Maca extract is reduce|lightened, Provide the Maca extract containing food and drink which are easy to eat and drink. PROBLEM to be solved They are the Maca extract containing food and drink containing the foodstuffs which contain an acetic acid or acetic acid, such as a vinegar, with a Maca extract, They are the Maca extract containing food and drink with which the flavor peculiar to a Maca extract which contains especially an acetic acid by 8 % or more of weight ratio of a Maca extract (solid-substance conversion) was reduce|lightened, The Maca extract containing food and drink which specifically take the form of an alcoholic beverage or a non-alcoholic drink, and carbonated beverages are provided.

SELECTED DRAWINGS Absence

**Número de publicación:** JP2007112782A

**Fecha de solicitud:** 2005-12-21



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** ESTROGEN-INCREASING COMPOSITION, ESTROGEN-INCREASING FOOD, ESTROGEN-INCREASING MEDICAMENT, AND PROGESTERONE-INCREASING COMPOSITION | The increase composition in an oestrogen, the increase foodstuffs in an oestrogen, the increase drug in an oestrogen, and

**Solicitante:** TOWA CORPORATION KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition, a food and a medicament each having the effect of increasing estrogen. SOLUTION: Intake of Maca extract powder increases blood estradiol, progesterone and growth hormone levels, therefore having estrogen-increasing effects, suppressing lowering serum estradiol levels in the menopausal period of time, and having the effects of ameliorating menopausal disorders. Suppression of lowering serum estradiol levels is related to female hormone balance adjustment. The above facts are hopeful of the prophylactic and ameliorative effects of various disorders associated with female hormone including ameliorating menses irregularity and infertility and preventing aging. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention The composition, the foodstuffs, and the drug which have an increase effect|action in an oestrogen are provided. PROBLEM to be solved by ingestion of a Maca extract powder, the estradiol amount in the blood and a progesterone amount, and a growth- hormone amount increase. It has an increase effect|action in an oestrogen. A reduction of the estradiol amount in the blood serum of a climacterium can be suppressed. It has an effect|action which improves menopausal disorders. Suppression of a blood serum estradiol amount reduction is related to adjustment of female-hormone balance. The prevention-and-improvement effect|action of the various disorder|damage|failure relevant to female hormones, such as improvement of the paramenia and an infertility, menstruation recovery|restoration and ageing prevention, is expectable. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2007135485A

**Fecha de solicitud:** 2005-11-18

**Título:** GEL-LIKE HYDROPHILIC FOOD PRODUCT AND METHOD FOR PRODUCING THE SAME | Gel-form hydrophilic foodstuffs and its manufacturing method

**Solicitante:** TOWA KAGAKU KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a hydrophilic food product containing coenzyme Q10, maca (*Lepidium meyenii* walp) root and a water-soluble vitamin. SOLUTION: The gel-like hydrophilic food product characterized as follows is used. The gel-like hydrophilic food product comprises 0.04-5.00 wt.% of the maca root, 0.03-4.00 wt.% of the coenzyme Q10, 0.0001-11.0 wt.% of the water-soluble vitamin, 30-85 wt.% of water, 0.1-40.0 wt.% of a solvent miscible with water and 0.05-12.00 wt.% of a gelling agent based on the total weight of the food. The coenzyme Q10 is subjected to a hydrophilization treatment. A specific method is adopted for production of the food product. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention They are the foodstuffs containing a coenzyme Q10, a Maca root|origin, and a water soluble vitamin, Comprising: Provide a hydrophilic thing. PROBLEM to be solved They are gel-form hydrophilic foodstuffs, Comprising: A Maca root|origin by making the whole quantity of said foodstuffs into reference(standard) 0.04 to 5.00 weight%, 0.1 to 40.0 weight% and a gelatinizer are contained for the solvent which mixes with a water soluble vitamin 0.0001 to 11.0weight% 0.03 to 4.00weight%, and mixes with water to a coenzyme Q10 with water 30 to 85 weight% 0.05 to 12.00weight%, And the hydrophilization treatment of the coenzyme Q10 is carried out, The gel-form hydrophilic foodstuffs characterized by the above-mentioned are used. A specific method is employ|adopted about manufacture of said foodstuffs. SELECTED DRAWINGS Absence



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** JP2007222116A

**Fecha de solicitud:** 2006-02-27

**Título:** HEALTH FOOD AND DRINK | Health food/beverage products

**Solicitante:** FUJI OIL CO LTD

**Abstract:** PROBLEM TO BE SOLVED: To provide health food and drink having effects such as relief from fatigue, suppression of aging, antioxidation, metabolic promotion and blood circulation promotion, and having excellent flavor through masking uncomfortable taste and bitter taste peculiar to a material to be used. SOLUTION: The health food and drink containing peptide and *Lepidium meyenii* Walp extract is further mixed with ginger or ginger extract. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention The foodstuffs or the drink which has effect, such as recovery from fatigue, ageing suppression, an antioxidization, promotion of metabolism, and blood-circulation promotion, is provided, And And it aims at masking the unpleasant taste peculiar to a raw material to be used, and bitterness, and providing health food/beverage products with favorable flavor. PROBLEM to be solved They are the health food/beverage products containing a peptide and a Maca extract, Comprising: Furthermore, by mix|blending ginger or a ginger extract, a subject is solvable.

**Número de publicación:** JP2007230987A

**Fecha de solicitud:** 2006-03-02

**Título:** ANTI-OBESTIC AGENT | Antiobesity agent

**Solicitante:** KINOS KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a medicine, a food and drink or an animal feed having anti-obestic actions and/or blood neutral fat lowering actions. SOLUTION: The medicine, food and drink or animal feed comprises *Lepidium meyenii* Walp or a benzyl glucosinolate as an active ingredient and has the anti- obestic actions and/or blood neutral fat lowering actions. COPYRIGHT: (C)2007,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI SUBJECT of the Invention It is providing the pharmaceutical, the food/beverage products, or the feed for animals which has an antiobestic effect and/or a blood neutral-fat lowering action. PROBLEM to be solved The pharmaceutical, the food/beverage products, or the feed for animals which has the antiobestic effect and/or blood neutral-fat lowering action which use a Maca or a benzyl glucosinolate as an active ingredient is provided. SELECTED DRAWINGS F IG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2007290969A

**Fecha de solicitud:** 2006-04-21

**Título:** ANTI-STRESS COMPOSITION | Anti- stress composition

**Solicitante:** NIPPON MENAADE KESHOHIN KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition which enables daily prolonged administration and has a safe and sufficient anti-stress action. SOLUTION: The anti-stress composition comprises an enzyme-treated substance of royal jelly and an extract of *Lepidium meyenii*. This anti-stress composition inhibits the secretion of glucocorticoid due to stress. A food, a quasi drug, and a drug which contain an enzyme-treated substance of royal jelly and an extract of *Lepidium meyenii* have an inhibitory action on the secretion of glucocorticoid due to stress and are effective for the prevention and amelioration of various symptoms caused by stress. COPYRIGHT: (C)2008,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI

SUBJECT of the Invention It can use continuously daily and the composition which has safe and sufficient



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

anti- stress effect|action is provided. PROBLEM to be solved This invention contains the enzyme-treated material and Maca extract of royal jelly, It is related with the anti- stress composition characterized by the above-mentioned. The anti- stress composition of this invention suppressed the glucocorticoid secretion by a stress. The foodstuffs, quasi-drug, and pharmaceutical containing the enzyme-treated material and Maca extract of royal jelly have a glucocorticoid secretion inhibitory effect by a stress, It is effective in the prevention and improvement of many symptom which come from a stress. SELECTED DRAWINGS Absence

**Número de publicación:** JP2007314475A

**Fecha de solicitud:** 2006-05-26

**Título:** AGENT FOR SUPPRESSING TRIACYLGLYCEROL SYNTHESIS | Triacylglycerol synthetic|combination inhibitor

**Solicitante:** KAO CORP

**Abstract:** PROBLEM TO BE SOLVED: To provide an agent for suppressing triacylglycerol synthesis, having excellent safety and effective for the prevention or amelioration of hyperlipidemia, especially postprandial hyperlipidemia. SOLUTION: The agent for suppressing triacylglycerol synthesis contains one or more plants selected from the leaves of Diospyros kaki, Acer nikoense, Rubus suavissimus, Lepidium meyenii Walp and Foeniculum vulgare or its extract as an active component. COPYRIGHT: (C)2008,JPO&INPIT COPYRIGHT: (C)2006,JPO&NCIPI (Amendments Included) SUBJECT of the Invention It is excellent in safety|security and is provision of hyperlipidemia and a triacylglycerol synthetic|combination inhibitor especially effective in prevention or improvement of a post-prandial hyperlipidemia. PROBLEM to be solved The leaf (Diospyros kaki) of a persimmon, an Acer nikoense (Acer nikoense), The triacylglycerol synthetic|combination inhibitor which uses as an active ingredient the l or more type of plant body chosen from a sweet tea (Rubus suavissimus), Maca (Lepidium meyenii Walp), and the fennel (Foeniculum vulgare), or its extract. SELECTED DRAWINGS Absence

