

## **CHAPTER V**

### **CONCLUSION AND SUGGESTION**

#### **5.1 Conclusion**

In conclusion, red rice analog is a rice product made from porang tubers and purple sweet potatoes which are then added with soybean powder and dragon fruit peel powder. This red rice analog is expected to be high in protein, antioxidants, and fiber. However, due to the involved heat cooking process such as dehydrating and steaming, the antioxidant content in this red rice analog is lower compared to porang rice and regular red rice. However, the fiber and protein values of this analog brown rice are much higher compared to porang rice and regular brown rice. The high protein is due to the addition of soybean powder as a protein source, while the high fiber is due to the glucomannan content in porang tubers and others ingredients such as purple sweet potatoes, soybean, and dragon fruit peel. In other words, this red rice analog has a higher mineral content when compared to commercial porang rice and commercial red rice. This is due to the combination of mineral content in porang tubers and purple tubers. Behind its rich nutritional content, this product has an unappealing shape because the formation of the dough is done by cutting manually using a knife, resulting in a product with a less uniform shape.

#### **5.2 Suggestion**

Further research and development are recommended in order to improve the appearance and antioxidant content of the red rice analog. To get maximum results, further researchers can use an extruder. The extruder will shape the rice uniformly and is expected not to damage the nutritional content. In this regard, further research is expected to optimize the use of food waste such as dragon fruit peels in the food industry.