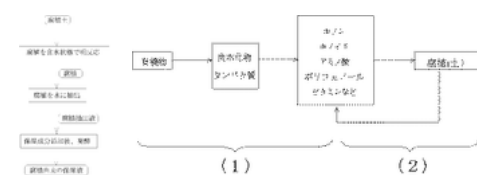


# Humus, humus extract solution, moisturizing liquid, their manufacturing method and use

## Abstract

<P>PROBLEM TO BE SOLVED: To provide a cosmetic which exhibits a skin reparation effect of the useful components in an organic substance for a long period without using an antiseptic and excels in stability and safety, and its raw material. <P>SOLUTION: Humus can be obtained by subjecting humus soil to light reaction while maintaining a water content of 50-80%, for example, for 3 to 12 months. Furthermore, a humus extract solution is obtained by extraction of the humus with water, for example, for 3-12 months. When this humus extract solution is mixed with a moisturizing agent such as glycerin and fermented, for example, for 6-12 months, a moisturizing liquid derived from humus can be obtained. This moisturizing liquid exhibits a moisturizing effect, a skin whitening effect, an anti-oxidizing effect, and a physiologically active effect and does not require incorporation of an antibacterial agent, an antioxidant, an antiseptic and the like. This moisturizing liquid is best for a cosmetic, particularly for a skin care lotion. <P>COPYRIGHT: (C)2007,JPO&INPIT

## Images (2)



## Classifications

Y02W10/37 Wastewater or sewage treatment systems using renewable energies using solar energy

JP2006273734A

Japan

[Download PDF](#)

[Find Prior Art](#)

[Similar](#)

**Other languages:** [Japanese](#)

**Inventor:** [Yusuke Ishida](#), 有甫 石田, [Kunitake Suzuki](#), 邦威 鈴木

**Current Assignee :** ENZYME KK

## Worldwide applications

2005 [JP](#)

## Application JP2005093459A events ②

**2005-03-29** Application filed by ENZYME KK

**2005-03-29** Priority to JP2005093459A

**2006-10-12** Publication of JP2006273734A

**2014-01-08** Application granted

**2014-01-08** Publication of JP5383963B2

**Status** Active

**2025-03-29** Anticipated expiration

**Info:** [Patent citations \(6\)](#), [Cited by \(7\)](#), [Legal events](#), [Similar documents](#), [Priority and Related Applications](#)

**External links:** [Espacenet](#), [Global Dossier](#), [Discuss](#)

## Claims (14)

[Hide Dependent](#) ^  
translated from Japanese

Humus produced by keeping the humus soil at a moisture content of 50 to 80% and causing a light reaction. The humus according to claim 1, wherein the period required for the light reaction is 3 to 12 months. A humus extract produced by extracting, in water, humus obtained by a bright reaction with humus soil kept at a moisture content of 50 to 80%.

The humus extract according to claim 3, wherein a period required for the light reaction is 3 to 12 months, and a period required for the water extraction is 3 to 12 months. A humus-derived moisturizing liquid produced by extracting humus obtained by maintaining a humus soil at a water content of 50 to 80% and subjecting it to a light reaction and then fermenting it by adding a moisturizing agent. The humus according to claim 5, wherein a period required for the light reaction is 3 to 12 months, a period required for the water extraction is 3 to 12 months, and a period required for the fermentation is 6 to 12 months. Moisturizing liquid derived from. The humus-derived moisturizing liquid according to claim 6, wherein the humectant is glycerin and / or propylene glycol. A method for producing humus, comprising subjecting humus soil to a light reaction while maintaining a moisture content of 50 to 80%. A method for producing a humus extract, comprising extracting humus obtained by performing a light reaction while maintaining humus soil at a moisture content of 50 to 80%, into water. A method for producing a humus-derived moisturizing liquid, comprising extracting a humus obtained by a light reaction while keeping the humus soil at a moisture content of 50 to 80%, extracting the humus into water and then fermenting the humus. Use of humus produced by keeping humus soil at a water content of 50 to 80% and causing a light reaction as a cosmetic raw material. Use as a cosmetic raw material of a humus extract produced by extracting humus obtained by subjecting a humus soil to a light reaction while maintaining a moisture content of 50 to 80% into water. Use as a cosmetic of a humus-derived moisturizing liquid produced by extracting humus obtained by light reaction while keeping the humus soil at a moisture content of 50 to 80% and extracting it with water and fermenting it. . A humus obtained by subjecting a humus soil to a light reaction while maintaining a moisture content of 50 to 80% after extraction into water, adding a moisturizer and fermenting the humus, and cosmetics, A moisturizing cosmetic composition comprising a dermatologic and / or pharmaceutically acceptable additive.

