PENGARUH SUHU DAN WAKTU PENGERINGAN TERHADAP KARAKTERISTIK DRY FRUIT BUAH NAGA MERAH MENGGUNAKAN FOOD DEHYDRATOR

(Effect of Temperature and Drying Time on the Characteristics of Dry Fruit Red Dragon Fruit Using a Food Dehydrator) Dr. Elly Kurniawati, S.TP., M.P.

Galuh Regita Dyah Ayu

Study Program of Food Engineering Technology Majoring of Agricultural Technology

ABSTRACT

Dry fruit made from red dragon fruit (Hylocereus Polyrhizus) is the result of innovation in developing food products using a drying process that aims to increase product value, facilitate fruit consumption to be more efficient and practical while maintaining nutritional content and extending the shelf life of the fruit so that it lasts longer and is not easily damaged. The drying uses a food dehydrator using temperatures of 40°C, 50°C and 60°C for 15 and 20 hours. The purpose of this study was to determine the effect of using temperature and drying time and the best treatment in using temperature and drying time on the characteristics of red dragon fruit dry fruit. The research method used was a Completely Randomized Design (RAL) with 2 factors and 3 treatments repeated 3 times, resulting in 18 experiments. The results showed that the use of temperature and drying time for red dragon fruit dry fruit had a significant effect on the parameters of L, a, b, browning index, texture, total dissolved solids, water content, vitamin C content and activity of antioxidant. The best treatment obtained from this study was sample X2Y3 (drying time 20 hours: drying temperature 60°C) with physical characteristics that have a value of L (lightness) 7,98%, a (redness) 23,72%, b (yellowness) 3,53%, browning index 238,20%, texture 0.67 n and total dissolved solids 8,50°brix. For chemical characteristics include water content 6,19%, vitamin C content 40,80 mg/100 gr and activity of antioxidant 80,22%.

Keywords: Red dragon fruit, dry fruit, food innovation, drying, food dehydrator.