## Karakteristik Fisik, Kimia dan Organoleptik Beras Analog dari Rumput

Laut, Porang, dan Kimpul (Physical, Chemical, and Organoleptic Characteristics of Analogue Rice Made from Seaweed, Porang, and Kimpul) Agung Wahyono, S.P., M.Si., Ph.D (Pembimbing I)

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## ABSTRACT

Analog rice is another name for artificial rice in the form of granules rice and it can be made from non-rice materials. Analog rice which is rich in fiber can increase functional facts, one of which uses seaweed. Eucheuma cottonii seaweed is high in fiber and has benefits in the food sector because it produces primary metabolites of hydrocolloid compounds called carrageenans as a balance regulators. Porang tubers (Amorphophallus muelleri Blume) contains high nutrition like glucomannan, including a source of soluble fiber, which has the ability to form a gel and can have a function as an elastic, texture-forming, waterbinding. The kimpul tuber (Xanthosoma sagittifolium) is used as a raw material for analog rice because it contains high carbohydrates. This study aimed to maximize the use of seaweed flour, porang flour, and kimpul flour as staple foods substitues rich in fiber. This research used Randomized Block Design (RBD) with one factor, which is the proportion of porang flour of 2%, 3%, 4%, 5%, and 6% with 3 replications. The results of this study showed that proportion of 6% porang flour showed that rehydration ratio (5.67), yield (14.59%), lightness (L) (28,07), vellowness (b) (10.43), KPA (875.85%), water content (7,07%), ash content (12.57%), crude fiber (6.45%), hedonic after rehydration (4.05 color; taste 4.00; texture 4,02; appearance 4.23), and hedonic quality after rehydration (whiteness 3.15; texture 3.50; taste 3.15; stickiness 2.93; adhesiveness 3.00).

Key words: Analog Rice, Kimpul, Porang, Seaweed