## Description

translated from Japanese

The present invention relates to humus, humus extracts and humus-derived moisturizing liquids, and methods for their production and use.

Skin care cosmetics are used to obtain a skin moisturizing effect, whitening effect, wrinkles, spots, sagging effects on sagging skin, and the like. The active ingredients to be blended for obtaining these effects are roughly classified into organic substances and inorganic substances, but the organic substances are unavoidably changed or spoiled by microorganisms.

Conventional cosmetics contain antibacterial agents, antioxidants, preservatives and the like so that organic components are not altered, oxidized or spoiled. Although they are used within the regulatory scope of the Pharmaceutical Affairs Law, they are less preferred for skin with subtle and complex changes. It is a component that should be avoided as much as possible, and the recent consumer wants a cosmetic that does not contain preservatives.

Biological cosmetics have been proposed in order to suppress and eliminate preservatives as much as possible. For example, cosmetics using biological reactions such as rice, wheat, soy milk fermentation liquid, yeast, sake lees, and natto ingredients. These are said to be resistant to discoloration, decay and oxidation because they use fermented ingredients. However, when there is a blend with other ingredients, not all ingredients are fully fermented.

Several cosmetic materials that utilize the antibacterial properties of humus have also been proposed. For example, Japanese Patent Application Laid-Open No. 2004-51590 (a method for producing a culture solution, a culture solution, and a skin lotion using the same), Japanese Patent Application Laid-Open No. 2000-136140 (an

aqueous solution containing a humus extract material), Japanese Patent Application Laid-Open No. 2003-267821. No. gazette (cosmetic raw material).  
JP 2004-51590 A Use example 2 of JP2000-136140A JP 2003-267821 A

Cosmetic raw materials and cosmetics using the humus have limited antibacterial properties and oxidation / corruption prevention, and do not necessarily reach a satisfactory level. In addition, cosmetics have good usability, ease of use, palatability, etc., no alteration, discoloration, odor, microbial contamination (stability), no irritation to skin and no toxicity (safety) is also very important.

Accordingly, an object of the present invention is to provide cosmetic raw materials and products that exhibit the skin conditioning effect of useful components of organic matter for a long period of time without using preservatives, and are excellent in usability, stability and safety, and these are in providing the manufacturing method of.

As a result of intensive studies on the above problems, the present inventors have found that the following problems can be solved. That is, this invention provides the humus manufactured by keeping a humus soil at a water content of 50-80%, and making it light-react. In the present specification, the light reaction means that the excavated humus soil is aged and fermented while keeping the moisture content at 50 to 80% without drying it under sunlight. The present invention also provides a humus extract produced by extracting the obtained humus into water, and a humus-derived moisturizer produced by adding a humectant to the obtained humus extract and fermenting it. Also provide.

The present invention also provides a method for producing humus comprising maintaining a humus soil at a moisture content of 50 to 80% and causing a light reaction, a method for producing a humus extract comprising extracting the humus into water, and further, the humus. Also provided is a method for producing a humus-derived moisturizing liquid comprising adding a moisturizing agent to the extract and fermenting it.

The present invention also relates to the use of humus produced by keeping a humus soil at a moisture content of 50 to 80% as a light source as a cosmetic raw material, and a humus extract produced by extracting the humus into water. The present invention provides use of a humus-derived moisturizing liquid produced by adding a humectant to the extract and fermenting the extract as a cosmetic material. The present invention also provides a humus-derived moisturizing liquid produced by extracting a humus obtained by a light reaction while keeping the humus soil at a moisture content of 50 to 80%, followed by extraction with water and fermenting it with a moisturizer. And a moisturizing cosmetic composition comprising cosmetically, dermatologically and / or pharmaceutically acceptable additives.

The humus of the present invention obtained by subjecting humus soil to a light reaction for a long time while maintaining a constant moisture content has the following features.

- (1) Large pH buffer action.
- (2) Perform a chelate reaction.
- (3) High cation exchange capacity (CEC).
- (4) Has a physiologically active function.
- (5) Deodorizing action.
- (6) It contains various components such as amino acids, polyphenols, sugars, vitamins, quinones, organic acids, minerals, ATP, and exhibits various effects and actions.
- (7) Has antioxidant function.
- (8) Has the effect of suppressing pathogenic bacteria.

The reason why the antioxidant function is particularly high is that the carboxyl group and phenol group of the functional group of humus become proton donors, and these protons leave the carboxyl group and phenol group at a very fast rate to suppress the oxidizing power. is there. This is the following formula:

The proton equilibrium state is shown.

