Sustainable Use of Biological Resources

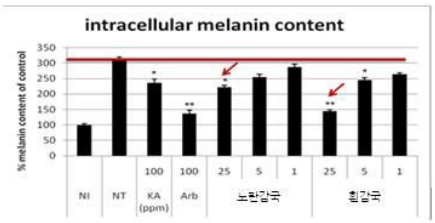
1. Research on biodiversity assets

☐ Discovery of whitening effects in white mother chrysanthemum (Chrysanthemum indicum var. albescens), a native rare species

Amorepacific restored white mother chrysanthemum, a native rare species, and conducted research on its efficacy. As a result, we discovered that its whitening efficacy is twice as effective as yellow mother chrysanthemum and four times as effective as arbutin and obtained a certification for its use as a whitening functional material.

Amorepacific restored white mother chrysanthemum, a rare species native to Korea and known to be effective in traditional Korean texts such as Dongeuibogam. Through research on its efficacy, Amorepacific discovered that white mother chrysanthemum has whitening efficacy twice as effective as yellow mother chrysanthemum and four times as effective as arbutin and can control the manifestation of liver spot-related genes. Accordingly, Amorepacific conducted research on the cultivation technology of white mother chrysanthemum and how to use it as a whitening functional material and obtained a certification for its use as a whitening functional material from the Korean Ministry of Food and Drug Safety (KFDS). Amorepacific announced these achievements at the International Biotechnology Symposium and Exhibition (IBS) 2012 and obtained two patents. We also used the highly effective white mother chrysanthemum as a key whitening functional ingredient in Hanyul Chrysanthemum Powder Serum.

This research is an example of the combination of traditional Oriental medicinal knowledge passed down over generations and modern science and technology. It is appraised as a success case of developing a whitening substance that is functionally superior to conventional materials.



Whitening efficacy twice as effective as yellow mother chrysanthemum and four times as effective as arbutin

Final verification of whitening efficacy through a clinical test

※ Restoration of rare varieties of native white mother chrysanthemum
Refer to pdf (Conservation of Biodiversity – restoration of rare varieties of native species)

Sustainable Use of Biological Resources

1. Research on biodiversity assets

☐ Discovery of the value of rare varieties of native beans

Amorepacific succeeded in discovering that dolkong, a keystone species, contains the largest amount of anti-oxidant substances through its research on ingredients and efficacy for skin after restoring and proliferating rare varieties of beans native to Korea.

In order to strengthen the competitiveness of Korean beans, considered one of the three major heritage materials, and to conserve biodiversity, Amorepacific restored and proliferated rare varieties of native beans. We also examined the beans with value for cosmetics among the rare varieties of native beans. Ten species were selected through a basic efficacy survey, among which we confirmed that napttegikong, horangikong, and saeal have anti-oxidant and anti-aging substances that are not found in common soy beans. We also discovered that dolkong contains various flavonoids and the largest amount of anti-oxidant substances.

Amorepacific succeeded in developing new bean ingredients that have distinctive features and enabled high value-added cosmetic applications of beans compared to their conventional use as food resources. We also created Beauty Bean Garden in Youngwol-gun, Gangwon-do and plan to continue our research on cultivation methods and efficacy to produce organically grown clean and pure beans.

Napttegikong

Horangikong

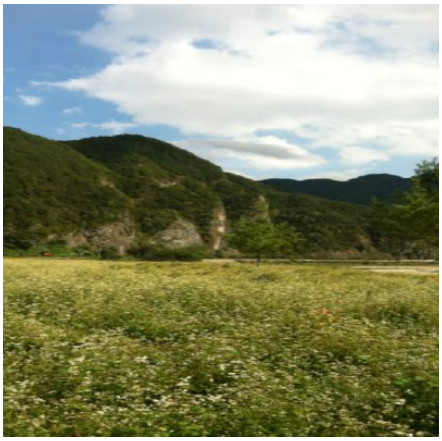
Saeal

Dongkong

※ Restoration of rare varieties of native beansà
Refer to pdf (1. Biodiversity Conservation – restoration of rare varieties of native species)

2. Creation of AMORE Botanical Garden and Beauty Bean Garden

☐ Creation of Beauty Bean Garden



Amorepacific signed an MOU with Youngwol-gun in Gangwon-do, Gangwon Techno Park, and Grace of Nature to create a farm and a mass production complex for sustainable research on rare varieties of native beans in September 2013. The MOU is mainly aimed at creating Beauty Bean Garden in the pristine region around the Dong River to grow high quality rare varieties of native beans in a large scale and continue joint research to use the beans as ingredients for cosmetics. Rare varieties of native beans, which have been restored and proven to have outstanding efficacy by Amorepacific, will be grown in a large scale through appropriate methods, including organic farming, in areas around Youngwol-gun. Going forward, we also plan to build a bean museum with Youngwol-gun to display the history of Korean beans, their heritage resources, and applications and contribute to the development of the local community.

☐ Creation of AMORE Botanical Garden

AMORE Botanical Garden was built within the Osan Beauty Campus in Korea for the hands-on cultivation and study of medicinal plants beneficial to the skin. Over 200 species of Oriental medicinal plants and herbs are being cultivated in the garden.
In March 2013, Amorepacific signed an MOU with Osan City and the Gyeonggi-do government to create the AMORE Dullegil path, which leads to the botanical garden, and share the botanical resources with the local communities.

3. Building a Biodiversity Research Network

☐ Sponsorship of the Biodiversity Foundation

The Biodiversity Foundation is a non-profit organization established to conduct research on wild flora and fauna, disseminate the idea of respecting all living creatures, and develop and provide technologies necessary for the conservation of nature. Amorepacific became an official sponsor for the establishment of the Foundation, which was launched through a ceremony in May 2013.

As for specific activities, the Foundation plans to 1) participate in the Roots and Shoots Campaign, which originated from the worldwide environmental movement under Dr. Jane Goodall; 2) support projects to conduct research and conserve wild flora and fauna, including the ecology of wild primates; 3) engage in consulting and cooperation projects for sustainable management companies; 4) initiate environmental art and participatory programs based on the convergence of science and artistic expression; and 5) develop international exchanges programs, including joint projects with the international chapters of the Jane Goodall Institute (JGI).

Amorepacific has launched the Roots and Shoots Campaign through one of its brands and plans to continue its biodiversity conservation activities in various forms, including sustainable cooperation and partnerships with research institutions and local communities.

Primera, a cosmetics brand by Amorepacific, donated some of the proceeds from its sales and the funds raised through the environmental protection campaign Primera Friends to the Biodiversity Foundation. The funds will be used toward the Foundation's academic research on animals, plants, and the environment and on biodiversity conservation activities.

☐ MOU with the National Institute of Biological Resources

The National Institute of Biological Resources (NIBR) is a national institution established to secure, conserve, and research biological resources in Korea. Amorepacific and NIBR signed the first private-government agreement in the area of biodiversity and have initiated joint research projects to protect endangered plant species since 2011.

☐ Hosting the Eco-Science Forum

Amorepacific held the Asia Women Eco-Science Forum 2013 jointly with Korea Federation of Women's Science and Technology Associations (KOFWST). Themed on "biodiversity and sustainable development," this forum brought together some 200 professors and young and rising female scientists from about 10 Asian countries, including Korea, Japan, China, Thailand, India, Taiwan, Malaysia, Singapore, and Indonesia. It was a significant occasion to review the biodiversity status of various countries in Asia and seek development directions for a better future.