

RINGKASAN

Jagung merupakan komoditas pangan terpenting kedua setelah padi. Jagung sangat bermanfaat bagi kehidupan manusia dan ternak. Jagung mengandung senyawa karbohidrat, lemak, protein, mineral, air, dan vitamin. Konsumsi pangan lokal sumber karbohidrat pengganti beras tersebut mengalami kendala. Hal itu disebabkan kurangnya pengetahuan gizi masyarakat, minimnya kesiapan masyarakat secara psikologis untuk mengganti makanan pokok dan kurangnya ketersediaan produk pangan yang memenuhi selera masyarakat. Selama ini jagung hanya digunakan untuk diolah sebagai panganan, kue dan jajanan. Selain itu, budaya masyarakat Indonesia yang sangat kuat akan anggapan belum makan jika belum mengkonsumsi nasi. Maka hal ini mendorong pentingnya untuk melakukan pengembangan terhadap pangan alternatif yang memiliki bentuk menyerupai beras. Produk olahan sumber karbohidrat non padi yang dikembangkan akhir-akhir ini adalah beras tiruan atau beras analog. Beras analog memiliki bentuk yang sangat mirip dengan beras, beras analog merupakan beras tiruan yang dibuat dari karbohidrat non padi. Beras tiruan dibuat dari non padi dengan kandungan karbohidrat mendekati atau melebihi beras yang terbuat dari tepung lokal. Penelitian ini dilaksanakan di Laboratorium Teknologi Hasil Pertanian Fakultas Pertanian UISU. Penelitian menggunakan rancangan acak lengkap (RAL) faktorial dengan dua (2) ulangan. Faktor I: Jumlah Tepung (J) yang terdiri atas empat taraf : $J_1 = 30\%$, $J_2 = 40\%$, $J_3 = 50\%$, $J_4 = 60\%$. Faktor II: Jenis Tepung (T) yang terdiri atas empat jenis : $T_1 = \text{Terigu}$, $T_2 = \text{Tapioka}$, $T_3 = \text{Sagu}$, $T_4 = \text{Beras}$. Parameter yang diamati meliputi Kadar air, protein, lemak, karbohidrat, rasa dan warna. Hasil penelitian : Kadar air tertinggi 13,100 (J_4), 12,450 (T_4), kadar protein tertinggi 7,655% (J_4), 8,456% (T_1), kadar lemak tertinggi 1,415% (J_4), 1,098% (T_1), kadar karbohidrat tertinggi 43,158% (J_4), 42,673% (T_4), warna tertinggi 3,313 (J_1), 3,236 (T_1), rasa tertinggi 3,652 (J_3), 3,725 (T_1). Untuk menghasilkan beras jagung analog yang baik dapat ditambahkan bahan pengisi tepung terigu dengan konsentrasi 50%.

Kata Kunci : Jagung, Beras, Analog, Terigu, Tapioka, Sagu

SUMMARY

Corn is the second most important food commodity after rice. Corn is very beneficial for human life and livestock. Corn contains carbohydrates, fats, protein, minerals, water and vitamins. Consumption of local food sources of carbohydrate substitute for rice is experiencing problems. This is due to the lack of knowledge of community nutrition, the lack of psychological preparedness of the community to replace staple foods and the lack of availability of food products that meet people's tastes. So far, corn has only been used to be processed as snacks, cakes and snacks. In addition, the culture of the Indonesian people is very strong with the notion that they haven't eaten if they haven't consumed rice. So this encourages the importance of developing alternative foods that have a shape similar to rice. Processed products for non-rice carbohydrate sources that have been developed recently are artificial rice or analog rice. Analog rice has a shape very similar to rice, analog rice is imitation rice made from non-rice carbohydrates. Artificial rice is made from non-rice with a carbohydrate content close to or exceeding rice made from local flour. This research was conducted at the Laboratory of Agricultural Product Technology, Faculty of Agriculture, UISU. This study used a factorial completely randomized design (CRD) with two (2) replications. Factor I: Total Flour (J) which consists of four levels: $J_1 = 30\%$, $J_2 = 40\%$, $J_3 = 50\%$, $J_4 = 60\%$. Factor II: Type of flour (T) which consists of four types: $T_1 = \text{flour}$, $T_2 = \text{tapioca}$, $T_3 = \text{sago}$, $T_4 = \text{rice}$. The parameters observed included water content, protein, fat, carbohydrates, taste and color. Results: The highest water content was 13,100 (J_4), 12,450 (T_4), the highest protein content was 7,655% (J_4), 8,456% (T_1), the highest fat content was 1,415% (J_4), 1,098% (T_1), the highest carbohydrate content was 43,158 % (J_4), 42.673% (T_4), the highest color was 3,313 (J_1), 3,236 (T_1), the highest taste was 3,652 (J_3), 3,725 (T_1). To produce good analog corn rice, wheat flour filler can be added with a concentration of 50%.

Keywords: Corn, Rice, Analog, Wheat flour, Tapioca, Sago