The humus extract obtained by extracting the humus into water over a longer period of time inherits the above-mentioned features of humus and further provides the following features. The humus extract has a function of suppressing melanin production and exhibits a whitening effect when used as a cosmetic raw material. That is, the functional group of the humus and extract of the present invention exhibits a chelate reaction with copper, which is a tyrosinase prosthetic molecule, thereby inhibiting tyrosinase and suppressing melanin production, which is useful for the whitening effect. .

Natural moisturizing factors that play an important role in the moisture retention of the stratum corneum are amino acids, minerals, saccharides, and the like, and the moisturizing effect is that these are contained in a balanced manner so that the moisture in the stratum corneum is not lost. Some vitamins and physiologically active substances penetrate into the stratum corneum and promote the moisturizing effect. The humus extract of the present invention produces a large amount of amino acids during a long-term extraction process, increases the cation exchange capacity to the extent that minerals are sufficiently retained, and contains physiologically active substances such as sugars and coenzymes in a well-balanced manner. Therefore, the moisturizing effect is exhibited. Also from this point, the humus extract of the present invention is useful as a cosmetic raw material.

The humus and humus extract of the present invention are useful as cosmetic raw materials, accelerators for sewage treatment, deodorizers, etc., taking advantage of the above-mentioned features.

The humus-derived moisturizing liquid of the present invention made from the above-mentioned humus extract is a natural organic material such as deciduous leaves and trees, and the humus-derived component obtained by fermenting the organic material for many years. Even after a long period of time, it does not deteriorate, rot or oxidize, and is excellent in stability and safety. The humus-derived moisturizing liquid of the present invention grows many components that exert a whitening effect and a skin conditioning effect as described in the section of the humus and humus extract. Furthermore, it has good usability such as feeling of use, ease of use, and palatability, and there is no irritation or toxicity to the skin.

In particular, the stability of the moisturizing effect of the humus-derived moisturizing liquid of the present invention is increased by fermenting the added moisturizing agent. That is, humectants such as glycerin and propylene glycol are partially converted into amino acids such as serine, glycine, and cysteine by a biological reaction. On the other hand, glycerin is produced from saccharides such as glucose and organic acids contained in humus. While these biological reactions are performed in a complex manner, a comprehensive and stable moisture retention capacity is born. Therefore, the moisturizing liquid of the present invention exhibits a stable moisturizing effect not found in the prior art.

Skin originally has a self-physiological function that protects and regenerates itself. Since the moisturizing liquid of the present invention also contains a physiologically active substance that assists its function, it is even more effective.

The humus-derived moisturizing liquid of the present invention having the various effects described above is an active ingredient of cosmetics such as a lotion product with enhanced moisturizing properties, or a lotion, a cosmetic liquid, a milky lotion, a cream, a cosmetic liquid, and a face wash. It is suitable as. In particular, it is optimal as a skin care lotion by taking advantage of its enhanced moisture retention.

The humus, humus extract, and humus-derived moisturizing liquid of the present invention will be described with reference to the production flow of FIG. In FIG. 1, the humus used as a raw material of the present invention is a deciduous tree fallen leaf, a decomposition / biosynthesis product derived from organic matter such as a tree, which is usually buried underground for, for example, about 8000 years or more. It has been humified through the formulas (1) and (2). The age of humus can be determined by, for example, measuring the number of years with coexisting pollen.

Organic matter in the soil is converted into carbohydrates, proteins, CO<sub>2</sub>, H<sub>2</sub>O, and the like by the biological reaction shown in Formula (1) in FIG. In the formulas (1) and (2), low-molecular sugars, proteins, etc. in the organic matter are initially decomposed and synthesized by non-spore bacteria. Thereafter, more complex compounds such as cellulose are converted to polyphenols, quinones, amino acids, vitamins, organic acids, and the like in a biological reaction by spore bacteria. A humus soil containing humus in which these biosynthetic products are polycondensed is produced. Therefore, humus soil is rich in structural units such as polyphenols, quinones, amino acids, and vitamins.

By the way, the humus soil in the soil has the following reaction under the interception of sunlight:

(In the formula, Pi means phosphoric acid.)

Is considered to be progressing. Hereinafter, the reaction of humus in the soil is called dark reaction.

In the present invention, it is necessary to leave the excavated humus soil under sunlight, usually for 1 to 12 months, preferably 3 to 12 months, particularly preferably 6 to 12 months. This gives the following reaction:

Proceed at the same time. Hereinafter, the above reaction of humus under sunlight is referred to as a light reaction (fermentation).