**Número de publicación:** JP2008237117A

**Fecha de solicitud:** 2007-03-27

**Título:** ANTI-FATIGUE FOOD RAW MATERIAL AND ANTI-FATIGUE FOOD | An anti-fatigue foodstuff material and anti-fatigue foodstuffs

**Solicitante:** KINOS KK

**Abstract:** PROBLEM TO BE SOLVED: To provide anti-fatigue food raw material effective in recovery from fatigue; and to provide anti-fatigue food containing the food raw material. SOLUTION: The anti-fatigue food raw material contains benzyl glucosinolate. A second version of the anti-fatigue food raw material comprises at least one kind of extract and/or concentrated extract selected from Lepidium meyenii-W alp, Cruciferae and Tropaeolum majus, and contains at least benzyl glucosinolate. A third version of the anti-fatigue food raw material comprises at least leaves, underground parts, seeds, sprouts or the like of one kind selected from Lepidium meyenii-Walp, Cruciferae and Tropaeolum majus, and contains at least benzyl glucosinolate. The anti-fatigue food contains the anti-fatigue food raw material. COPYRIGHT: (C)2009,JPO&INPIT SUBJECT of the Invention Let it be a subject to provide the anti-fatigue foodstuffs formed by containing an anti-fatigue foodstuff material effective in recovery from fatigue, and this foodstuff material. PROBLEM to be solved It consists of at least 1 type of extract selected from the anti-fatigue foodstuff material, Maca (Lepidium meyenii-Walp, Cruciferae), and tropaeolum (Tropaeolum majus) containing a benzyl glucosinolate, and/or a concentration extract. It consists of at least 1 type of leaf selected from the anti-fatigue foodstuff material, Maca, and



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

tropaeolum which contain a benzyl glucosinolate at least, an underground part, a seed, a bud, etc., and is set as the anti-fatigue foodstuffs formed by containing the anti-fatigue foodstuff material which contains a benzyl glucosinolate at least, or this anti-fatigue foodstuff material. SELECTED DRAWINGS A bsence

**Número de publicación:** JP2008297282A

**Fecha de solicitud:** 2007-06-01

**Título:** COMPOSITION HAVING ANTIOXIDANT ACTIVITY | The composition which has an antioxidant activity

**Solicitante:** KOBAYASHI PHARMACEUT CO LTD

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition having excellent antioxidant activity, a food and drink using the composition, and a method for producing the composition. S OLUTION: The composition contains a processed product of Cistanche Tubulosa and a processed product of Withania somnifera. The composition preferably further contains a processed product of Ginseng radix and/or a processed product of Lepidiummeyeni Walp. The food and drink prepared by using the composition. A method for producing the composition, and a method for enhancing antioxidation power of the Cistanche Tubulosa are also provided. C OPYRIGHT: (C)2009,JPO&INPIT SUBJECT of the Invention This invention primarily aims to provide the food/beverage products using the composition which has the outstanding antioxidant activity, and this composition, and the manufacturing method of this composition. PROBLEM to be solved The food/beverage products obtained by using the composition containing the composition containing the Cistanche tubulosa processed material and a Ashwagandha processed material and also a ginseng processed material, and/or a Maca processed material and this composition, the manufacturing method of this composition, and the antioxidation ability increase|augmentation method of Cistanche tubulosa are provided. SELECTED DRAWINGS Absence

**Número de publicación:** JP2009000039A

**Fecha de solicitud:** 2007-06-20

**Título:** METHOD FOR PRODUCING DRIED MACA | The manufacturing method of a dry Maca

**Solicitante:** KINOS KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a method for producing dried Maca enabling stable production of dried Maca containing sufficiently much of benzylglucosinolate. SOLUTION: The method for producing dried Maca includes a forcedly drying process of drying a bulb of Maca at 60-100°C until the water content thereof becomes  $\leq 10$  mass%, and keeping the water content of the bulb  $\geq 50$  mass% until starting the forcedly drying process after harvesting the Maca. COPYRIGHT: (C)2009,JPO&INPIT SUBJECT of the Invention Provide the manufacturing method of a dry Maca which can obtain steadily the dry Maca containing enough many benzyl glucosinolates. PROBLEM to be solved The manufacturing method of a dry Maca with which the water content of a bulb is hold|maintained at 50 mass % or more until it starts a forced-drying process after the harvesting of a Maca including the forced-drying process which dries the bulb of a Maca at 60-100 degreeC until the water content results in 10 mass % or less. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** JP2009067763A

**Fecha de solicitud:** 2007-09-18

**Título:** AGENT FOR PREVENTING OR AMELIORATING HANGOVER | Hangover prevention-or-improvement agent

**Solicitante:** TSUJIDO KAGAKU KK





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** PROBLEM TO BE SOLVED: To provide an agent for preventing or ameliorating hangover, preventing hangover after drinking an alcohol and having rapid effect on unpleasant symptom of hangover in order to solve problems in which effect for preventing or amelioration hangover is not sufficient yet, though hangover- preventing or ameliorating agent improving unpleasant symptoms such as hangover after taking an alcohol is required hitherto and a liquid agent (suspension) in which various ingredients having pharmacodynamic effects are formulated with an antacid is suggested as such a liquid preparation for oral administration. SOLUTION: The agent for preventing or ameliorating hangover comprises an extract of *Lepidium meyenii* Walp. COPYRIGHT: (C)2009,JPO&INPIT SUBJECT of the Invention The hangover prevention-or-improvement agent which can improve many unpleasant symptom, such as a hangover after an alcohol ingestion, conventionally is calculated|required, As this kind of an internal use liquid, the liquid agent (suspension liquid) which mix|blended various active drug substance with the gastric antacid is proposed, However, The effect was not yet enough. This invention makes it a subject to provide the hangover prevention-or-improvement agent which has immediate effectiveness with respect to the unpleasant symptom of a hangover while preventing the hangover after an alcohol ingestion. PROBLEM to be solved The extract of a Maca (*Lepidium meyenii* Walp) is contained, The hangover prevention-or-improvement agent characterized by the above-mentioned. SELECTED DRAWINGS Absence

**Número de publicación:** JP2009072127A

**Fecha de solicitud:** 2007-09-21

**Título:** FOOD COMPOSITION | Foodstuffs composition

**Solicitante:** TSUJIDO KAGAKU KK

**Abstract:** PROBLEM TO BE SOLVED: To provide a composition having improved systemic absorptivity of coenzyme Q10, by solving the problems wherein the absorptivity in the oral administration is low, even though the coenzyme Q10 has antioxidant activities, energy production promoting activities, activities for enhancing cardiopulmonary function, immunostimulation activities, aging-preventing activities or the like. SOLUTION: The internal absorptivity of the coenzyme Q10 is markedly improved, by further adding an extract of *Lepidium meyenii* Walp to a composition containing both of the coenzyme Q10 and sesamins. COPYRIGHT: (C)2009,JPO&INPIT SUBJECT of the Invention Although coenzyme Q10 had an antioxidant activity, an energy production enhancement effect, the effect|action that improves cardiopulmonary function, an immunostimulatory action, an ageing prevention effect|action, etc., that the absorptivity in oral administration is low had a trouble. This invention makes it a subject to provide the composition which improves the in-vivo absorption of coenzyme Q10. PROBLEM to be solved I t discovers that the in-vivo absorption of coenzyme Q10 is improved remarkably by adding the extract of a Maca (*Lepidium meyenii* Walp) to the composition which used coenzyme Q10 and sesamin together further, The said subject was solved. SELECTED DRAWINGS Absence

**Número de publicación:** JP2010235533A

**Fecha de solicitud:** 2009-03-31

**Título:** AGENT FOR PREVENTING OR TREATING OSTEOPOROSIS | The agent for osteoporosis prevention or treatments

**Solicitante:** FANCL CORP | KINKI UNIV

**Abstract:** PROBLEM TO BE SOLVED: To provide an excellently safe agent for preventing o treating osteoporosis. SOLUTION: The agent for preventing or treating the osteoporosis includes an extract obtained from leaves of *Lepidium meyenii* as an active ingredient. COPYRIGHT: (C)2011,JPO&INPIT SUBJECT of the Invention Provision of the bone



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

porosity agent which is excellent in safety|security PROBLEM to be solved The agent for osteoporosis prevention or treatments which uses as an active ingredient the extract obtained from the leaf of a Maca. SELECTED DRAWINGS FIG. 1 [MAT\_IMAGE 000002]

**Número de publicación:** KR1074649B1

**Fecha de solicitud:** 2011-07-22

**Título:** COSMETIC COMPOSITION CONTAINING SARCODON ASPRATUS AND LEPIDIUM MEYENII WALPERS EXTRACT FOR WHITENING AND ANTIOXIDATION | The cosmetic composition for whitening and oxygen-resistant including the Sarcodon aspratus and marker extracts

**Solicitante:** DERMALAB

**Abstract:** PURPOSE: A cosmetic composition for whitening and antioxidant, containing Sarcodon aspratus and Lepidium meyenii Walpers extract is provided to ensure whitening effects and antioxidant. CONSTITUTION: A cosmetic composition for whitening and antioxidant contains 0.001-5% of Sarcodon aspratus and Lepidium meyenii Walpers extract. The extract is isolated using water or anhydrous or hydrous alcohol of 1-4 carbon atoms. A cosmetic composition is manufactured in the form of skin softener, nutrition lotion, nutrition cream, massage cream, nutrition serum, essence, or pack. COPYRIGHT KIPO 2012

The present invention relates to the cosmetic composition for whitening including the Sarcodon aspratus and the marker extracts and oxygen-resistant. And the excellent whitening effect and antioxidant effect have as to the cosmetic composition of the present invention. Therefore the use is possible as the naturation field.

