**PENGARUH PENAMBAHAN RAGI DAN LAMA FERMENTASI TERHADAP KADAR GLUKOSA TEPUNG BIJI JENGKOL**

**(*Pithecollobium jiringa*)**

**Oleh:**

**Ariva Faatihah Rahmawati**

**11307141001**

**Pembimbing Utama :** Dr. Das Salirawati, M.Si

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ragi dan lama fermentasi terhadap kadar glukosa tepung biji jengkol (*Pithecollobium jiringa*).

Penelitian ini merupakan penelitian eksperimen dengan tiga kali pengulangan. Penelitian dilakukan dengan variasi penambahan berat ragi, yaitu 5, 10, dan 15 mg, serta variasi lama fermentasi, yaitu 24, 48, 72, 96, 120, 144, dan 168 jam. Analisis yang dilakukan meliputi analisis kualitatif dan analisis kuantitatif. Analisis kualitatif meliputi uji Molisch dan uji Barfoed, dan analisis kuantitatif menggunakan metode Nelson Somogyi.

Hasil analisis kualitatif menunjukkan adanya karbohidrat dalam tepung biji jengkol sebelum dan setelah difermentasi. Analisis kuantitatif menunjukkan bahwa variasi penambahan berat ragi dan lama fermentasi berpengaruh terhadap kadar glukosa tepung biji jengkol. Berdasarkan uji Tukey variasi penambahan berat ragi dan lama fermentasi mempengaruhi kadar glukosa hasil fermentasi tepung biji jengkol secara signifikan. Kadar glukosa tertinggi dihasilkan pada penambahan berat ragi 10 mg dan pada lama fermentasi 96 jam, yaitu sebesar 0,0240 % b/v.

Kata kunci: ragi, fermentasi, glukosa, tepung biji jengkol

**THE EFFECT OF ADDING YEAST AND FERMENTATION TIME TO GLUCOSE LEVELS FROM THE FERMENTATION OF DOGFRUIT (*Pithecollobium jiringa*) SEEDS POWDER**

**By:**

**Ariva Faatihah Rahmawati**

**11307141001**

**Superview :** Dr. Das Salirawati, M.Si

**ABSTRACT**

The aim of the research is to determine the effect of adding yeast and fermentation time to glucose levels from the fermentation of dogfruit seeds powder (*Pithecollobiumjiringa*).

This research is an experiment research with triple repetition. It uses variations of adding yeast weight, which are 5 mg, 10 mg, and 15 mg, and the variation of fermentation time are 24, 48, 72, 96, 120, 144, dan 168 hours. The Molisch test and Barfoed test were used during this research in order to get qualitative analysis of glucose level and the quantitative analysis uses Nelson Somogyi method.

The result of qualitative analysis showed that carbohydrate exist before and after dogfruit seed powder was fermented. The quantitative analysis showed that the variation of adding yeast weight and fermentation time affect the glucose level in dogfruit seeds powder. Based on Tukey, the variation of adding yeast weight and length of fermentation time significantly affect the glucose level from the result of the fermentation. The highest glucose level generated on 10 mg yeast weight added and the 96 hours of fermentation, that is 0,0240 % b/v.

Keyword: yeast, fermentation, glucose, dogfruit seeds powder (*Pithecollobium jiringa*).