In the present invention, the water content of the soil on the ground is 50 to 80%, preferably 50 to 70%, more preferably 50 to 65%, and it is necessary to maintain the water content suitable for fermentation during the light reaction. There is. The underground water content is preferably maintained at 50 to 80%.

In the light reaction under a certain water content, the coenzyme NADP (oxidized form, nicotinamide adenine dinucleotide phosphate) produced in the dark reaction is converted to NADPH<sub>2</sub> (reduced form), and hydrogen ions are released. ADP produced by the dark reaction is changed to ATP by the light reaction. Biological reactions can be further activated by the production of coenzymes by this light reaction. In order to uniformly light the entire humus soil (fermentation and aging), it is sometimes preferable to perform turning.

The humus soil is neutral at a pH of about 7 when excavated, but when the light reaction on the ground is advanced, the pH becomes about 3 after one month. Even after one year has elapsed, there is no significant change in pH, and the pH becomes 2.6 to 3.3.

Table 1 shows the humic components obtained by the light reaction. As can be seen from this component table, the biological reaction of formula (2) is vigorously progressing because of the high humic acid content.

In order to maximize the characteristics of the humus, humus components are extracted into water. To do this, first the humus obtained above is mixed with water. The humus of the present invention is usually mixed at a ratio of 20 to 50 parts, preferably 25 to 40 parts, particularly preferably 30 to 40 parts with respect to 100 parts of water.

Subsequently, it is left at normal temperature for 1 to 12 months, preferably 3 to 12 months, particularly preferably 6 to 12 months. It is preferable to stir the mixed solution once a month.

During the extraction period, the humus component dissolves and elutes in water, and fermentation and biosynthesis progress in water, increasing physiologically active substances such as amino acids and vitamins. In particular, a mixed solution that has a yellowish brown color at the initial stage of extraction shows red coloration seen in arginine, cysteine, histidine, tyrosine, etc. after 6 months or more, and all amino acids increase. The initial pH when humus and water are mixed is 3 to 3.5, but the pH becomes about 2.8 by fermentation for 6 to 12 months.

The humus extract contains galactose, arabinose, xylose, glucose, mannose, rhamnose, etc. as sugars by fermentation during extraction, and glycine, alanine, lysine, leucine, valine, proline, glutamic acid, arginine, serine, aspartic acid as amino acids. It contains threonine and the like, and it produces carotene, vitamins A, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub>, D, E, niacin, pantothenic acid, choline, biotin and the like as vitamins, and also contains coenzymes and the like.

There is a close relationship between these sugars, amino acids, vitamins, and coenzymes. For example, amino acids are produced from sugars and nitrogen in the presence of coenzyme NADPH<sub>2</sub> and enzymes. It is activated by obtaining ATP energy to produce active enzymes, vitamins, and the like. Comolecules NADPH<sub>2</sub> and NADPH contain vitamins.

The humus extract of the present invention has a high cation exchange capacity of 50 to 120 meq / 100 g due to fermentation during extraction.

The mixed solution that has been fermented and matured at room temperature is separated by precipitation. The supernatant or filtrate is used as the humus extract.

The humus extract has a pH of about 2.8, but may be appropriately neutralized with potassium hydroxide or sodium hydroxide solution to a pH of 5 to 7 to precipitate and separate Fe(OH)<sub>3</sub>. By precipitating and separating iron, the iron rust odor of the extract can be reduced.

Next, the humus-derived moisturizing liquid of the present invention will be described. This humectant is obtained by adding a humectant to the humus extract obtained above and fermenting it for a certain period. Addition of moisturizing agent enhances the moisturizing property of humus extract, promotes the production of organic acids, amino acids, vitamins, etc. through fermentation, and brings moisturizing solution to a stable state that keeps balance of bacteria and various components. Can do.

Examples of the humectant include glycerin, propylene glycol, sodium hyaluronate, sorbitol, polyethylene glycol and the like. As the humectant, glycerin and / or propylene glycol is usually employed, but can be substituted or used in combination with at least one of sodium hyaluronate, sorbitol, and polyethylene glycol depending on the application and effect.

The ratio of the moisturizer added to the extract is usually 3 to 20 parts per 100 parts of the humus extract. When the use of the moisturizing liquid is lotion, 3 to 15 parts are preferable, and when the moisturizing liquid is cream or emulsion, 15 to 20 parts are preferable.

