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Synergistic Whitening Effect of SAKURA Extract and Glutathione Confirmed!
~Patent Filed for a Novel Combination for a Whitening Approach~

We have recently discovered a **new synergistic whitening effect between SAKURA EXTRACT** a product launched in 2010 with excellent anti-glycation properties made from the symbolic Japanese cherry blossom, **and Glutathione**. **We have filed a patent for this novel combination technology.**

■ About Glutathione

Glutathione is a tripeptide composed of three amino acids: glutamic acid, cysteine, and glycine. It possesses strong antioxidant properties and is globally recognized as a whitening ingredient due to its high tyrosinase*1 inhibitory activity.
In Japan, glutathione-containing cosmetics have become increasingly popular, and they are also used in whitening cosmetic products in other countries, particularly in Southeast Asia. While classified as a "pharmaceutical" in Japan, glutathione is allowed as a food ingredient in countries like Thailand, the Philippines, and Malaysia. In these markets, it is widely used in beverages and supplements, gaining popularity as a whitening ingredient.

■ Research Highlights

To measure the whitening effect, we evaluated the effects of a powdered SAKURA EXTRACT (SAKURA EXTRACT-P) and glutathione using a tyrosinase inhibition assay. The following effects were confirmed:

- ✓ **The inhibitory rate was approximately 10% for SAKURA EXTRACT-P alone or glutathione alone. However, when combined, the inhibitory rate increased to 35%, confirming a synergistic effect.**
- ✓ **The research scientifically demonstrated the usefulness of SAKURA Extract as a supporting ingredient to enhance the whitening effects of glutathione.**

Based on the evidence obtained from this research, **we have filed a patent for this novel combination of Cherry Blossom Extract and glutathione for a whitening technology.**

■ Future Developments

This research shows that SAKURA EXTRACT is a strong partner ingredient for the potent whitening agent, glutathione. Going forward, we will propose the combined use of SAKURA EXTRACT and glutathione to domestic and international food and cosmetic manufacturers. We will also actively promote the combination in overseas markets, such as Thailand, the Philippines, and Malaysia, where glutathione can be used as a food ingredient.

■ Glossary

*1 Tyrosinase:
a key enzyme involved in melanin pigment production, converting tyrosine into melanin. By inhibiting the activity of this enzyme, it is possible to suppress the overproduction of melanin, which causes blemishes and dullness. Therefore, it is a widely used metric for measuring the effectiveness of whitening ingredients.

■ About SAKURA EXTEACT


The Japanese wild cherry

We have been researching sakura—a symbol of Japanese beauty alongside Mt. Fuji—for over 15 years. We launched SAKURA EXTEACT in 2010 as a key ingredient for anti-aging, primarily for its anti-glycation properties.

In a joint study with Kyoto Pharmaceutical University, we were the first in the world to discover that cherry blossoms contain the phenylpropanoid glycoside caffeoyl glucose (1-caffeoyl-O-β-D-glucopyranoside) and the flavonoid glycoside quercetin glucoside (quercetin 3-O-β-D-glucopyranoside). We further proved that an extract containing these components has anti-glycation effects, such as suppressing the production of AGEs—a cause of wrinkles and sagging—and increasing collagen lattice formation in fibroblasts. (Japanese Patents 5878023 and 5792844). More recently, the extract was also certified and registered as a "New Food Ingredient" in China.

We also launched our second sakura-themed ingredient, Sakura Lactic acid bacteria (Sakulora™), in October 2024. After many years of screening, this new product was developed from a lactic acid bacterium (Lacticaseibacillus paracasei shidare strain) we discovered in a weeping cherry tree in Japan. We found that it has excellent physiological functions, including: 1) improved intestinal health and bowel movements, 2) immune-boosting effects, 3) cosmetic benefits, and 4) promotion of equol production and suppression of EMT (which contributes to menstrual discomfort). We have filed a patent application for the EMT suppression effect and the synergistic effect of its combination with SAKURA EXTEACT to promote collagen synthesis gene expression. The ingredient has received strong support from many customers as a material for femcare.

Sincerely,
Oryza Oil & Fat Chemical Co., Ltd.