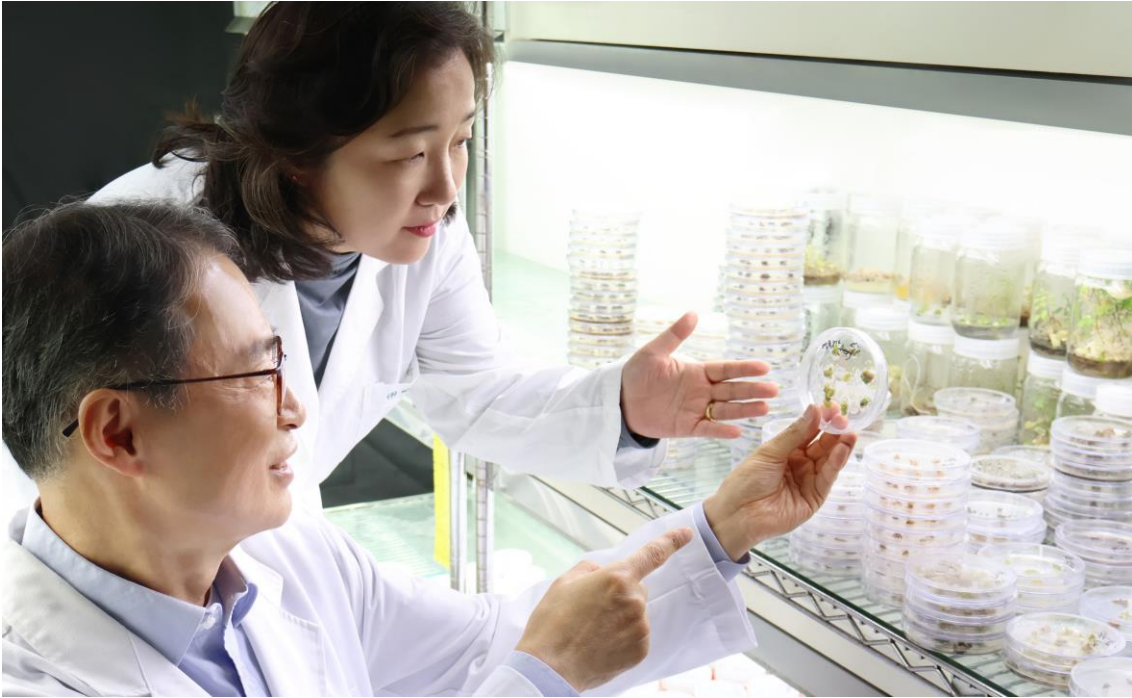




VEGETOLOGY



1. iNGR Overview

2. VEGETOLOGY Introduction

3. Product Presentation

4. Additional Information

1. iNGR Overview

■ Introduction of iNGR's Representative



CEO

Dr. Jaeho Pyee

- Bachelor's and Master's degrees in Microbiology from Seoul National University
- Ph.D. in Molecular Biology from Ohio State University
- Professor in the Department of Molecular Biology at Dankook University
- Expertise in molecular switches of natural materials, cell culture, and biotransformation technologies

1. iNGR Overview

■ The mission of iNGR is

Imagine the Next Green Revolution



The benefits of plants are endless, ranging from solving food, clothing, and shelter to raw materials for treating diseases. I cherished the value of these plants and started researching to find useful materials that protect human health and happiness from plants and to develop technologies that mass-produce them in a sustainable way.

In 2010, Institute of Native Genetic Resources Inc. was established to actively utilize the value while preserving Korea's unique plant genetic resources. Around that time, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization was being adopted in Nagoya, Japan. This marked the emergence of a new issue called the biological resource war, predicting intense competition between nations to secure biological resources. **Over the past decade, the Institute of Native Genetic Resources Inc. has discovered key materials from Korea's unique plant resources that will become future bio-semiconductors in the beauty health industry and secured related production technologies.**

In 2020, adopting the acronym of the former corporate name, INGR, we embraced a new corporate identity (Ingr Inc.) to expand and productize the 'Plant-Derived Natural Bio-material Platform' we had built over the years, both quantitatively and qualitatively. The new name, INGR, also carries the mission of 'Imagine the Next Green Revolution,' encapsulating our commitment to realizing the dream of the next green revolution. **Our aspiration is to produce beauty and health materials of the future in mass quantities, embodying the precious values of plants, in an absolutely clean environment that does not harm nature or the environment, and is free from pollution.**

1. iNGR Overview

■ INGR's Key Technologies

Molecular Switch Technology



A genetic control device embedded in genes is referred to as a molecular switch, and the technology that finely regulates this, enabling precise control of plant metabolism, is known as molecular switch technology.

