

Comparison Study of HPLC Profiles and Antioxidant Activities of Traditional Chinese Herb *Abri cantoniensis* and *Abri mollis*

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Abstract—*Abri cantoniensis* (AC) is regarded as a potent folk medicine for jaundice, hepatitis for long history worldwide. *Abri mollis* (AM) is an alternative species of AC. In the present study, the high performance liquid chromatography (HPLC) profile and antioxidant activities of these two species were compared. With the established HPLC fingerprint, 20 batches of AC and AM were efficiently distinguished. The antioxidant activities against DPPH radical of 20 batches of AC and AM were compared, and AC showed generally stronger antioxidant activities than AM, with IC₅₀ value ranging from 14.19 to 65.06 µg/mL. Extract of AC was further separated into 4 fractions by serial extraction. Only ethyl acetate fraction (EF) and n-butanol fraction (BF) showed strong DPPH radical scavenging activities, with IC₅₀ value of 48.32 ± 4.70 and 62.72 ± 3.03 µg/mL, respectively. These two fractions also showed potent cellular antioxidant activities (CCA) at concentration around 100 µg/mL in cell model.

Keywords—Antioxidant activities, HPLC fingerprint, Quality control, Traditional Chinese herb

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