**Número de publicación:** KR1143516B1

**Fecha de solicitud:** 2009-04-29

**Título:** INCLUDING THE MARKER EXTRACTS THE DRINK IN WHICH THE ANTI- OXIDANT ACTIVITY AND MEMORY ENHANCEMENT EFFECT HAVE AND A METHOD OF MANUFACTURE THEREOF | The drink in which the drink have the anti-oxidant activity and memory enhancement effect while including t

**Solicitante:** DAEJIN UNIVERSITY CENTER FOR EDUCATIONAL INDUSTRIAL COOPERATION | CHUNG HAI JUNG | KANG YONG SOO

**Abstract:** The invention relates to the drink in which it has the anti-oxidant activity and memory enhancement effect while including the marker extract and a manufacturing method thereof, and more specifically, to the manufacturing method of the drink in which the drink has the anti-oxidant activity and memory enhancement effect while including the step that adds the marker extract in the purified water as to the anti-oxidant activity, including the marker extract the drink in which the mixed step has the memory enhancement effect and manufacture of the drink and as to the drink and including the marker extract. While including the marker extract of the present invention when the human for preventing the adult disease disregarding people of all ages and both sexes and is attacked takes the drink in which the drink has the anti-oxidant activity and memory enhancement effect can contribute the anti-oxidant activity. And when the significant person, in other words, the teenager and age are older and old peoples in which the memory power is a bit reduced take moreover, the memory power helps to the memory enhancement and it can contribute to the dementia prevention protecting. Keywords The marker, extract, anti-oxidant activity, memory power.

**Número de publicación:** KR1247375B1

**Fecha de solicitud:** 2012-07-18



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** MANUFACTURING METHOD OF HEALTH FOOD USING EUTERPE OLERACEA AND PROPOLIS | A method of manufacturing health food using the Asai very and propolis.

**Solicitante:** PARK SANG HEON

**Abstract:** **PURPOSE:** A manufacturing method of health food is provided to use a medicinal effect of Euterpe oleracea, Paullinia cupana, and Lepidium meyenii. **CONSTITUTION:** A manufacturing method of health food using Euterpe oleracea and Propolis comprises: a step of obtaining Euterpe oleracea concentrate by pulverizing after mixing 1kg of freeze-dried Euterpe oleracea powder with 1.5L of water; a step of obtaining an initial mixed extract by adding 0.26-0.27g of Paullinia cupana powder, of 0.8-0.82kg Lepidium meyenii powder, 5-6kg of oligosaccharide, 150L of water and the Euterpe oleracea concentrate to a first mixer, and heating the mixture at 80-100 deg. C for 50-60 minutes; a step of obtaining a final mixed extract by adding 1.1-1.2kg of Japanese apricot juice, 25-27kg of grape concentrate, 0.078-0.38kg of Propolis, and the initial mix extract into a second mixer; and a packing step which filters after pulverizing the final mixed extract. **COPYRIGHT KIPO 2013** The present invention is to provide the step of obtaining the Asai very concentrate it pulverizes in the water 1.5l after doing the mixing: the step of obtaining the initial mix extract it puts and it heats with the temperature of 80~100°C with 50~60 discrimination: the step of obtaining the final mixed extract it puts and it mixes: the Asai very comprised of the step that it packs after it filters after it pulverizes the final mixed extract and method of manufacturing the health food using the propolis, and the invention provides the health food having the Asai very, the guarana, the marker, the propolis as a chief ingredient. It is very useful invention expecting the health improvement of the consumer by the medicinal effect due to the abundant intake of the nutrient component by all kinds of the components and this.

**Número de publicación:** KR1270956B1

**Fecha de solicitud:** 2010-04-27

**Título:** Manufacturing method of beverage comprising Lepidium meyenii extract | The manufacturing method of the drink including the marker extract

**Solicitante:** Daejin University Center for Educational Industrial Cooperation, KR | CHUNG Hai Jung, KR | KANG YONG SOO, KR

**Abstract:** The invention relates to the manufacturing method of the drink comprising the marker extract. The manufacturing method of the drink including the marker extract of the invention exhibits the manufacturing method of the drink including the marker extract which comprises a at least one vitamin 0.01~1 weight % selected from the vitamin A, the vitamin B 1, the vitamin B, the pyridoxine, the cyanocobalamin, the vitamin B 13, the vitamin C, biotin, the pteroylglutamic acid, choline, inositol, the vitamin L, the rutin as to the beverage manufacture, and a at least one sweetener 5~20 weight % selected from the marker extract 0.1~5 weight %, the concentrated liquid of plum, the schizandra concentration, the Citrus junos concentrate or the jujube concentrate 5~20 weight %, and the xylitol 1~5 weight % the dietary fiber 0.1~3 weight %, the taurine 0.5~1 weight %, fructose, glucose, dextrin, the rice candy group, the sugar syrup class, sugar, lactose, the oligosaccharides, the honey, the propolis, the trehalose, the aspartame, the sucralose, the sorbitol, the mannitol, the bay flaw toll (mantitol), the rhamnitol, the inositol, the erythritol, the paratinos, the quercitol and step of being stirred after doing the mixing the purified water of the remainder. The other manufacturing method of the drink including the marker extract of the invention exhibits the manufacturing method of the drink including the marker extract obtaining yogurt containing the marker extract the starter 0.1~1 parts by weight is inoculated with and the step fermented at 35~39°C for 12~24 hours is included of the complex powder of lactic acid



## Boletín de la Comisión Nacional contra la Biopiratería

 CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

bacteria consisting of the lactobacillus ash drawing fillers (*Lactobacillus acidophilus*), and the lactobacillus bulgaricus and the *Streptococcus thermophilus* in the homogenate described in the above; the step of cooling to the room temperature after the nonfat milk (skim milk) 1~30 parts by weight, and the marker extract 1~12 parts by weight are added about the whole milk 100 parts by weight and it homogenizes as to the beverage manufacture it sterilizes. Another manufacturing method of the drink including the marker extract of the invention exhibits the manufacturing method of the drink including the marker extract which comprises the step that a at least one sweetener 5~20 parts by weight selected from the fructose, glucose, dextrin, the rice candy group, the sugar syrup class, sugar, lactose, the oligosaccharides, the honey, the propolis, the trehalose, the aspartame, the sucralose, the sorbitol, the mannitol, the bay flaw toll, the rhamnitol, inositol, the erythritol, the paratinos, the quercitol; the taurine 0.5~1 parts by weight; the dietary fiber 0.1~3 parts by weight; the xylitol 1~5 parts by weight; a at least one vitamin 0.01~1 parts by weight selected from the vitamin A, the vitamin B 1, the vitamin B, the pyridoxine, the cyanocobalamin, the vitamin B 13, the vitamin C, biotin, the pteroylglutamic acid, choline, inositol, the vitamin L, the rutin; the fermentation liquid 0.1~10 parts by weight described in the above is stirred about the mixture 100 parts by weight described in the above; the step of obtaining the mixture it mixes about the purified water 100 parts by weight; the step of obtaining the fermentation liquid it adds and it ferments for 24 hours ~7 after doing the mixing.