INGR conducts research exploring molecular switches of natural metabolism genes in various plant cells and regulates them to maximize the concentration of active ingredients.

Plant Cell Culture Technology



The technology of cultivating plant stem cells in an absolutely clean environment, rather than growing or harvesting plants in fields or mountains, is referred to as plant cell culture technology.

INGR has successfully pioneered the world's first technology to mass-produce resveratrol through the cultivation of grape flower cells and has successfully commercialized this achievement.

Bioconversion Technology



The technology that utilizes the metabolic activity of organisms such as bacteria or fungi to convert a specific structure into an entirely new substance or a similar substance is known as biotransformation technology.

INGR's biotransformation technology utilizes plant cells without the need for a chemical synthesis process, producing natural raw materials with superior functionality, while maintaining the most plant-like structure and characteristics.

2.

VEGETOLOGY Introduction

■ The meaning of the brand name



*Harmony of Botany and Science:
Elevating Home Skincare for Your Skin*

Brand Story

Vegetology, Born from Plant Science and Dermatology

In VEGETOLOGY, 'VEGET' signifies plants, and 'OLOGY' represents plant science and dermatology. Similar to how fruit peels protect the pulp, our skin is another organ crucial for safeguarding important bodily functions.

Therefore, Vegetology, for healthy and beautiful skin, blends plant-based natural ingredients scientifically researched through dermatology.

It's not just about mechanically extracting plants; it's about uncovering beneficial components hidden within plants, mass-producing them, validating their efficacy tailored to the skin, and utilizing our technological prowess to make them accessible to many.

This is precisely what Vegetology envisions as the 'Intersection of Plant and Science.'

2.

VEGETOLOGY Introduction



The first hero in the Vegetology lineup Grape Flower Cell Extract

- Trade Name: Vino Chocolate
(The name is given due to the natural color of the ingredients)
- Scientific Name: Vitis vinifera
- INCI Name: Vitis Vinifera (Grape) Flower Cell Extract
- Major Efficacy: Antioxidant, Anti-inflammatory, Anti-aging, Whitening
- Active ingredients: Viniferine, Resveratrol

Product Features:

Viniferine is a high-value substance found in small amounts in the stems and rice of grapevines, exhibiting various physiological activities.

The remarkable effects of Viniferine include:

- Whitening efficacy, 62 times more potent than Vitamin C
- Antioxidant efficacy, 28 times more potent than Tocopherol
- 28.6% inhibition of melanin synthesis
- High skin penetration rate

3.

Product Presentation

Viniferine Skincare: Grape Flower Miracle



Vegetology's Skin Routine

Vegetology mild cleansing foam



Vegetology viniferine water essence



Vegetology viniferine brightening ampoule



Vegetology viniferine brightening cream



Grape Flower Clean Tone Up Suncream SPF50+ PA++++

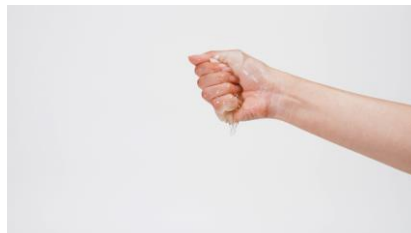


Viniferine Brightening Mask



3. Product Presentation

Vegetology
Viniferine Brightening Mask 25g X 10ea

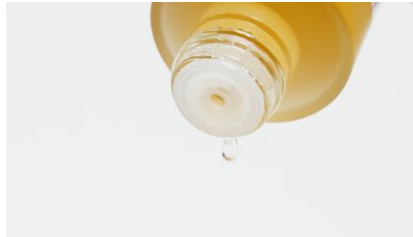


- Patented ingredient containing Viniferine, with 10% Grape Flower Cell Extract
- Dual-functional cosmetic for whitening and wrinkle improvement
- Primary irritation clinical test completed
- All ingredients rated green by EWG for safety
- Eco-friendly cupra sheet that decomposes 100% in the soil
- Strong adhesion, minimizes skin irritation
- Suitable for all skin types
- 10 sheets per set