The mixture is heated at a temperature of 70 to 85 ° C., preferably 70 to 80 ° C., usually for 5 to 30 minutes, preferably 10 to 30 minutes, and then returned to room temperature. For the production of amino acids, micrococcus (actinomycetes), which is aerobic rather than anaerobic, and Bacillus bacteria are the most produced, but only spore bacteria are left. The heating is important. That is, the pathogenic bacteria are non-spore bacteria and are generally sterilized by heating at 60 to 65 ° C. for 20 to 30 minutes. On the other hand, since sterilization of spore bacteria such as Bacillus bacteria and actinomycetes generally requires heating at 120 ° C. for 30 to 60 minutes, the bacteria survive by the heating.

The mixed solution after heat sterilization is at room temperature, preferably at room temperature to 30 ° C., usually for 1 to 12 months, preferably for 3 to 10 months, more preferably for 6 to 8 months. In the presence of humectants such as glycerin and propylene glycol. When fermented at 30 ° C., fermentation is completed in a shorter period (1 to 8 months) than normal temperature fermentation.

The pH of the mixed solution to which the humectant is added is usually about 2.8, but the pH is adjusted to 5 to 7 by adding potassium hydroxide or sodium hydroxide solution to the humus extract before mixing. And the effect that the period required for fermentation is shortened to 3 to 10 months also appears with the reduction of the iron rust odor described above.

Since there are many metabolite suspensions in the mixed solution after the fermentation, a supernatant or filtrate is obtained by decantation, filtering with filter paper, or the like. This supernatant is mixed with the compound according to the nutritional purpose, and the fermentation is sequentially repeated to acclimate the added compound, so that the components are balanced and stable. As a result, cosmetics with all natural reactions are obtained for each application. It is particularly useful as a skin care lotion.

What is important here is that the supernatant or filtrate is not sterilized. While various components are balanced in the presence of bacteria, physiologically active substances such as vitamins are maintained for a long time, and when bacteria are sterilized, the content of physiologically active substances rapidly decreases after 3 to 6 months. This is because it is preferably used as a cosmetic.

The humus-derived moisturizing liquid of the present invention may be used alone or as a cosmetic composition comprising a humus-derived moisturizing liquid and cosmetically, dermatologically or pharmaceutically acceptable additives. can do.

Specific examples of such additives include emollients, keratin softeners, solubilizers, thickeners, buffers, drugs (nutrients, astringents, etc.), fragrances, colorants, ultraviolet absorbers known in the cosmetics field. Is mentioned. If the humus-derived moisturizing liquid of the present invention is used, it is not necessary to add an antibacterial agent, an antioxidant, an antiseptic, or the like to the composition. However, the present invention provides an antibacterial agent, an antioxidant and / or an antiseptic. The use of is not excluded.

The proportion of the additive in the cosmetic composition is usually 0 to 50% by weight, preferably 0 to 30% by weight, more preferably 0 to 20% by weight, based on the total weight of the composition. Additives can be aqueous, oily and / or emulsion depending on their nature.

#### [Example 1]

(1) Manufacture of humus 1000 kg of humus soil (pH = 7) buried underground for about 8000 years was excavated and light reaction was carried out at room temperature under sunlight for about 12 months. After the light reaction, 800 kg of the humus of the present invention was obtained. Table 2 shows the pH, moisture, and composition of the humus of the present invention.

(2) Humic pathogen control test The humic pathogen control test obtained above was performed as follows. First, 0.1 ml of the bacterial solution is added to 50 ml of the growth medium (0.1% peptone water) to which the humus is added to 1%, 3%, and 5%. did.

The viable cell count 6 and 24 hours after the start of the culture was measured by a pour plate culture method using a medium for measuring the bacterial count. Table 3 shows the time course of the bacteria inoculated in the humus-added liquid medium of the present invention. From Table 3, it can be seen that both *Escherichia coli* and *Staphylococcus aureus* are suppressed by the addition of the humus of the present invention. In addition, sulfate-reducing bacteria, *Pseudomonas aeruginosa*, *Salmonella* and Gram-negative bacteria were also suppressed. *Bacillus subtilis* was found to increase in growth.

Note) In the table, "10 or less" indicates the measurement detection limit or less.

Although the effect of humus on bacteria varies depending on the species, pathogenic bacteria are clearly suppressed. The humus content of the present invention when producing cosmetics may be 20 to 50%, which is sufficient for pathogen control. Since various bacteria are growing on the skin, the humus pathogen-inhibiting effect can be used to maintain healthy skin without using any other chemicals, and it can also be useful for facial cleansing, skin conditioning, protection, and the like.

