

## **DEVELOPMENT MASK POWDER RICE**

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### **ABSTRACT**

This study aims to develop rice powder masks, rice powder masks carried out testing based on organoleptics, and consumer responses to rice powder mask products with the addition of egg white. This research is research and development with a 4D model. The descriptive test results carried out by a standardized rice powder mask validation have characteristics of color, aroma, texture, stickiness and level of preference. Based on discriminatory testing by the validation, it was found that BBP3 samples were in accordance with the characteristics of rice powder masks. Based on the consumer preference assessment, it can be concluded that the sample with the most preferred BBP 3 code by the respondents with bright color characteristics, fishy aroma, very soft texture, very sticky power and the level of preference with interpretation is very like. These results indicate that rice powder masks with the addition of egg white developed have the potential for color, aroma, aroma, texture, and ready-to-use products. Thus it can be concluded that the development of rice powder masks with the addition of egg white that has been developed is classified as valid, effective, and beneficial to the world of entrepreneurship and provides a positive value to traditional masks.

**Keywords: Masks, Rice Powder**

### **INTRODUCTION**

Cosmetics is a science of medicine, so cosmetics experts in ancient times were also called medical experts, such as physicians and shamans. In its development there is a separation between cosmetics and drugs, both in terms of types and side effects (Wasitaatmadja, 1997). Based on data from the Ministry of Industry (Ministry of

Industry) in 2017 noted that 80% of men and women who live in cities say that the use of cosmetics is a necessity that must be done. In 2017 an increase in the cosmetics industry increased by 95% consisting of small and medium industries (IKM).

To produce a cosmetic BPOM (2011) issued a regulation that cosmetic requirements are appropriate to be circulated as follows: Hydroquinone is only allowed to be used without a doctor's prescription no more than 2%. Metal contamination consists of mercury (Hg) no more than 1mg / kg or 1mg / L (1ppm), lead (Pb) no more than 20 mg / kg or 20mg / L (20ppm), arsenic (As) no more than 5 mg / kg or 5 mg / L (5ppm), the Total Plate Number (ALT) is not more than 103 colonies / g or colonies / mL, and the number of molds and yeasts (AKK) is not more than 103 colonies / g or colonies / mL. Water content not more than 10% will be used. Containers and storage, stored in well-closed containers, stored at room temperature, in a dry place and protected from sunlight.

The content contained in rice powder is allantoin, oryzanol, which can regenerate melamine pigment on the skin and counteract ultraviolet light, acts as an antioxidant in ferulic acid in white rice and can protect the skin from various types of pollutants, peroxides, and free radicals, functioning as anti-inflammatory (anti-inflammatory), protects the skin by increasing the water content of skin cells, accelerates the growth of new skin cells, brightens the skin, and is able to prevent and treat skin from acne to oily skin. While the protein content in egg whites serves to increase skin elasticity and brighten the skin, as well as collagen, riboflavin, and vitamin E useful to disguise fine lines and wrinkles, protect from free radicals and remove dead skin cells (Wirakusumah, 2005).

## METHOD

This research is in the form of cosmetic product development, namely the development of rice powder masks with the addition of egg white. The development model used is an analytical procedural model that provides product components to be developed and the interrelationships between components. In this study the development of procedural models will develop and analyze traditional rice powder products with the addition of egg white. Stages in this study according to Brog and Gall (1993), namely,

idea development, development of cosmetic product concepts, development of production process formulas and flowcharts, process trials to produce protocepts and prototypes, formulation of cosmetic product attributes, and consumer tests. This type of data in product development research consists of primary data and secondary data. Primary data is data obtained from observations, interviews, primary data also obtained from the results of filling out questionnaires by expert dancers, and consumers free from sensory testing consisting of discriminatory tests, descriptive tests, and affective tests, traditional rice powder mask products with additions egg whites. While secondary data is obtained from documents, journals, and literature that are relevant to the development needs of traditional rice powder products with the addition of egg white.

## RESULTS AND DISCUSSION

This research and development aims to produce the development of rice powder masks with the addition of egg white. This development is declared feasible to use based on expert validation, and the results of trials and consumer preferences. This development research refers to the 4D development model (model Four D), which is limited to just a few stages. These stages include: The 4D development model consists of 4 main stages, namely: Define (Defining), Design (Design), Develop (Development) and Disseminate (Distribution). The development of ideas on the development of rice powder products with the addition of egg whites was obtained from observations to the market place for selling rice powder and egg white masks on the market, that egg white and rice powder are very good for rejuvenating the skin to make skin bright, from the results of observations and studies of research journals, then came the idea to develop traditional rice powder products into natural / herbal cosmetic products without any additional chemicals. Therefore, it is necessary to conduct research on the idea of developing this product. Based on the descriptive test, it can be concluded that the rice powder mask developed with the experimental code BBP 3 has the characteristics of bright colors, fishy-scented aroma, soft texture, fast adhesion that sticks fast and the level of preference by interpretation is very like. After the validator gave an assessment of the three existing experimental designs, the next step was ranking the quality of the rice powder mask with the best added egg white.

Based on the results of the ranking, followed by 50 respondents consisting of different ages and genders. This was done to assess consumer acceptance of rice powder mask products with added egg white. From the results of the assessment of 20 consumers obtained from the assessment of male consumers aged 17-50 years get an average of color 4 which means consumers agree with the color of rice powder mask products with the addition of egg white, aroma 4 which means consumers agree with the aroma of rice powder mask products with the addition of egg white, texture 4 which means consumers agree with the texture of rice powder mask products with the addition of egg white, product ready to use 4 which means consumers agree with products ready to use on rice powder masks with the addition of egg white . These results indicate that rice powder masks with the addition of egg white developed have the potential for color, aroma, texture, and ready-to-use products. Thus based on the description above, it can be concluded that the development of rice powder masks with the addition of egg whites that have been developed is classified as valid, effective, and useful.

Based on the results of research from Heru A. Cahyanto and Asmawit (2017) that the cosmetic scrub product produced by UKM Ranaka, no heavy metal contamination was found and no hazardous materials were found and prohibited in Ranata Cosmetics scrub products. The results of the research conducted by Ratu Inka Charisma Dianzy (2015) show that the physical properties of rice powder include color, texture, homogeneity and stickiness, but have no effect on aroma. With the existence of this research, it aims to determine the water content, ash content, and metallic surfaces of rice powder masks with the addition of egg white, and to find out the organoleptic test on traditional rice powder with the addition of egg whites to the panelist preferences and consumer preferences.

## CONCLUSION

Development of a mask of rice powder with the addition of egg white from the results of a descriptive test and discriminatory test, the sample was chosen with BBP 3 code which has an average category score of 4 which means agreeing with aroma, color, texture, stickiness and level of preference. Laboratory test results on the development of rice powder masks with the addition of egg white are known that water content is 28%,

0.87% ash content and metal contamination 0.0060 mg / kg so that this product is feasible to produce. The results of consumer preferences, namely, indicate that rice powder masks with the addition of egg white developed have the potential for color, aroma, texture, and ready-made products classified as valid, effective, and useful.

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