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Thailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3. Product Presentation

*Vegetology
Viniferine Water Essence 150ml*



- Patented ingredient containing Viniferine, with 10% Grape Flower Cell Extract
- Natural exfoliating ingredient, Allantoin, suitable for use as a toner
- Dual-functional cosmetic for whitening and wrinkle improvement
- All ingredients rated green by EWG for safety
- Primary irritation clinical test completed
- Freshness without stickiness

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Tailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3. Product Presentation

Vegetology
Viniferine Brightening Ampoule 50ml



- Patented ingredient containing Viniferine, with 20% Grape Flower Cell Extract
- Dual-functional cosmetic for whitening and wrinkle improvement
- All ingredients rated green by EWG for safety
- Certified by the Korea agency of Vegan Certification and Services
- Suitable for all skin types
- Primary irritation clinical test completed
- Clinical improvement of skin radiance and luminosity after a single use
- Clinical improvement of skin moisture levels after a single use
- Clinical reduction in eye wrinkle appearance after 4 weeks of use
- Clinical improvement in skin texture after 4 weeks of use
- Clinical skin lifting effect after 4 weeks of use
- Clinical improvement in skin tone after 4 weeks of use
- Clinical enhancement of skin elasticity after 4 weeks of use
- Clinical improvement in skin density after 4 weeks of use

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Thailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3. Product Presentation

Vegetology
Viniferine Brightening Cream 50ml



- Patented ingredient containing Viniferine, with 15% Grape Flower Cell Extract
- KFDA certified whitening ingredient, Niacinamide, with 5% content
- Dual-functional cosmetic for whitening and wrinkle improvement
- All ingredients rated green by EWG for safety
- Certified by the Korean Vegan Certification Institute
- Suitable for all skin types
- Primary irritation clinical test completed
- Clinical improvement in skin tone (brightness) after a single use
- Immediate enhancement of skin radiance after a single use
- Immediate improvement in skin transparency after a single use
- Immediate improvement in skin moisture after a single use
- Reduction in skin melanin after 4 weeks of use
- Improvement in eye wrinkle appearance after 4 weeks of use
- Improvement in skin lifting after 4 weeks of use
- Enhancement of skin elasticity after 4 weeks of use

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Tailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3. Product Presentation

Vegetology
Grape Flower Clean Tone Up Suncream
SPF50+ PA++++



- Patented ingredient containing Viniferine, with 10% Grape Flower Cell Extract
- Powerful UV protection with SPF 50+ and PA++++
- Triple-functional cosmetic for whitening, wrinkle improvement, and UV protection
- Primary irritation clinical test completed
- Natural tone-up effect
- Blocks harmful UV rays, infrared rays, and blue light
- Camellia flower extract provides 57.7% fine dust blocking effect
- Reef-friendly, excluding harmful ingredients to marine environments
- Rigorous Italian Vegan (V-LABEL) certification
- Soft, moisturizing lotion-like texture

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Tailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3. Product Presentation

*Vegetology
Mild Cleansing Foam 150ml*



- 100% naturally derived ingredients
- Mildly acidic cleansing foam that protects the skin
- Contains extracts from four fruits: Japanese apricot, papaya, apple, and grape
- Primary irritation clinical test completed
- All ingredients rated green by EWG for safety
- Dense microbubbles that thoroughly cleanse deep into pores

CPNP (EU)	SCPN (UK)	EAC (Russia)	PMDA (Japan)	Thai-FDA (Tailand)	BPOM (Indonesia)
○	○	○	○	○	In progress

3.

Product Presentation

Vegetology

Viniferine Gift Set : essence+ampoule+suncream



4.

