

July 30, 2025

## **Telomere-Extending Effects of SAKURA EXTEACT and Fisetin, Filed Patent Application as a New Approach to Anti-Aging**

We are pleased to announce a successful discovery of **telomere-extending effects** of our **SAKURA EXTEACT**. Launched in 2010 and made from the symbolic cherry blossoms of Japan, this extract is well-known for its excellent anti-glycation properties. We have also confirmed a similar effect in the natural flavonoid Fisetin \*1, which has recently garnered attention for its wide range of health benefits. **Based on these findings, we have filed a patent application.**

### ■ About Telomeres

Telomeres are like protective caps at the ends of chromosomes in a cell's nucleus. They shorten with each cell division. When telomeres become too short, cell division stops, leading to cell aging and death. For this reason, they are often called the "biological clock." Suppressing the shortening of telomeres or increasing their length is a promising approach for anti-aging at a cellular level.

### ■ Research Highlights

In a study using skin (dermal) cells, we evaluated the telomere-extending effects of both powdered SAKURA EXTEACT (SAKURA EXTEACT-P) and Fisetin. We used high-purity (over 95%) Fisetin refined from the Japanese wax tree (*Toxicodendron succedaneum*) for the test. The results confirmed the following:

- **SAKURA EXTEACT-P showed a significant telomere-extending effect (1.5 times the control group).**
- **Fisetin also showed a significant telomere-extending effect.**
- **The findings scientifically demonstrate the usefulness of these materials as next-generation anti-aging ingredients at the cellular level.**

Based on the evidence obtained, **we have filed a patent application for a new anti-aging approach that utilizes SAKURA EXTEACT and Fisetin.**

### ■ Future Developments

**This research adds a new anti-aging mechanism—telomere extension—to the well-established anti-glycation properties of SAKURA EXTEACT.** Going forward, we will actively promote collaborations with partners in the food and cosmetics industries. By combining the emotional value of cherry blossoms with their scientifically proven effects, we aim to create new value and bring our innovative anti-aging products to the global market.

### ■ Glossary

\*1 Fisetin:

A natural flavonoid found in various fruits and vegetables, including strawberries, smoke trees, and wax trees. It has recently received attention for its diverse health benefits, with reported antioxidant, anti-inflammatory, and neuroprotective effects.

### ■ About SAKURA EXTEACT

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.



The Japanese wild cherry

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 (*Lactocaseibacillus 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.