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Antioxidant activities of aqueous extract edible seaweeds from the northern coast of the Sea of Japan**Tabakaeva Oksana and Anton Tabakaev**
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The aqueous extracts of four marine algae from the coastal areas in North Primorye, Russia, were prepared by boiling dried and frozen seaweed powder in water for 1 h and by autoclaving each sample at 120 °C for 1 hour. They were then freeze-dried and evaluated for their antioxidant activities. Boiling extracts of the seaweeds, except *C. flagyl*, were found to have higher total phenolic contents than those obtained from the autoclave method. The antioxidant results also showed that O₂^{•-} scavenging activity existed only in the boiling extracts of *C. flagyl*, *M. greviller* and *G. verrucosa*. In DPPH and OH[•] assays, however, almost all the boiling extracts were less active than the autoclave ones. Among the four alga species, *S. miyabei* was the most active. Both extracts of this seaweed had the highest total phenol content and also displayed the strongest DPPH and OH[•] inhibitory activities. A strong positive-correlation between the antioxidant potency and total phenol content of the autoclave extracts was found, while for the boiling extracts such relation was very weak. This result thus reflected that in addition to the phenolic compounds, there might be some other active components present in these extracts involved in the antioxidant activity. The work was sponsored by the Russian Science Foundation (Project No. 14-50-00034).

Biography

Tabakaeva Oksana is a Doctor of Technical Sciences, Professor of the Department of Food Science and Technology, School of Biomedicine, Far Eastern Federal University, Russia. She has been working at the university since 1997. She is the author of eight patents, five textbooks and over 150 scientific publications. Her main scientific interests include study of algae and other seafood, biotechnology food and functional food.

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