#### [Example 2]

(1) Production of humus extract The humus obtained in Production Example 1 and water were mixed at a weight ratio of 30:70 (humus 30% by weight). Then, it was fermented stationary at room temperature for 12 months. During the fermentation, the mixture was stirred once a month. After completion of the fermentation, the supernatant was filtered to obtain 100 g of humus extract (pH = 2.8, color = light yellowish red).

(2) Antioxidant function test of humus extract The humus extract and stationery clip of the present invention was put in a glass test tube and kept stationary at room temperature. Did not occur. On the other hand, for comparison, when dechlorinated tap water and a stationery clip were placed in a glass test tube and kept stationary at room temperature, rust occurred in 1 to 2 days. These results show that iron is not oxidized because the carboxyl group and phenol group of the humus extract of the present invention are inactivated by donating protons to active oxygen.

#### Example 3

(1) Production of humus-derived moisturizing liquid The humus extract obtained in Example 2 and glycerin were mixed at a weight ratio of 87:13 (glycerin 13 wt%). The mixture was heated at 75 ° C. for 5 minutes and then returned to room temperature. Next, the mixed solution was fermented at room temperature for 12 months. After fermentation, the supernatant was filtered through filter paper to finally obtain 100 g of a moisturizing liquid (pH = 2.8, color = light yellowish red).

(2) Performance test of humus-derived moisturizing liquid as skin care lotion In order to evaluate the performance of the moisturizing liquid obtained above, a sensory evaluation test by 6 panelists A to F (gender = female) was conducted for 6 months. Conducted over time. At the time of evaluation, the panelists were asked to contrast the makeup effects that each person had used so far. Self sensory evaluation items were moisturizing, smooth skin whitening effect and makeup paste. Furthermore, the wetness was measured with a wet meter. The results are shown in Table 4.

\* Self-sensory evaluation criteria 1: Very good, 2: Good, 3: Normal, 4: Bad, 5: Very bad \* Wetness evaluation criteria

A:

Moisture degree 200 $\mu$ s or more, moisturizing is enough, skin condition is good

B:

Moisture 200 ~ 80 $\mu$ s, moisture is normal, skin condition is suitable for age

C:

Moisture 80 $\mu$ s or less, dry, skin condition is easy to age

Paneler A is a 19-year-old woman suffering from a collagen disease, and the use of moisturizer improved the feeling of moisture and smoothness of the skin. Paneler B is a woman in her 30s who suffers from atopic dermatitis. The use of moisturizer improves skin roughness, inflammation and itching, moisturizes and smoothes, restores firmness to the skin, and is healthy. Beauty was obtained. Panelers C to F consisted of one person in their 30s, 40s, 50s and 60s, and did not feel the whitening effect greatly, but all other items were very good.

In addition to the evaluation items, the use of the moisturizing liquid of the present invention has made it possible to obtain smoothness in the application to elbows, knees and kakato in winter, and the effect of suppressing drying, roughening and itching has also been found.

Moreover, when the wetness ( $\mu$ s) of the face skin surface of the panelists A to F was measured with a wetness meter, all the members were ranked B to C before the test, and all were ranked A during the test.

The humus, humus extract and humus-derived moisturizing liquid of the present invention are useful as cosmetic ingredients and products such as skin lotion, cosmetic liquid, milky lotion, cream, cosmetic liquid, and facial cleanser. These provide cosmetics with excellent moisturizing effect, skin conditioning effect, and whitening effect for healthy people, people with sensitive skin, and people with skin diseases.

The humus extract and the humus-derived moisturizing solution of the present invention are also atopic dermatitis, contact dermatitis, eczema / dermatitis such as metal allergy, erythroderma, erythema and telangiectasia, purpura, collagen disease Urticaria, urticaria, cutaneous pruritus, keratosis, dysplasia, metabolic disorders, nevi

and skin benign tumors, skin malignant tumors, bacterial diseases, dermatomycosis, viral diseases, skin diseases caused by insects, It is useful as a preventive or therapeutic agent for sexually transmitted diseases.

The humus and humus extract of the present invention are useful not only as a raw material for cosmetics, but also for promoting sewage treatment and deodorizing agents.

It is the figure which showed the flow which manufactures the humus extract of this invention, and the moisturizing liquid derived from humus. It is the figure which showed the production | generation of humus soil.