**Número de publicación:** KR2007073663A

**Fecha de solicitud:** 2007-04-26

**Título:** METHOD FOR PREPARING MACA EXTRACT WITH SIGNIFICANTLY INCREASED ALKAMIDE CONTENT THROUGH EXTRACTION STEP AND SACCHARIDE REMOVAL STEP, AND MACA EXTRACT PREPARED BY THE SAME COMPOSITION

**Solicitante:** AZI. CO. LTD. | NATURE CO. LTD.

**Abstract:** PURPOSE: A method for preparing a Maca extract is provided to remove saccharide to significantly increase the content of alkamide, thereby providing an extract with anti-cancer effect, analgesic effect, and sexual capacity reinforcing effect. CONSTITUTION: The method comprises the steps of: (a) after obtaining an extract of Maca by adding 5-10 times of fermented alcohol having an ethanol concentration of 65-75 vol./vol% regarding the weight of Maca powder into the Maca powder and extracting it at a temperature of 60-70 deg.C for 1-6 hours, vacuum-concentrating and drying it to obtain extract powder; and (b) after adding 5-10 times of fermented alcohol having an ethanol concentration of 95 vol./vol% regarding the weight of the extract powder, extracting it at a temperature of 30-60 deg.C for 1-6 hours and adding a moisture absorbent thereto to remove water therefrom to obtain the ethanol concentration in a solvent to be more than 99 vol./vol%, filtering precipitated saccharide to remove it and vacuum-concentrating and drying an obtained extract to obtain a saccharide removed Maca extract powder. The Maca extract obtained by the method comprises more than 0.9 wt.% of alkamide. © KIPO 2007

**Número de publicación:** KR2009009122A

**Fecha de solicitud:** 2008-07-17

**Título:** Fermented maca composition and method for manufacturing the same | The fermentation marker composition and manufacturing method thereof.

**Solicitante:** Industry-Academic Cooperation Foundation Yonsei University, KR | Easter B&F Co. Ltd., KR

**Abstract:** PURPOSE: A fermented marker composition is provided to improve the content and in vivo absorption rate of physiologically active ingredient of marker, and characteristic smell and taste, thereby facilitating the drinking and



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

increasing the absorption efficiency to the human body. CONSTITUTION: The fermented marker composition comprises a marker fermented by *Saccharomyces* sp. such as *Saccharomyces cerevisiae* STV89, and is manufactured by preparing the marker composition including marker, saccharifying the marker composition, inoculating *Saccharomyces cerevisiae* STV89 into the marker composition, and fermenting the marker composition. © KIPO 2009 The invention relates to the fermentation marker composition and manufacturing method thereof, more specifically, to the fermentation marker composition and the manufacturing method thereof including the marker fermenting with microorganism to the main component, and enhances content and absorption rate of the bioactive substance. As to the fermentation marker composition of the present invention, the physiologically active agent content and absorption rate of marker are high within composition. And smell and the unique taste of marker are improved and drink is facilitated. Accordingly, composition is easily absorbed in the human body. The effect of marker can be nearly exhibited with 100%. And accordingly it can be easily applied to the functional food, drug and cosmetic etc. Keywords The fermentation, and marker.

**Número de publicación:** KR2009092195A

**Fecha de solicitud:** 2008-03-17

**Título:** HAIR TONIC COMPOSITION CONTAINING MIXTURE EXTRACTS OF MACA, MISTLETOE, AND POLYGONUM MULTIFLORUM WHICH PROMOTES HAIR GROWTH WITHOUT SCALP IRRITATION | The hair tonic composition containing the *Polygoni multiflori* Radix, marker, and the passing the winter

**Solicitante:** BEAUTY HQ CO. LTD.

**Abstract:** PURPOSE: A hair tonic composition containing mixture extracts of maca, mistletoe, and *Polygonum multiflorum* is provided to maintain scalp health without irritation on scalp and prevent white hair.

CONSTITUTION: A hair tonic composition comprises mixture extract containing a mace, mistletoe, and *Polygonum multiflorum*. The mixture extract is isolated using solvent at 0~100°C for 1 to 30 days. The solvent is distilled water, ethanol, methanol, butanol, acetone ethyl acetate, hexane, propanol, hydrous butylenes glycol or hydrous propylene glycol. The hair tonic composition is used in the form of hair shampoo, hair rinse, hair treatment or hair ample. © KIPO 2009 The invention relates to the hair tonic composition containing the *Polygoni multiflori* Radix, marker, and the passing the winter mixing extract. And the invention is the marker (maca), and the mixing of the *Polygoni multiflori* Radix (*Polygonum multiflorum*) and passing the winter (mistletoe) It is about the hair tonic composition including the extracts to the active ingredient. According to the invention, the environment-friendly material is used.

Scalp is healthily maintained while not giving the unreasonableness to scalp. The trichosis promotion effect is excellent and it again makes the incidentally whitened head black. The head has the advantage of preventing depilation and white hair. Keywords The *polygoni multiflori* Radix, marker, hair tonic, scalp.

**Número de publicación:** KR2010060780A

**Fecha de solicitud:** 2008-11-28

**Título:** COSMETIC COMPOSITION CONTAINING OCTACOSANOL AND LEPIDIUM MEYENII EXTRACT FOR ENHANCING SKIN REBIRTH | The cosmetic composition containing octacosanol and the marker extracts as active ingredient

**Solicitante:** AMOREPACIFIC CORPORATION

**Abstract:** PURPOSE: A cosmetic composition which enhances skin rebirth is provided to enhance cell activation and to improve anti-wrinkle and elasticity. CONSTITUTION: A skin cosmetic composition contains 0.1-10 weight % of



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

octacosanol and 0.1-30 weight% of *Lepidium meyenii* extract as an active ingredient. The octacosanol and *Lepidium meyenii* extract is mixed in a weight ratio of 1-9:9-1. The *Lepidium meyenii* extract is isolated using ethanol. The cosmetic composition is used in the form of skin, lotion, massage cream, nutrition cream, pack, gel, or ointment, patch, or spray. COPYRIGHT KIPO 2010 The invention relates to the cosmetic composition increasing the vitality of skin. And the cosmetic agent composition containing more specifically, Octacosanol and marker extracts as an active ingredient increase the activity of cell through the ATP increasing production of cell. And it mixes rather than furthermore independently using and the skin color of the face, the skin wrinkle and improvement effect of the elasticity are excellent and usage is possible through various formulations of cosmetics in use. Keywords Octacosanol, the marker extracts, and the adenosine triphosphate.

**Número de publicación:** KR2010118816A

**Fecha de solicitud:** 2009-04-29

**Título:** INCLUDING THE MARKER EXTRACTS THE DRINK IN WHICH THE ANTI- OXIDANT ACTIVITY AND MEMORY ENHANCEMENT EFFECT HAVE AND A METHOD OF MANUFACTURE THEREOF | The drink in which the drink have the anti-oxidant activity and memory enhancement effect while including t

**Solicitante:** KANG YONG SOO | DAEJIN UNIVERSITY CENTER FOR EDUCATIONAL INDUSTRIAL COOPERATION | CHUNG HAI JUNG

**Abstract:** PURPOSE: The anti-oxidant activity and memory enhancement effect have. Provided is the manufacturing method and the drink manufactured with method of drink. CONSTITUTION: The manufacturing method of the drink in which the anti-oxidant activity and memory enhancement effect have. The step that adds the marker extracts in the purified water and mixed is included. Marker extracts. Marker is added in the solvent of the marker comparison to weight 10~20 times amount. COPYRIGHT KIPO 2011 The invention relates to the manufacturing method of the drink in which the drink has the anti-oxidant activity and memory enhancement effect while including the drink, and the step that adds the marker extracts in the purified water as to the manufacture of drink and that the manufacture mixes and the marker extracts comprising the drink in which it has the anti-oxidant activity and memory enhancement effect while including the marker extracts and a manufacturing method thereof, more specifically, the marker extracts as to drink, and as to the drink, it has the anti-oxidant activity and memory enhancement effect. While including the marker extracts of the present invention when the man for preventing the adult disease disregarding people of all ages and both sexes and is attacked takes the drink in which the drink has the anti-oxidant activity and memory enhancement effect can contribute the anti-oxidant activity. And when the significant person, in other words, teenager and age are older and old peoples in which the memory power is a bit reduced take moreover, the memory power helps to the memory enhancement and it can contribute to the dementia prevention protecting. Keywords The marker, extracts, anti-oxidant activity, memory power.

**Número de publicación:** KR2010129571A

**Fecha de solicitud:** 2009-06-01

**Título:** COMPOSITION FOR IMPROVING SEXUAL FUNCTION WITH AN EFFECT OF INCREASING THE NUMBER OF SPERM AND PREVENTING FROM ENDOCRINAL DISRUPTOR | The food for the sexual function improvement containing composition for improvement of sexual function and this having th

**Solicitante:** BEN'S LAB. CO. LTD. | JUNG JONG MOON



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** PURPOSE: A composition for improving sexual function and a food containing the same are provided to improve sexual functional by vasodilation and hormone balance. CONSTITUTION: A composition for improving sexual function contains 30-70 weight% of *Lepidium meyenii*, 40-60 weight % of red ginseng, and 20-40 weight% of *Tribulus alatus* extract as an active ingredient. The composition is fermented by adding *Lactobacillus* (*Leuconostoc* sp., *Lactobacillus* sp., *Lactococcus* sp., *Bifidobacterium* sp., and *Streptococcus* sp.) only or together with a starter. A food for improving sexual function contains the extract as an active ingredient. The food includes gum, tea, vitamin complex, health supplement, and honey. COPYRIGHT KIPO 2011 It relates to the food for the sexual function improvement containing the composition for improvement of sexual function and this having the invention is the improvement of sex function and the male reproductivity depression preventive effect by the number of sperm increase and environment hormone. The composition for improvement of sexual function according to the present invention mixes the marker extracts, the extract of red ginseng, and the *Tribulus* extracts. It ferments and it maximizes the active ingredient. The marker extracts obtains among the extracts from the hot water extraction. Using this, while it shows the vasodilation, and the testis tissue injury by the improvement of sex function due to the hormone balance and number of sperm increase and environment hormone and number of sperm reduction preventive effect it is harmless in the human body and the functionality improvement composition of the present invention can be usefully used. Keywords The sexual function, number of sperm, environment hormone, composition for improvement of sexual function, the health food.

