Antioxidant and Tyrosinase Inhibition Activities in the Persicae Semen Extracts

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Prunus persica (L.) BATSCH (Rosaceae) seeds are well known as a traditional folk medicine (Persicae Semen; Tounin, Taoren in Chinese) in China, Korea, and other Asian countries. They are frequently used as an ingredient in a variety of Chinese medicine prescriptions, particularly those used to treat women's diseases. The aim of the present study was to examine the antioxidant and tyrosinase inhibition activities of Persicae semen extracts. The crude ethanol extracts were used in this study. Antioxidant activities were measured by both 1, 1-diphenyl-2-picrylhydrazyl radical (DPPH') scavenging and 2,2-azino-bis (3- ethylbenz-thiazoline-6-sulfonic acid) (ABTS') decolourisation methods. To further evaluate the effect of Persicae semen extracts on tyrosinase inhibition, in vitro tyrosinase inhibition assays was employed. Results shown that the tyrosinase inhibition activities of Persicae semen extracts (IC₅₀, 0.43 mg/mL) were stronger than licorice extracts (IC₅₀, 0.76 mg/mL).

In conclusion, the *Persicae semen* ethanol extracts had the potent activities in the antioxidant and tyrosinase inhibition assays. It suggested that *Persicae semen* had the potential for cosmetic applications.

Key words: Persicae semen, ethanol extraction, antioxidant, tyrosinase inhibition