

Comparison of Phytochemicals Ingredient Contents According to Flower Color of *Abeliophyllum distichum* Nakai

Jeong-Yun Mun¹⁾, Tae-Won Jang²⁾, Ji-Soo Choi³⁾, Jong-Yun Im¹⁾, Jae-Ho Park⁴⁾*

¹⁾Student, Pharmaceutical Science, Jungwon University, 28027, ²⁾Ph.D student, Medicinal Plant Resources, Andong National University, 36729, ³⁾M.S student, Medicinal Plant Science, Jungwon University, 28027, ⁴⁾Professor, Medicinal Plant Science, Jungwon University, 28027

ABSTRACT

Abeliophyllum distichum Nakai belonging to Oleaceae is only species in Korean endemic genus, *Abeliophyllum*. *Abeliophyllum distichum* (AD) is divided into various types according to flower shape and color. AD is known to have various colors such as white, pink, and ivory. Recently, light yellow flowers have been registered as new varieties (Okhwang 1ho). To date, various ecological and morphological studies on AD have been carried out, but no studies have been made on the phytochemicals and activities according to various traits. In this study, we analyzed the phytochemicals and antioxidative activities of from four kinds of flowers (white, pink, ivory, light yellow) in full bloom. The contents of phytochemicals such as chlorogenic acid, Hirsutrin, Rutin, Acteoside and Isoacteoside were analyzed by HPLC. Antioxidant activity was evaluated by DPPH, ABTS. As a result, the content of each substance varied according to the flower color. These results will provide basic data for evaluating the usefulness of genetic resources in Korea and developing new functional materials in preparation for the Nagoya Protocol.

*(Corresponding author) E-mail: parkjh@jwu.ac.kr Tel: +82-54-830-8614

** (Acknowledgement) This research was supported by Basic Science Research Program through the National Research Foundation of Korea(NRF) funded by the Ministry of Education(NRF-2016R1D1A1B03934869)