**Número de publicación:** KR2011016422A

**Fecha de solicitud:** 2010-08-11

**Título:** HEALTH SUPPLEMENTARY FOOD INCLUDING CHIA SEEDS AND MACA, A FEED USING THEREOF, AND A PRODUCING METHOD OF A PHARMACEUTICAL COMPOSITION CONTAINING THEREOF | The health supplementary food, fodder, and the pharmaceutical composition including the tooth seed a

**Solicitante:** KIM YOUN JIN

**Abstract:** PURPOSE: Health supplementary food, a feed using thereof, and a producing method of a pharmaceutical composition containing thereof are provided to use chia seeds and maca as main components. CONSTITUTION: Health supplementary food contains 100parts of chia seeds by weight and 5~250parts of maca by weight. The chia seeds and the maca are added in an extract form obtained by extracting the chia seeds and the maca with a solvent selected from water, ethanol, and their mixture. The health supplementary food additionally contains germanium, selenium, dietary zinc, and their compound. COPYRIGHT KIPO 2011 The present invention relates to the health supplementary food, the food addition, fodder, the feed admixture, the pharmaceutical composition including the tooth seed (chia seed) and marker (maca) and manufacturing method thereof and have the effect that it has the tooth seed, derived from the plant the marker, and its powder or the extracts as the main component the health supplementary food etc of the present invention is soft. Germanium, and selenium or the diet zinc can be added if it is necessary to have. And it biochemicals with biology it is excellent for the bowel function such as the weight loss, the fatigue recovery, the endurance promotion, the blood circulation improvement, the cholesterol reduction, the inflammation diminution, the immunity enlargement, the sex hormone enlargement, the skin care, the hangover cure, the nicotine elimination, the removal of oral smell, the body odor removal, the tonicity and infertility improvement, and the prevention of the sexual function or the dyshepatia and improvement in side.

**Número de publicación:** KR2011090415A

**Fecha de solicitud:** 2010-02-03



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** PRODUCING METHOD OF A HIGHLY CONCENTRATED MACA EXTRACT AND A COMPOSITION THEREOF | Manufacturing method of high enrichment marker extracts and composition.

**Solicitante:** AZI. CO. LTD.

**Abstract:** PURPOSE: A producing method of a highly concentrated maca extract and a composition thereof are provided to use food ingredients as a solvent. CONSTITUTION: A producing method of a highly concentrated maca extract comprises the following steps: adding fermentation alcohol with the ethanol concentration of 90~95.5%(v/v) into maca powder for extracting; concentrating the obtained extract to make the concentration of solid portion into 35~45%(w/v); adding water into the extract to make the concentration of the solid portion into 10%(w/v); and settling the extract for more than 24hours at 5~10deg C to obtain an oil layer. C OPRYRIGHT KIPO 2011 The invention relates to manufacturing method of the marker extracts and the composition, providing manufacturing method of the high enrichment marker extracts which is the vacuum concentration and in which for the concentration of the solid content, 35 (w/v) is the filtrate which adds the ferment alcohol of the ethanol concentration 90 (v/v) to the marker powder and which it extracts from 10~50°C for 1~5 hours and which is obtained and one next, and this are concentrated here so that it adds water and for the concentration of the solid content, 10 (w/v) is and in which for the concentration of the solid content, 35 (w/v) is and 5~10°C leaves this over 24 hours and forming the fat layer in the upper body and in which the content of the Macamide collecting this and is obtained with the method for being dry is 0.5 (w/w) or greater and the composition.

**Número de publicación:** KR2011119419A

**Fecha de solicitud:** 2010-04-27

**Título:** PRODUCING METHOD OF A BEVERAGE INCLUDING A MACA (LEPIDIUM MEYENII) EXTRACT | The manufacturing method of the drink including the marker extract

**Solicitante:** KANG YONG SOO | DAEJIN UNIVERSITY CENTER FOR EDUCATIONAL INDUSTRIAL COOPERATION | CHUNG HAI JUNG

**Abstract:** PURPOSE: A producing method of a beverage including a maca (lepidium meyenii) extract is provided to offer the anti-oxidant activity and memory enhancement effects of the beverage to eaters. CONSTITUTION: A producing method of a beverage including a maca(lepidium meyenii) extract comprises a step of: mixing 0.01-1wt % of vitamins, 0.1-5wt% of maca(lepidium meyenii) extract, 5-20wt% of extract selected from a Japanese apricot extract, a schisandra chinensis extract, a citron extract, or a jujube extract, 1-5wt% of xylitol, 0.1-3wt % of edible fiber, 0.5-1wt % of taurine, 5-20wt% of sweetener, and the balance of purified water. The vitamins are selected from vitamin A, thiamin, vitamin B2, pyridoxine, cyanocobalamin, vitamin B13, vitamin C, biotin, folic acid, choline, inositol, vitamin L, or vitamin P. COPYRIGHT KIPO 2012 The invention relates to the manufacturing method of the drink comprising the marker extract. The manufacturing method of the drink including the marker extract of the present invention exhibits the manufacturing method of the drink including the marker extract comprising the step of agitating after doing the mixing the purified water of the remainder and a at least one sweetener 5~20 weight % selected from a at least one vitamin 0.01~1 weight %: marker extract 0.1~5 weight %: concentrated liquid of plum, selected from as to the beverage manufacture the vitamin A, the thiamin, the vitamin B, the pyridoxine, the cyanocobalamin, the vitamin B 13, the vitamin C, biotin, the pteroylglutamic acid, choline, inositol, the vitamin L, the rutin the schizandra concentration, and the Citrus junos concentrate or the jujube concentrate 5~20 weight %: xylitol 1~5 weight %: dietary fiber 0.1~3 weight %: taurine 0.5~1 weight %: fructose, glucose, dextrin, the rice candy group, the sugar syrup class, sugar, lactose, the





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

oligosaccharides, the honey, the propolis, the trehalose, the aspartame, the sucralose, the sorbitol, the mannitol, the bay flaw toll (mantitol), the rhamnitol, the inositol, the erythritol, the paratinos, the quercitol. The other manufacturing method of the drink including the marker extract of the present invention exhibits the manufacturing method of the drink including the marker extract obtaining the yogurt inoculating with the starter 0.1~1 parts by weight of the complex powder of lactic acid bacteria consisting of the lactobacillus drawing fillers (*Lactobacillus acidophilus*), and the lactobacillus bulgaricus and the *Streptococcus thermophilus* in the step of cooling to the room temperature after the nonfat milk (skim milk) 1~30 parts by weight, and the marker extract 1~12 parts by weight are added about the whole milk 100 parts by weight and the marker extract 1~12 parts by weight homogenize as to the beverage manufacture the marker extract 1~12 parts by weight sterilize, and the homogenate described in the above and includes the step that ferments at 35~39°C for 12~24 hours and contains the marker extract. The drink, including the marker extract of the present invention and, the other manufacturing method exhibits the manufacturing method of the drink including the marker extract comprising the marker extract 1~5 weight %, the concentrated liquid of plum, and the step of obtaining the mixture it mixes the purified water of the schizandra concentration or the jujube concentrate 5~20 weight % and remainder, the step of obtaining the fermentation liquid it adds and during being 24 hours ~7 it ferments the starter 1~5 parts by weight about the mixture 100 parts by weight described in the above, the fermentation liquid 0.1~10 parts by weight described in the above about the purified water 100 parts by weight, and the step of agitating after doing the mixing a at least one sweetener 5~20 parts by weight selected from a at least one vitamin 0.01~1 parts by weight: xylitol 1~5 parts by weight: dietary fiber 0.1~3 parts by weight: taurine 0.5~1 parts by weight: fructose, glucose, dextrin, the rice candy group, the sugar syrup class, sugar, lactose, the oligosaccharides, the honey, the propolis, the trehalose, the aspartame, the sucralose, the sorbitol, the mannitol, the bay flaw toll, the rhamnitol, inositol, the erythritol, the paratinos, the quercitol selected from the vitamin A, the thiamin, the vitamin B, the pyridoxine, the cyanocobalamin, the vitamin B 13, the vitamin C, biotin, the pteroylglutamic acid, choline, inositol, the vitamin L, the rutin as to the beverage manufacture.

