Characteristics and Antioxidant Activity of Dried Purwoceng (Pimpinella Alpina Molk) as Functional Food to Increase Body Immune

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Abstract	Purwoceng (Pimpinella Alpina Molk.) is a native plant of Indonesia. This plant contains potential antioxidants in the form of alkaloids, glycosides, coumarins, triterpenoids-steroids, and saponins. These bioactive compounds are useful as aphrodisiacs, diuretics, and tonics (capable of increasing the body's immune system). Purwoceng-based functional drinks will go through a drying process. This process will result in a decrease in antioxidants in purwoceng. To reduce the loss of antioxidants contained in purwoceng, proper drying is the main key in producing purwoceng-based functional beverage products. The aims of this study were: (1) to determine the characteristics and antioxidant activity of purwoceng during drying to produce functional drinks to increase the body's immune system. and (2) obtaining a drying formula for dried purwoceng products to produce functional drinks to increase the body's immune system. This research method is experimental. This research was divided into four stages, namely: (1) determination of the formulation temperature for drying purwoceng, (2) physico-chemical testing after drying, (3) reducing the dimensions of dried purwoceng, and (4) physico-chemical testing after changing the dimensions of dried purwoceng. . The experimental design used in this study was a factorial Completely Randomized Design (CRD) with 2 factors. The first factor is the drying temperature of purwoceng, while the second factor is whole and counting. Both factors consist of 3 levels with 3 replications so that there are a total of 27 experimental combination units. Observational data were analyzed by analysis of variance (F test) and if they were significantly different, it was continued with the DMRT test at an accuracy level of 5%. The results showed that the best moisture content was the water content of dry purwoceng drying with the lowest value at a temperature of 70? (T4) with a value of whole pieces (P0) 27.95 and chopped pieces (P1) with a value of 26.53. The best pH for drying purwoceng tea is at a temperature of 70? (T4) with whole pieces (P0) getting a value of 6.85, while chopped pieces (P1) get a value of 6.77. The best yield in purwoceng drying is the least yield at 70? (T4). The best antioxidant test results are those that have the highest value at a temperature of 70? (T4). The best test for phenol content is with the highest value at a temperature of 70 (T4). The organoleptic test on dried purwoceng steeping with crystalline coconut sugar got the best values, including: color test with a value of 5, fragance test with a value of 5, and taste test with a value of 4.84.
Publisher Name	Institute of Computer Science (IOCS)
Publish Date	2023-02-28
Publish Year	2023
Doi	DOI: 10.35335/jbst.v12i1.3646
Citation	
Source	Journal Basic Science and Technology
Source Issue	Vol 12 No 1 (2023): February: Basic Science and Technology
Source Page	1-11
Url	https://iocscience.org/ejournal/index.php/JBST/article/view/3646/2702
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