

## Antioxidant Activities of Water- and Ethanol-Extracts of Glasswort (*Salicornia herbacea*)

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*Salicornia herbacea* is a halophyte inhabited the tidal silts in the west- and south-coastal area of South Korea. It accumulates a great amount of salt, Mg, Ca, Fe, and K and thus contains high levels of minerals in its body. The plant is one of materials of vegetable salad in Europe. Furthermore it has long been a functional food or medicinal plant in many countries. However, the biological and dietary potentials of *S. herbacea* are not fully understood. The present study is to evaluate antioxidant abilities of water- and ethanol-extracts of *S. herbacea*. The antioxidant activity of aqueous-organic extracts was determined using free radical 2,2-diphenyl-1-picryl-hydrazyl scavenging, DPPH method<sup>1)</sup>. There were little differences in the activities between water- and ethanol-extracts. Both of the extracts showed a slightly lower activity in free radical scavenging than well-known antioxidants such as ascorbic acid, BHT, glutathione, etc.<sup>2)</sup>. Although the antioxidant activities of *S. herbacea* extracts proved to be comparable to some of well-known antioxidants, possible reasons for further study do exist

1. Gao Z, Huang K, Yang X, Xu H. (1999), Free radical scavenging and antioxidant activities of flavonoids extracted from the radix of *Scutellaria baicalensis* Georgi., *Biochim Biophys Acta.* **1472**(3), 643-650.
2. Joseph F. W, Michael R. L. (2003), Protection against ionizing radiation by antioxidant nutrients and phytochemicals, *Toxicology* **189**, 1-20.