**Número de publicación:** KR2012097914A

**Fecha de solicitud:** 2011-02-26

**Título:** MICROORGANISM FERMENTATION COMPOSITION FOR HEALTHINESS USING *LEPIDIUM MEYENII* WALPERA AND A METHOD FOR PREPARING THE SAME | The microorganism fermentor production for the tonicity using the marker and manufacturing method thereof

**Solicitante:** SIM BO SUNG

**Abstract:** PURPOSE: A microorganism fermentation composition for healthiness using *Lepidium meyenii walpera* is provided to enhance basic energy and to strengthen endurance. CONSTITUTION: A method for preparing a fermentation composition for healthiness comprises: a step of putting nuruk, apple peel, grape seeds, grape skin, and water in a jar and sealing; a step of fermenting at 25-30 Deg. C for 15-20 days to prepare microorganism fermentation culture liquid; a step of adding *Acanthopanax Cortex*, *Cistanchis Herba*, jujube, *Schizandrae Fructus*, *Eucommia ulmoides*, *Astragali Radix*, *Angelicae gigantis Radix*, *Polygonati Rhizoma*, *Psoraleae Semen*, *Lespedeza cuneata*, *Polygoni multiflori Radix*, marker, *epimedii Herba*, AND water to the culture condition and sealing in the jar; a step of fermenting the mixture at 25-30 Deg. C. for 15-20 days to prepare a second fermentation composition; a step of pulverizing *Acanthopanax Cortex*, *Cistanchis Herba*, jujube, *Schizandrae Fructus*, *Eucommia ulmoides*, *Astragali Radix*, *Angelicae gigantis Radix*, *Polygonati Rhizoma*, *Psoraleae Semen*, *Lespedeza cuneata*, *Polygoni multiflori Radix*, and



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

Epimedii Herba and sealing; a step of fermenting at 25-30 Deg. C. for 24 hours to prepare a third fermentation composition. COPYRIGHT KIPO 2013 As the invention relating to the invention "the microorganism fermentor production for the tonicity using marker and manufacturing method thereof". And more specifically, it is about the microorganism fermentor production for the tonicity used and manufacturing method thereof the herbal medicine with excellent tonic effect the marker having the tonic effect increasing the basis vitality of the elder and old and feeble person or intensifies the endocrine of the body of the male / female as to the tonic food manufacture which includes and enhances the blood flow and strengthens intensity and endurance of body. It included the step of mixing the marker in this culture medium and herbal medicine it manufactures and it became effective in the fermentation room of 15 -20 days 25~30°C and the invention manufactured the microorganism fermentor production. (Index term). Fermentation, and the basis vitality. The sexual function, tonicity, hormone, endocrine.

**Número de publicación:** KR2012115736A

**Fecha de solicitud:** 2011-04-11

**Título:** FERMENTED MILK COMPOSITION CONTAINING FERMENTED MACA, AND A

PRODUCING METHOD THEREOF | The fermented milk composition containing fermentation marker and manufacturing method thereof.

**Solicitante:** EASTER B&F CO. LTD.

**Abstract:** PURPOSE: Fermented milk composition containing fermented maca, and a producing method thereof are provided to improve the flavor and taste of the fermented milk composition. CONSTITUTION: A producing method of fermented milk composition containing fermented maca comprises the following steps: cultivating microorganisms; mixing maca powder, oligosaccharide, and purified water to obtain a medium; sterilizing and cooling the medium; injecting the cultured microorganisms to the cooled medium for fermenting, and filtering to obtain fermented maca liquid; adding sugar into the cultivated microorganisms to obtain liquid yogurt; and mixing the liquid yogurt and the fermented maca liquid in ratio of 85-90:10-15. COPYRIGHT KIPO 2013 REPRESENTATIVE DRAWING - Reference numerals: (AA) Producing a maca composition medium; (BB) Sterilizing and cooling the medium; (CC) Producing fermented maca liquid: injecting microorganisms, fermenting, and filtering; (DD) Culturing the microorganisms; (EE) Producing liquid yogurt; (FF) Mixing the liquid yogurt and the fermented maca liquid The invention relates to the fermented milk composition containing the fermentation marker included at a ratio of 85:90 : 10:15 the manufacturing method of the fermented milk composition containing the fermentation marker, and the fermented fermentation marker liquid by the microorganism and liquid yoghurt comprising 3rd step of cooling after doing sterilization the second step: culture medium which more specifically, it manufactures with the invention relates to the culture medium the marker composition which includes 1st step of cultivating the microorganism, and the marker powder, and the oligosaccharide and purified water and manufactured: 4th step of manufacturing the fermentation marker liquid after it inoculates and it ferments it filters: 5th step of manufacturing the liquid yoghurt adding and is manufactured: as the fermented milk composition containing the fermentation marker, and manufactured liquid yoghurt as described above and 6th step of mixing at a ratio of 85:90:10:15 the fermentation marker liquid. The fermented milk composition of this kind of the invention has the effect that the content of the physiologically active agent of the marker and absorption rate are remarkably improved by the fermentation marker liquid being mixed with the liquid yoghurt and manufacturing the fermented milk. The taste and scent are improved and the preference and drinkability are improved. The effect by the effect of the yogurt itself and fermentation marker ascend.



## Boletín de la Comisión Nacional contra la Biopiratería

 CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Número de publicación:** KR2012119464A

**Fecha de solicitud:** 2011-04-21

**Título:** METHOD FOR MANUFACTURING TABLETS CONTAINING LEPIDIUM MEYENII CAPABLE OF TABLETING LEPIDIUM MEYENII POWDER AND SUPPLEMENTARY MATERIALS | The manufacturing method of the refinement including the marker

**Solicitante:** KANG YONG SOO

**Abstract:** PURPOSE: A method for manufacturing tablets containing *Lepidium meyenii* is provided to enable a user to more conveniently take nutrient components contained in *Lepidium meyenii*. CONSTITUTION: A method for manufacturing tablets containing *Lepidium meyenii* is as follows. *Lepidium meyenii* powder 1-99 wt.% and supplementary material 1-99 wt.% are tableted in a tablet machine. Foreign materials are removed from the *Lepidium meyenii* powder. The *Lepidium meyenii* powder is steamed with the steam vapor of 90-100 deg.C for 10-30 minutes and is dried. The *Lepidium meyenii* powder is processed with electric field for 30-60 minutes, is processed with magnetic field for 30-60 minutes, and is pulverized to have particle size of 100-300 mesh. COPYRIGHT KIPO 2013 REPRESENTATIVE DRAWING - Reference numerals: (AA) *Lepidium meyenii* powder is poured into a tablet machine; (BB) Supplementary material is poured into the tablet machine; (CC) Tableting; (DD) Manufacturing *Lepidium meyenii* tablet The invention relates to the manufacturing method of the refinement including the marker, and more specifically, to the manufacturing method of the refinement including the marker including the step that supplies the marker powder and supplementary material to the tablet machine and tabletized.

**Número de publicación:** KR2013041636A

**Fecha de solicitud:** 2011-10-17

**Título:** COMPOSITION CONTAINING A MACA EXTRACT FOR ANTI-FATIGUE AND FOR PREVENTING AND TREATING INFLAMMATORY BOWEL DISEASES | The antifatigue having marker extract as active ingredient, and the prophylactic for inflammatory intestinal disease and composition for a

**Solicitante:** PULMUONE HOLDINGS CO. LTD.

**Abstract:** PURPOSE: A composition containing a maca extract is provided to effectively prevent and treat inflammatory bowel diseases. CONSTITUTION: A food composition for preventing and treating inflammatory bowel diseases contains a supercritical fluid extract of maca as an active ingredient. The inflammatory bowel diseases are selected from the group consisting of ulcerative colitis, hemorrhagic rectal ulcer, and pouchitis. The supercritical fluid extract of maca is prepared by extracting maca with supercritical carbon dioxide at 35-80 deg. C and at 75-600 bar for 30 minutes to 5 hours. COPYRIGHT KIPO 2013 The invention relates to the novel use of the marker extract, more specifically, to the food composition for the antifatigue which comprises the supercritical extract of the food composition for the prophylactic for inflammatory intestinal disease which comprises the supercritical extract of the marker to the active ingredient and improvement and marker to the active ingredient. The supercritical extract of the marker of the present invention provides the food composition for the food composition for the antifatigue useful as the food industry the effect has the prevention and improvement effect of the inflammatory bowel disease the effect is in the antifatigue and prophylactic for inflammatory intestinal disease and improvement.

**Número de publicación:** KR814133B1

**Fecha de solicitud:** 2006-12-05



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** Method for Maca Extracts with High Content of Macamide | Macamide high content maca extract production method.

