Comparison and Analysis of Antioxidant Capacity of *Hypericum*¹

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Abstract

This study mainly investigates the differences between different varieties of *Hypericum* in terms of antioxidant capacity and antioxidant active ingredient of ethanol extract by measuring the content of total phenolic compounds \(\) total flavonoid and determine respective ORAC, DPPH radical scavenging and reducing power of 11 varieties. The results show the antioxidant capacity of ethanol extract from HPD94002 is outstandingly superior than others in respects of ORAC (31.5 \(\text{µmol} \) Trolox equivalent) \(\text{DPPH}(93.5\%) \) reducing(1.122) and total phenolic content (0.86 \(\text{mg}\cdot\)\gargentering-1gallic acid equivalent dry weight). In terms of total flavonoid (0.52 \(\text{mg}\cdot\)\gargentering-1 quercetin equivalent dry weight), HJA95001 has highest content. In conclusion, the analysis of this study shows that the antioxidant capacity has positive correlation with total phenolic content and negative with total flavonoid contents.

Key words: *Hypericum*, Oxygen radical absorbance capacity (ORAC), diphenyl- picrylhydrazyl (DPPH) radical scavenging, Reducing power, Total Phenolic, Total Flavonoid.

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