Additional Information

● Countries currently exporting

United States, Russia, Germany, Romania, Thailand, Indonesia, Japan, Spain, Poland, United Arab Emirates, Greece, Vietnam

● Countries in export negotiations

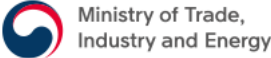
Hong Kong, Malaysia, Taiwan, China, India, Australia, Brazil, France



4.

Additional Information

INGR's molecular switch technology has been recognized as advanced technology by the Ministry of Trade, Industry, and Energy



Ministry of Trade, Industry and Energy



첨단기술·제품 확인서

확인번호 : 제2024-03호
관련고시 : 산업통상자원부고시 제2022-36호
기관명 : (주)아이엔지알
대표자명 : 피재호
주소 : 경상북도 안동시 풍산읍 산업단지길 88, 3층 305호

귀사의 [친환경 조절인자 활용 식물 기능성 생리활성 물질 함량 증진 '분자스위치' 기술은 『산업발전법』 제5조 및 『첨단기술 및 제품의 범위』 고시의 '바이오 분야 - 기능성 생리활성 신소재 및 생산기술'에 해당됨을 확인합니다.

2024년 2월 8일

산업통상자원부장관



아이엔지알, 바이오 신소재 생산을 위한 첨단기술 인증 획득

머니투데이 | 고은은 기자 | 2024.02.16 16:13
<https://news.mt.co.kr/mtview.php?no=2024021610215965914&type=1> 기사주소 복사

주식회사 아이엔지알(대표 피재호, INGR)이 식물 기능성 생리활성 물질의 함량을 증진시키는 혁신적인 '분자스위치' 기술에 대해 산업통상자원부로부터 '첨단기술·제품 확인서'를 받았다고 발표했다. 이 인증은 기술의 집약성, 혁신 속도 및 경제적 파급효과를 기준으로 첨단기술을 보유한 기업에 부여되며, 아이엔지알의 기술력과 시장 내 비교우위를 공식적으로 인정받는 것을 의미한다.



사진제공=아이엔지알

아이엔지알은 지속 가능한 방법으로 식물 세포 유래 천연 바이오 소재 및 기술을 개발하며 '차세대 녹색 혁명'을 목표로 연구 개발에 전념해 왔다. 그들의 '분자스위치' 기술은 식물 조직에서 고기능성 생리활성 물질의 함량을 최대화 하여 신소재를 대량 생산할 수 있는 첨단기술로, 이를 통해 신규 시장 수요를 창출하고 고부가가치 제품을 개발하는 데 기여했다.

이 기술의 성공적인 적용 사례로, 포도꽃 세포에서 발견되는 '비니페린'과 발아귀리에서 추출되는 '아베난쓰라마이드' 성분의 함량을 극대화시켜, 이를 활용한 기능성 화장품과 식품을 개발하여 시장에 성공적으로 출시했다. 비니페린은 탁월한 항산화 및 미백 효과를, 아베난쓰라마이드는 다이어트 및 지체 예방에 효과적인 것으로 알려져 있다. 이들 성분의 대량생산은 기존에 높은 비용과 환경적 부담이라는 장벽을 극복한 결과이다.

피재호 대표는 "분자스위치 기술을 통해 우리의 자연에서 발견되는 귀중한 대사물질을 탐색하고 개발하는 연구를 지속할 것이며, 이와 같은 고부가가치 친환경 기술 개발에 더욱 주력할 것"이라며 포부를 밝혔다.

아이엔지알은 이미 이 기술로 개발된 '배지톨로지 비니페린 스킨케어' 제품을 2022년에 출시하여 미국, 독일, 태국 등 해외 10개국에 성공적으로 수출하고 있다. 이는 회사의 기술적 우수성과 시장에서의 경쟁력을 입증하는 사례이다.

4.

Additional Information

Influencer marketing

Collaboration with a beauty/fashion influencer with 100,000 followers, @leey.zin.



4.

Additional Information

Popup store at Hyundai Department Store

Operated a popup store at the clean beauty specialty store 'Be CLEAN' located in Hyundai Department Store Mokdong branch



4.