**Solicitante:** PULMUONE HOLDINGS CO. LTD.,KR | PULMUONE HEALTH&LIVING CO. LTD.,KR | Naturalhouse,KR

**Abstract:** PURPOSE: A method of producing maca extract (*Lepidium meyenii*) with a high content of macamide by using super critical carbon dioxide extraction is provided to increase extraction efficiency and ensures safety because of using no harmful organic solvent. CONSTITUTION: *Lepidium meyenii* is extracted by using super critical carbon dioxide extraction by increasing the temperature and pressure of super critical carbon dioxide by a gradient of 0.375deg.C per min from 35deg.C to 80deg.C per and 4.375bar per min from 75bar to 600bar for 2hr. © KIPO 2008 The present invention relates to the extracts which is manufactured by using that from the Republic of Peru acid Maca (*Maca*, *Lepidium meyenii*) with the Macamide high content extract production method by using the supercritical fluid extraction. It compared to the extracts which increased to the specific temperature and pressure to the slope gradient by using the supercritical carbon dioxide and it extracted, was produced by the existing extraction with organic solvent and because Macamide was extracted to the high efficiency and the harmful organic solvent which was excellent in the economic effect value and did not remain behind, the sampling method using the supercritical fluid the safety problem as the food material secured. Keywords The Maca, Macamide, supercritical fluid, carbon dioxide.

**Número de publicación:** RU2311802C2

**Fecha de solicitud:** 2005-12-09

**Título:** BIOLOGICALLY ACTIVE ADDITIVE BASED UPON PLANT EXTRACTS WITH L- CARNITINE DERIVATIVES

**Solicitante:** OOO INVEST FARM

**Abstract:** FIELD: medicine. ^ SUBSTANCE: the present innovation deals with manufacturing biologically active additives. The suggested biologically active additive contains certain plant extracts *Lepidium meyenii* and *Pfaffia paniculata*, and, also, as biologically active components - acetyl-L-carnitine taurinate or acetyl-L-carnitine arginate. The innovation enables to increase human reproductive ability. ^ EFFECT: higher efficiency. ^ 2 ex

**Número de publicación:** US20040137131A1

**Fecha de solicitud:** 2003-09-30

**Título:** Maca products and their uses

**Solicitante:**

**Abstract:** An extract and procedure for extracting the polar components from plants of the Family Brassicaceae, specifically but not limited to the genus *Lepidium*. The extraction has an increased polar and decreased lipidic constituent concentration with an increased pharmacological ability to affect growth parameters relative to the parent material. The concentration of polar constituents makes the product more amenable to preparations that increase growth parameters in aquaculture.

**Número de publicación:** US20060147600A1

**Fecha de solicitud:** 2005-03-25

**Título:** 'Maca Blast' energy drink

**Solicitante:**



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** The present invention is a new high quality natural energy drink created in base of extract of Maca and Camu-Camu; other ingredients are natural extract of Guarana, caffeine, glucose, fructose and water, drink is carbonated. Procedure to prepare beverage is presented too. The composition is the result of the investigation to find the process of extraction of a beverage of Maca of high energetic power and pleasant flavor, offering consumers corporal and mental enhancement in natural and optimum form, containing recommended amounts of Maca and Camu-Camu of optimal consumption. Maca and Camu Camu, present in this energy beverage complements their qualities for a better operation of the immune system. The Camu Camu, already known in the entire world by presenting a largest quantity of vitamin C naturally in a fruit, permits the stimulation and strengthens the immune system. Maca is very internationally renowned for its extraordinary nutritional properties.

**Número de publicación:** US20080311253A1

**Fecha de solicitud:** 2008-06-16

**Título:** GENDER-SPECIFIC HERBAL AND MINERAL SUPPLEMENT DRINKS

**Solicitante:** SAKURA PROPERTIES LLC,Salem,UT,US

**Abstract:** Gender-specific trace mineral-containing drink compositions for nutritional supplementation are described. Both the drinks intended for males and the drinks intended for females contain minerals, vitamins, flavors, and water. The drinks intended for males contain an extract of maca, whereas the drinks intended for females contain an extract of vitex.

**Número de publicación:** US20120141601A1

**Fecha de solicitud:** 2012-02-10

**Título:** DIETARY SUPPLEMENT, FEED AND PHARMACEUTICAL COMPOSITION CONTAINING CHIA SEED AND MACA, AND PREPARATION METHOD THEREOF

**Solicitante:** Hanyang Patent Firm,Seoul,KR

**Abstract:** Disclosed are a composition comprising chia seeds and maca, a dietary supplement or food additive, a feed and a pharmaceutical composition, all being based on the composition, and a method for preparing the dietary supplement, feed or pharmaceutical composition. The dietary supplement or food additive, the feed or feed additive, and the pharmaceutical composition exhibit can bring about excellent improvement in weight loss, sexual, gastrointestinal or hepatic function, male sex hormone release and endurance. In addition to a combination of chia seeds and maca, the composition, the food and the like may comprise optionally germanium, selenium or dietary zinc, and they are useful for the potentiation of sexual, gastrointestinal or hepatic functions, which leads to an improvement in weight loss, fatigue resistance, endurance, blood circulation, blood cholesterol level, anti-inflammation, immunity, sex hormone release, skin care, hangover cure nicotine removal, breath care, body smell, invigoration and sterility.

**Número de publicación:** US6267995B1

**Fecha de solicitud:** 1999-03-03

**Título:** Extract of *Lepidium meyenii* roots for pharmaceutical applications

**Solicitante:** Pure World Botanicals Inc.

**Abstract:** An isolated composition obtained by extracting *Lepidium meyenii* roots is provided. The composition is substantially free of cellulose and comprises between about 5% and about 9% of benzyl isothiocyanate, between about 1% and about 3% of *Lepidium* sterol component, between about 20% and about 30% of *Lepidium* fatty acid component,



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

and about 10% or more of macamide component. The composition is prepared by a process which comprises contacting *Lepidium meyenii* roots with a first aqueous solvent of about 90% vol-% or more water, then separating the residual *Lepidium meyenii* root material from the first contacted aqueous solvent, then contacting the residual *Lepidium meyenii* root material with a second aqueous solvent which comprises a mixture of an alcohol and water having about 90 vol-% alcohol or more to form a liquor, and then finally concentrating the liquor to obtain the composition. The composition can be used for treating cancer and sexual dysfunction.

**Número de publicación:** US6428824B1

**Fecha de solicitud:** 2001-10-19

**Título:** Treatment of sexual dysfunction with an extract of *Lepidium meyenii* roots

**Solicitante:** Pure World Botanicals Inc., South Hackensack, NJ

**Abstract:** An isolated composition obtained by extracting *Lepidium meyenii* roots is provided. The composition is substantially free of cellulose and comprises between about 5% and about 9% of benzyl isothiocyanate, between about 1% and about 3% of *Lepidium* sterol component, between about 20% and about 30% of *Lepidium* fatty acid component, and about 10% or more of macamide component. The composition is prepared by a process which comprises contacting *Lepidium meyenii* roots with a first aqueous solvent of about 90% vol-% or more water, then separating the residual *Lepidium meyenii* root material from the first contacted aqueous solvent, then contacting the residual *Lepidium meyenii* root material with a second aqueous solvent which comprises a mixture of an alcohol and water having about 90 vol-% alcohol or more to form a liquor, and then finally concentrating the liquor to obtain the composition. The composition can be used for treating cancer and sexual dysfunction.

**Número de publicación:** US7985434B2

**Fecha de solicitud:** 2009-05-08

**Título:** Compositions of atomized or lyophilized maca (*Lepidium meyenii*) extracts and atomized or lyophilized yacon (*Smallanthus sanchifolius*) extracts as adjuvants in the treatment of different conditions

**Solicitante:** Universidad Peruana Cayetano Heredia, PE

**Abstract:** The present invention refers to compositions of atomized or lyophilized extracts of selected maca hypocotyls of the red and black variety and atomized or lyophilized parts of the yacon plant selected from leaves and roots. The invention also refers to the methods to prepare such compositions using aqueous or hydroalcoholic extraction processes. Likewise, as novel element of the maca hypocotyls extraction process is the selection of the batches of maca hypocotyls having a pH of less than 5.5, which have better biological activity than those with a greater pH. The compositions of the invention are useful in the treatment of different condition and diseases.

**Número de publicación:** WO2001015713A1

**Fecha de solicitud:** 2000-08-01

**Título:** MACA AND ANTLER FOR AUGMENTING TESTOSTERONE LEVELS

**Solicitante:** BIOTICS RESEARCH CORPORATION, US

**Abstract:** Testosterone levels in men are increased by the oral administration of powdered maca and antler.

**Número de publicación:** WO2003053146A1

**Fecha de solicitud:** 2001-12-20



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Título:** COMPOSITION AND METHOD FOR IMPROVING SEXUAL DESIRE AND OVERALL SEXUAL VITALITY

**Solicitante:** HERTURN L.L.C. ARIZONA LIMITED LIABILITY COMPANY, US

**Abstract:** A composition and method for improving sexual desire and overall sexual vitality is disclosed in which a sufferer is administered orally a natural composition containing Maca Extract 6:1, Epimedium Sagittatum, Zinc Monomethionine Aspartate and Yohimbe Extract 10:1 in an effective amount.