Patent Citations (6)

Publication number	Priority date	Publication date	Assignee	Title
<a href="#">JPSS5934260A</a> *	1982-08-23	1984-02-24	Koreo Morishita	Activation of plant rot mud
<a href="#">JPH07316488A</a> *	1994-05-25	1995-12-05	Health Kk	Composition used for painting skin or container
<a href="#">JPH1059837A</a> *	1996-08-15	1998-03-03	Keinzu Corp:Kk	Composition for cosmetic
<a href="#">WO1999045900A1</a> *	1998-03-11	1999-09-16	Kabushiki Kaisha Soken	Skin normalizing agents
<a href="#">JP2000136140A</a> *	1998-10-29	2000-05-16	Ra Purata Koeki Kk	Aqueous solution containing substance extracted from humic soil
<a href="#">JP2003267821A</a> *	2002-03-13	2003-09-25	Koike Kagaku Kk	Raw material for cosmetic
Family To Family Citations				

\* Cited by examiner, † Cited by third party

Cited By (7)

Publication number	Priority date	Publication date	Assignee	Title
<a href="#">JP2011074047A</a> *	2009-10-02	2011-04-14	Enzyme Kk	Process of humus extract
<a href="#">WO2011139246A1</a> *	2010-05-06	2011-11-10	Dizman Mumln	Topical or injectable composition comprising humic acid salts and polyvinylpyrrolidone for the treatment of skin diseases
<a href="#">JP2016124815A</a> *	2014-12-26	2016-07-11	株式会社コーセー	Protease activity-promoting agent
<a href="#">JP2016124816A</a> *	2014-12-26	2016-07-11	株式会社コーセー	Epidermal turnover-promoting agent
<a href="#">JP2016183130A</a> *	2015-03-26	2016-10-20	株式会社コーセー	Agent for improving or preventing pigmentation
<a href="#">JP2016183131A</a> *	2015-03-26	2016-10-20	株式会社コーセー	Inhibitor for potential spots
<a href="#">JP2020048468A</a> *	2018-09-26	2020-04-02	エンザイム株式会社	Cultivation method of aquatic animal
Family To Family Citations				

\* Cited by examiner, † Cited by third party, ‡ Family to family citation

Similar Documents

Publication	Publication Date	Title
<a href="#">JP5383963B2</a>	2014-01-08	Humus, humus extract and moisturizing liquid, and their production and use
<a href="#">JPWO2009084200A1</a>	2011-05-12	External skin preparation for acne skin
<a href="#">WO1999002128A1</a>	1999-01-21	A skin care and protection composition and a method for preparation thereof
<a href="#">KR101494661B1</a>	2015-02-23	Composition for hair or scalp treatment comprising fermented black garlic residue and method of preparing the same
<a href="#">JP5758174B2</a>	2015-08-05	Antioxidants and antioxidant cosmetics
<a href="#">JPH0517363A</a>	1993-01-26	Antiphlogistic agent and cosmetic containing the same
<a href="#">KR102119825B1</a>	2020-06-05	A cosmetic composition for maintaining the balance of microbiom in the skin comprising brown rice, grean tea and dandelion fermentation extracts and methode thereof
<a href="#">KR101474340B1</a>	2014-12-18	Anti-aging cosmetic composition comprising herb ferment extract
<a href="#">JP2000247864A</a>	2000-09-12	Cosmetic composition

<a href="#">JP2017114814A</a>	2017-06-29	Cosmetics
<a href="#">KR102195365B1</a>	2020-12-30	Cosmetic composition for skin moisturizing comprising Mixed extract of rice embryo and fermentation
<a href="#">KR100994987B1</a>	2010-11-18	Cosmetic composition with the calming effect for skins
<a href="#">JP2008120792A</a>	2008-05-29	Skin and hair cosmetic having moisture retention and hairdressing activity and method for producing the same
<a href="#">KR20120140141A</a>	2012-12-28	Cosmetic composition comprising the fermented extracts and the extracts of the rice
<a href="#">KR20170097837A</a>	2017-08-29	Cosmetic composition and soap composition comprising fermented coffee wastes and coffee beans
<a href="#">KR101397160B1</a>	2014-05-20	Cosmetic compositon for skin-irritation alleviation with Inula britannica var. chinensis, Cynanchi Radix and Lysimachia foenum-graecum Hance
<a href="#">JPH11240817A</a>	1999-09-07	Beauty culture pack
<a href="#">KR20170089093A</a>	2017-08-03	A cosmetic composition for antioxidating comprising extracts of eisenia bycyclis, gallnut and rhubarb
<a href="#">JP2007131602A</a>	2007-05-31	Bleaching external preparation
<a href="#">KR20130099277A</a>	2013-09-06	A cosmetic composition comprising hydrolysates of ecklonia cava
<a href="#">KR102194314B1</a>	2020-12-23	Antioxidant or skin microbiome balance cosmetic composition comprising green tea fermented extract fermented by inoculating lactobacillus rhamnosus strain
<a href="#">KR102001244B1</a>	2019-07-18	Composition for improving microbial flora containing extract of Carthami Fructus
<a href="#">JP2004175688A</a>	2004-06-24	Bleaching agent and cosmetic
<a href="#">JPH0710740A</a>	1995-01-13	Melamine production-inhibiting agent
<a href="#">JPH07300409A</a>	1995-11-14	Cosmetic composition containing extract of selenium-containing yeast

