

## ABSTRAK

### **ILHAM MARGINING TRI UTAMI. Karakteristik Fisikokimia dan Sensoris Minuman Instan Ekstrak Beras Hitam Berdasarkan Konsentrasi Maltodekstrin dengan Metode *Foam-mat Drying*. DIBIMBING OLEH NURHIDAJAH DAN MUHAMMAD YUSUF.**

Beras hitam merupakan salah satu varietas lokal yang mempunyai pigmen terutama antosianin paling baik di bandingkan dengan beras putih maupun beras lainnya. Antosianin yang dimiliki beras hitam berasal dari senyawa golongan flavonoid. Pemanfaatan beras hitam menjadi pangan fungsional salah satunya adalah pembuatan minuman instan yang berkhasiat untuk kesehatan karena mengandung antosianin yang baik untuk tubuh. Pengolahan beras hitam agar menjadi minuman instan siap saji dengan metode *foam-mat drying* dan memerlukan bahan pengisi yaitu maltodekstrin. Tujuan penelitian ini untuk mengetahui karakteristik fisikokimia meliputi kadar antosianin, aktivitas antioksidan, intensitas warna dan sensoris dengan penambahan konsentrasi maltodekstrin. Penelitian ini menggunakan (RAL) Rancangan Acak Lengkap 1 faktor yaitu penambahan konsentrasi maltodekstrin (10%, 15%, 20%, 25%, dan 30%). Prosedur penelitian dilakukan dengan pertama yaitu ekstraksi beras hitam, pembuatan minuman instan ekstrak beras hitam, dan formulasi minuman instan ekstrak beras hitam. Hasil penelitian ini menunjukkan bahwa penambahan konsentrasi maltodekstrin berpengaruh sangat nyata terhadap karakteristik fisikokimia (kadar antosianin, aktivitas antioksidan, intensitas warna) dan sensoris (warna dan rasa) tetapi tidak berpengaruh terhadap sensori (aroma). Perlakuan terbaik minuman instan ekstrak beras hitam berdasarkan uji fisikokimia yaitu kadar antosianin (15,40mg/g), aktivitas antioksidan (58,14%RSA), intensitas warna °Hue 41,02 (merah) dan uji sensoris mempunyai skor 3,45 mendekati suka yang terdapat pada penambahan konsentrasi maltodekstrin 30%.

**Kata Kunci:** Beras hitam, kadar antosianin, aktivitas antioksidan, maltodekstrin, minuman instan

## **ABSTRACT**

**ILHAM MARGINING TRI UTAMI. *Physicochemical and Sensory Characteristics of Instant Drink Black Rice Extract Based on Maltodextrin Concentration with Foam-mat Drying Method.* DIRECTED BY NURHIDAJAH AND MUHAMMAD YUSUF.**

*Black rice is one of the local varieties that has the best pigments, especially anthocyanins, compared to white rice and other rice. The anthocyanins in black rice are derived from the flavonoid group of compounds. One of the uses of black rice as a functional food is the manufacture of ready-to-drink instant drinks that can maintain product quality and do not have added preservatives. Processing of black rice into instant ready-to-serve drinks uses the foam-mat drying method and requires a filler material, that is maltodextrin. The purpose of this study was to determine the physicochemical characteristics including anthocyanin levels, antioxidant activity, color intensity, and sensors with the addition of maltodextrin concentration. The experimental design used in this study was a Completely Randomized Design (CRD) with one factor addition of maltodextrin (10%, 15%, 20%, 25%, and 30%). The research procedure was carried out first, black rice extraction, making black rice extract instant drink, and black rice extract instant drink formulation. The results showed that increasing the concentration of maltodextrin had a significant effect on physicochemical characteristics (anthocyanin levels, antioxidant activity, color intensity) and sensory (color and taste), but had no significant effect on sensory (aroma). The best treatment for an instant drinks with black rice extract is based on physicochemical tests, namely anthocyanin content (15.40mg/g), antioxidant activity (58.14%RSA), color intensity °Hue (41.02) Red and sensor test has a score of (3.45) close to like, contained in the addition of 30% maltodextrin concentration.*

**Keywords:** *Black rice, anthocyanin content, antioxidant activity, , maltodextrin, instant drink*