**Número de publicación:** WO2004016216A3

**Fecha de solicitud:** 2003-08-12

**Título:** IMIDAZOLE ALKALOIDS FROM LEPIDIUM MEYENII AND METHODS OF USAGE

**Solicitante:** PURE WORLD BOTANICALS INC., US

**Abstract:** The present invention relates to novel imidazole alkaloid compounds that have been isolated as a form of chloride salt from a root extract of *Lepidium meyenii* Walp, with the common name Maca, and identified below as 1,3-bis(phenylmethyl) 4,5-dimethyl-1H-imidazolium chloride and 1,3-bis(phenylmethyl)-2,4,5-trimethyl-1H imidazolium chloride, compounds (1) and (2) respectively. The present invention further relates to the use of these novel compounds (1) and (2) to treat proliferative diseases, such as but not limited to cancer.

**Número de publicación:** WO2004052123A1

**Fecha de solicitud:** 2003-10-03

**Título:** ZINC-RICH FOODS HAVING EFFECT OF PREVENTING DIABETES

**Solicitante:** ARITA Junichi, JP

**Abstract:** Because of being an inorganic salt, a zinc (II) ion (zinc sulfate, zinc acetate, etc.) scarcely passes a biomembrane and thus is hardly taken into the body. To solve this problem, it is necessary to develop a food containing a zinc source, which is less toxic than zinc (II) ions and has an adequate stability and an adequate fat-solubility, and having an effect of preventing diabetes. It is intended to provide foods having an effect of preventing diabetes which contain a food for specified health uses, a food with nutrient function claims or the like comprising a natural matter containing zinc at a high concentration (a plant such as papaya or maca, or a yeast such as baker's yeast or brewer's yeast).

**Número de publicación:** WO2004112742A3

**Fecha de solicitud:** 2004-06-17

**Título:** MACA EXTRACT AND COSMETIC COMPOSITION CONTAINING SUCH AN EXTRACT

**Solicitante:** LABORATOIRES EXPANSCIENCE,FR

**Abstract:** The invention relates to a method for extracting substances from maca, to the obtained extract, to a cosmetic and pharmaceutical composition containing said extract, and to the use thereof as an anti-aging cosmetic agent. The method is characterized by a step involving the use of an enzymatic hydrolysis of proteins.

**Número de publicación:** WO2005094859A1

**Fecha de solicitud:** 2005-03-31

**Título:** AGENT IMPROVING MOISTURE-RETENTION FUNCTION OF SKIN

**Solicitante:** SUNTORY LIMITED,JP



## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** It is intended to provide a skin moisture-retention agent for oral administration which can be easily obtained by persons suffering from dry skin, can exert a moisture-retention effect when orally taken and has no side effect, and a food and so on containing this skin moisture-retention agent. More specifically speaking, a skin moisture-retention agent for oral administration which contains, as the active ingredient, an extract of a plant belonging to the family Cruciferae and the genus Lepidium, still specifically, a skin moisture-retention agent for oral administration which contains, as the active ingredient, an extract of maca (*Lepidium myenii* Walp); and foods, liquors, functional foods or drugs containing the skin moisture-retention agent for oral administration.

**Número de publicación:** WO2005095573A1

**Fecha de solicitud:** 2005-03-30

**Título:** ALCOHOLIC DRINK CONTAINING MACA EXTRACT

**Solicitante:** SUNTORY LIMITED,JP

**Abstract:** It is intended to provide an alcoholic drink containing maca extract having various favorable effects which can be easily taken since the characteristic smell of the maca extract has been lessened. More specifically speaking, an alcoholic drink containing maca extract which is prepared by adding the maca extract to a distilled spirit obtained by fermenting and distilling with the use of muscat as the main material, characterized in that a distilled spirit containing from 1 to 400 ppm, in terms of pure alcohol, of acetic acid is employed as the distilled spirit. In particular, an alcoholic drink containing maca extract characterized by containing 1 part by weight of the maca extract in 0.5 to 1000 parts by weight of the distilled spirit.

**Número de publicación:** WO2007014379A3

**Fecha de solicitud:** 2006-07-26

**Título:** A LIPIDIC EXTRACT FROM LEPIDIUM MEYNII AND ITS EFFECT ON THE LIBIDO

**Solicitante:** NATUREX,FR | ZHENG Qun Yi,US | ZHENG Bo Lin,US | HE Kan,US

**Abstract:** The present invention relates to compositions containing particular components that can be obtained from a plant which can have pharmaceutical applications. More particularly, the plant genus is *Lepidium* and the composition may contain in the range of between about .3% and .7% of benzyl isothiocyanate, b) between about .06% and about .02% of *Lepidium* sterol component, c) between about 1% and about 2% of a *Lepidium* fatty acid component, and d) about .006% to .6% or more total macamide/macaenes component as standardized with excipients.

**Número de publicación:** WO2008012628A1

**Fecha de solicitud:** 2007-07-19

**Título:** A PREPARATION FOR INFERTILITY TREATMENT

**Solicitante:** CHIEREGATI Angelo,IT

**Abstract:** A preparation for infertility treatment includes the following elements: *lepidium meyenii* walp; manganese; vitamin E; selenium, zinc.

**Número de publicación:** WO2008153527A1

**Fecha de solicitud:** 2007-06-15

**Título:** GENDER-SPECIFIC HERBAL AND MINERAL SUPPLEMENT DRINKS

**Solicitante:** SUPRANATURALS LLC,US | MOWER Thomas E.,US | BRADY Charles Jeffrey,US





## Boletín de la Comisión Nacional contra la Biopiratería

CENTRO DE INFORMACIÓN Y DOCUMENTACIÓN

### BOLETÍN DE MACA

Marzo 2014

**Abstract:** Gender-specific trace mineral-containing drink compositions for nutritional supplementation are described. Both the drinks intended for males and the drinks intended for females contain minerals, vitamins, flavors, and water. The drinks intended for males contain an extract of maca, whereas the drinks intended for females contain an extract of vitex.

**Número de publicación:** WO2011019210A9

**Fecha de solicitud:** 2010-08-11

**Título:** DIETARY SUPPLEMENT, FEED AND PHARMACEUTICAL COMPOSITION CONTAINING CHIA SEED AND MACA, AND PREPARATION METHOD THEREOF

**Solicitante:** KIM Younjin,KR | KIM Hojun,KR

**Abstract:** The present invention relates to a dietary supplement, a food additive, a feed, a feed additive, and a pharmaceutical composition containing chia seed and maca, and a preparation method thereof. The dietary supplement and the like of the present invention contains chia seed and maca derived from a plant, and a powder or extract thereof as main ingredients, may further contain germanium, selenium or dietary zinc, if necessary, and has remarkable effects of preventing and improving disorders of the intestinal function, the sexual function or the liver function, such as weight reduction, fatigue relief, endurance increase, blood circulation improvement, cholesterol reduction, inflammation reduction, immunity enhancement, sex hormone increase, skin care, hangover relief, nicotine elimination, halitosis removal, body odor removal, analeptic effect or sterility treatment from biological and biochemical aspects.

**Número de publicación:** WO2011026500A1

**Fecha de solicitud:** 2009-09-02

**Título:** DIETARY SUPPLEMENT FOR TREATING ERECTILE DYSFUNCTION

**Solicitante:** PHYT-IMMUN GMBH,DE | NARDI Giuseppe,DE

**Abstract:** Composition comprising extracts of Tribulus terrestris and Lepidium meyenii. Said composition may be used as dietary supplement for treating erectile dysfunction.

**Número de publicación:** WO2012085226A1

**Fecha de solicitud:** 2011-12-22

**Título:** EXTRACT OF AERIAL PARTS OF MACA RICH IN POLYPHENOLS AND COMPOSITION COMPRISING SAME

**Solicitante:** LABORATOIRES EXPANSCIENCE,FR | SAUNOIS Alex,FR | BAUDOIN Caroline,FR | LECLERE-BIENFAIT Sophie,FR | GARNIER Sébastien,FR | MSIKA Philippe,FR

**Abstract:** The invention relates to an extract of aerial parts of Maca rich in polyphenols, and also to a composition comprising such an extract and, where appropriate, a suitable excipient. The invention also relates to a process for extracting an extract of aerial parts of Maca rich in polyphenols, and also to the extract that can be obtained by means of said process. The invention also relates to such a composition or such an extract for use thereof in preventing or treating disorders or pathological conditions of the skin, the mucous membranes or the superficial body growths and/or for use thereof in preventing and/or treating vascular disorders. Finally, the invention relates to a cosmetic care process for the skin, the superficial body growths or the mucous membranes, with a view to improving the condition thereof or the appearance thereof, which comprises the administration of such a composition or of such an extract.