

INTISARI

Pengaruh Lama Perendaman dalam Air pada Suhu 85°C terhadap Aktivitas Antioksidan, Antidiabetes dan Tingkat Penerimaan Konsumen Teh Rumput Laut *Sargassum crassifolium*

Rumput laut *Sargassum crassifolium* mempunyai bioaktivitas sehingga berpotensi sebagai sumber fungsional, salah satunya dibuat menjadi teh rumput laut. Teh rumput laut memiliki kelemahan yaitu kurang disukai konsumen karena adanya bau amis. Salah satu cara mengurangi bau amis yaitu dengan perendaman dalam air $\pm 85^{\circ}\text{C}$ dan penambahan kayu manis. Penelitian ini bertujuan untuk mengetahui pengaruh lama perendaman dan penambahan kayu manis terhadap karakteristik dan tingkat penerimaan konsumen teh rumput laut *Sargassum crassifolium*. Teh rumput laut dibuat dengan cara merendam dalam air $\pm 85^{\circ}\text{C}$ selama 0, 4, 8, 12, dan 16 menit kemudian dipotong-potong lalu disangrai dan ditambah bubuk kayu manis. Teh rumput laut *Sargassum crassifolium* dianalisis meliputi: kadar air, total fenol, aktivitas antioksidan metode *2,2-Diphenyl-1-picrylhydrazyl* (DPPH) dan metode *Ferric Reducing Antioxidant Power* (FRAP), aktivitas penghambatan α -glukosidase dan uji hedonik. Hasil penelitian menunjukkan bahwa lama perendaman berpengaruh terhadap kadar air, total fenol, aktivitas antioksidan, penghambatan α -glukosidase, dan tingkat penerimaan konsumen. Perlakuan terbaik yaitu lama perendaman 16 menit dengan karakteristik kadar air $3,35 \pm 0,41\%$, total fenol $68,63 \pm 0,67$ mg GAE/g, aktivitas penghambatan DPPH $55,99 \pm 1,01\%$, nilai FRAP $116,97 \pm 1,89$ $\mu\text{M/g}$, penghambatan enzim α -glukosidase $55,67 \pm 0,36\%$, dan nilai hedonik parameter aroma, rasa, warna, kenampakkan, dan keseluruhan secara berturut-turut yaitu $4,29 \pm 1,18$; $4,59 \pm 0,85$; $4,18 \pm 0,98$; $4,43 \pm 0,91$; $4,37 \pm 0,98$.

Kata kunci: antidiabetes, antioksidan, perendaman, teh rumput laut, sensori.

ABSTRACT

The Effect of Soaking Time in Hot Water at 85°C on Antioxidant, Antidiabetic Activity and Consumer Acceptance of *Sargassum crassifolium* Seaweed Tea

Seaweed *Sargassum crassifolium* has bioactivity so that it has the potential as a functional source, one of which is made into seaweed tea. Seaweed tea has a weakness that is less liked by consumers because of the fishy smell. One way to reduce the fishy smell is by soaking in water at $\pm 85^{\circ}\text{C}$ and addition of cinnamon. The purpose of this research to know the effect of soaking time and addition of cinnamon powder for the characteristics and level consumers acceptance of brown seaweed *Sargassum crassifolium* tea. Seaweed tea is made by soaking in water at $\pm 85^{\circ}\text{C}$ for 0, 4, 8, 12, and 16 minutes then cut into pieces and then roasted and added with cinnamon powder. Brown seaweed *Sargassum crassifolium* tea analyzed includes moisture content, total phenol, antioxidant activity of the 2,2-Diphenyl-1-picrylhydrazyl (DPPH) method and the *Ferric Reducing Antioxidant Power* (FRAP) method, α -glucosidase inhibitory activity and hedonik test. This research result to show that the soaking time take effect on the water content, total phenol, antioxidant activity, α -glucosidase inhibition, and level of consumer acceptance. The best treatment was soaking for 16 minutes which is obtained from the water content of $3,35 \pm 0,41\%$; phenol content of $68,63 \pm 0,67$ mg GAE/g ; % inhibition DPPH of $55,99 \pm 1,01\%$; FRAP value of $116,97 \pm 1,89$ $\mu\text{M/g}$; the inhibitory activity of the α -glucosidase was $55,67 \pm 0,36\%$; and the hedonic value of the parameters for aroma, taste, color, appearance, and totality hedonic successively was $4,29 \pm 1,18$; $4,59 \pm 0,85$; $4,18 \pm 0,98$; $4,43 \pm 0,91$; $4,37 \pm 0,98$.

Keywords: antidiabetic, antioxidants, soaking, seaweed tea, sensory.