Additional Information

<https://www.youtube.com/watch?v=xekCckmbcwk&t=3s>

PPL

SBS funE channel's program "All That Muse" featured actress U-IE using the Vegetology Brightening Ampoule



4.

Additional Information

Winner of the 2023 Consumer Satisfaction Award

Selected as a promising service excellence company, recognizing the discovery of outstanding enterprises and the realization of customer satisfaction

아이엔지알 '베지톨로지', 2023 소비자가 뽑은 서비스고객만족대상 수상

머니투데이 | 김재련 기자

2023.04.27 20:21

<https://news.mt.co.kr/mtview.php?no=2023042711025939002&type=1>

기사주소 복사

아이엔지알(대표 피재호)의 기능성화장품 브랜드 '베지톨로지(Vegetology)'가 27일 서울 중구 프레스센터에서 열린 머니투데이 '2023 소비자가 뽑은 서비스고객만족대상'에서 화장품 부문 대상을 수상했다.



아이엔지알 피재호 대표(오른쪽)가 '2023 소비자가 뽑은 서비스고객만족대상' 수상 후 머니투데이 정희경 대표(왼쪽)와 함께 기념촬영을 하고 있다./사진=김휘선 기자 hwijpg@

'소비자가 뽑은 서비스고객만족대상'은 차세대 각 분야 유망서비스 우수기업을 발굴하고 고객만족을 실현하는 기업을 선정하여 수여하는 상이다.

아이엔지알은 희귀 천연 기능성 바이오 소재인 비니페린(Viniferine)을 다량 함유한 베지톨로지(Vegetology) 5종 제품을 생산 및 판매하고 있다. 30년 이상 천연 기능성 바이오 소재를 연구한 단

4.

Additional Information

Exhibited at the SANA International Exhibition of Natural Products 2023



Vegetology Suncream, certified with the Italian V Label for organic and natural products, was showcased



4.

Additional Information

SNS

[Instagram]

@vegetologybeauty__official
 @vegetologybeauty_global

[Youtube]

@vegetology2797
<https://www.youtube.com/@vegetology2797>

[Facebook]

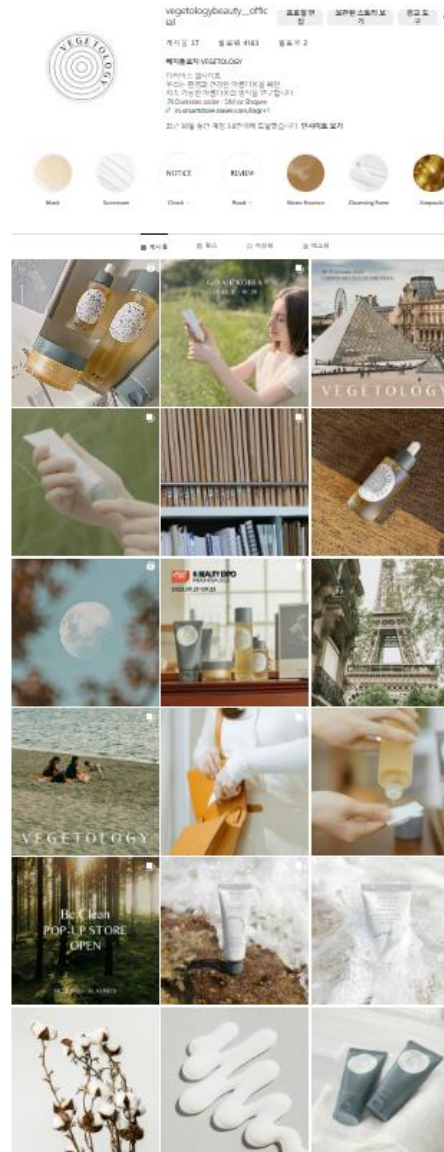
<https://www.facebook.com/profile.php?id=100091487073393>

[Tictok]

@vegetology_official

[Wechat]

Vegetology





VEGETOLOGY

Contact Point

Address

B-509, 338, Gwanggyojungang-ro,
Suji-gu, Yongin-si, Gyeonggi-do

Export and Business Transactions

Jinseok Lee (VP)

+82 10-6283-8113

jinseok.lee@ingr.kr