## Priority And Related Applications

### Priority Applications (1)

Application	Priority date	Filing date	Title
<a href="#">JP2005093459A</a>	2005-03-29	2005-03-29	Humus, humus extract and moisturizing liquid, and their production and use

### Applications Claiming Priority (1)

Application	Filing date	Title
<a href="#">JP2005093459A</a>	2005-03-29	Humus, humus extract and moisturizing liquid, and their production and use

## Legal Events

Date	Code	Title	Description
2008-02-02	A621	Written request for application examination	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A621 <b>Effective date:</b> 20080201
2010-07-28	A977	Report on retrieval	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A971007 <b>Effective date:</b> 20100728
2011-01-06	A131	Notification of reasons for refusal	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A131 <b>Effective date:</b> 20110105
2011-03-01	A521	Request for written amendment filed	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A523 <b>Effective date:</b> 20110228
2011-03-29	A02	Decision of refusal	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A02 <b>Effective date:</b> 20110328
2011-06-21	A521	Request for written amendment filed	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A523 <b>Effective date:</b> 20110620
2011-07-08	A911	Transfer to examiner for re-examination before appeal (zenchi)	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A911 <b>Effective date:</b> 20110707

2011-08-15	A912	Re-examination (zenchi) completed and case transferred to appeal board	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A912 <b>Effective date:</b> 20110812
2013-05-24	A521	Request for written amendment filed	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A523 <b>Effective date:</b> 20130523
2013-07-17	A521	Request for written amendment filed	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A523 <b>Effective date:</b> 20130716
2013-10-10	A61	First payment of annual fees (during grant procedure)	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: A61 <b>Effective date:</b> 20131002
2013-10-11	R150	Certificate of patent or registration of utility model	<b>Ref document number:</b> 5383963 <b>Country of ref document:</b> JP <b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R150 <b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R150
2016-05-24	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2017-07-11	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2018-08-21	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2019-07-23	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2020-07-03	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2021-08-30	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250
2022-10-07	R250	Receipt of annual fees	<b>Free format text:</b> JAPANESE INTERMEDIATE CODE: R250

### Concepts

machine-extracted

[Download](#) [Filter table](#)

Name	Image	Sections	Count	Query match
■ humus		title,claims,abstract,description	150	0.000
■ moisturizing		title,claims,abstract,description	55	0.000
■ extract		title,claims,abstract,description	45	0.000
■ liquid		title,claims,abstract,description	39	0.000
■ manufacturing process		title,claims,description	21	0.000
■ chemical reaction		claims,abstract,description	44	0.000
■ cosmetic		claims,abstract,description	37	0.000
■ soil		claims,abstract,description	29	0.000
■ water		claims,abstract,description	28	0.000
■ raw material		claims,abstract,description	12	0.000
■ glycerine		claims,abstract,description	9	0.000
■ glycerol		claims,abstract,description	9	0.000
■ extraction		claims,abstract,description	8	0.000
■ chemical substances by application		claims,abstract,description	6	0.000
■ fermentation		claims,description	18	0.000
■ fermentation		claims,description	18	0.000
■ mixture		claims,description	12	0.000
■ humectant		claims,description	10	0.000

▀ propylene glycol	claims,description	10	0.000
▀ Moisturizer	claims,description	6	0.000
▀ additive	claims,description	6	0.000
▀ moisturizer	claims,description	6	0.000
▀ additive	claims,description	2	0.000
▀ water extraction	claims	2	0.000
▀ Skin	abstract,description	28	0.000
▀ effects	abstract,description	12	0.000
▀ lotion	abstract,description	11	0.000
▀ substance	abstract,description	11	0.000
▀ whitening	abstract,description	8	0.000
▀ antioxidant agent	abstract,description	7	0.000
▀ antioxidant	abstract,description	6	0.000
▀ anti bacterial agent	abstract,description	4	0.000
▀ anti-septic	abstract,description	4	0.000
▀ anti-oxidating	abstract	1	0.000
▀ incorporation	abstract	1	0.000
<a href="#">Show all concepts from the description section</a>			

Data provided by IFI CLAIMS Patent Services