RINGKASAN

Berino Renadi, Program Studi Teknologi Industri Pertanian, Fakultas Pertanian, Universitas Muhammadiyah Jember, 2025, Formulasi *Snack* Pasta Coklat Dengan Penambahan Bubuk Carob Sebagai Subtituen, Dosen Pembimbing: Andika Putra Setiawan S.ST., M.T. dan Danu Indra Wardhana S.TP. MP.

Snack pasta coklat adalah produk makanan ringan berbahan dasar coklat bubuk yang berbentuk pasta dan tidak meleleh pada suhu ruang, serta tidak mengalami pemisahan lemak dan air. Produk ini mengandung berbagai bahan tambahan seperti vegetable oil, susu, gula, cocoa powder, stabilizer, emulsifier, antioksidan, dan perasa tambahan. Sebagai alternatif pengganti coklat konvensional, bubuk Carob, yang rendah lemak dan bebas kafein, dipilih karena memiliki karakteristik rasa coklat dan kaya serat. Penelitian ini bertujuan untuk mengembangkan formulasi snack pasta coklat dengan menggunakan bubuk Carob sebagai subtituen coklat konvensional.

Penelitian ini dilakukan di Pusat Penelitian Kopi dan Kakao Indonesia serta di Laboratorium Teknologi Pengolahan Agroindustri Universitas Muhammadiyah Jember pada Mei hingga Juli 2024. Rancangan penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan empat formulasi yang berbeda. Variabel yang diamati meliputi uji organoleptik, kadar air, kadar gula, kadar lemak, dan analisis ANOVA.

Hasil penelitian menunjukkan bahwa hasil uji sesuai dengan SNI 7934:2014. Uji kadar gula hasil terbaik terdapat pada formulasi ke 4 dengan persentase 2,853%. Uji kadar lemak hasil terbaik yaitu pada formulasi pertama dengan persetase 45% hal ini dikarenakan tingginya bubuk Kakao yang di tambahkan dibanding dengan Bubuk Carob . Uji kadar air hasil terbaik yaitu terdapat pada formulasi 2 dan 3 dengan hasil persentase 0,2%. Secara keseluruhan, penelitian ini memberikan bukti bahwa penggunaan bubuk Carob sebagai subtituen coklat dalam snack pasta coklat dapat menghasilkan produk dengan kualitas sensorik yang baik, serta kandungan gula dan lemak yang lebih rendah, yang cocok untuk konsumen yang peduli dengan kesehatan.

SUMARRY

Berino Renadi, *Agricultural Industrial Technology Study Program, Faculty of Agriculture, Muhammadiyah University of Jember,* 2025, *Chocolate Pasta Snack Formulation with the Addition of Carob Powder as a Substituent, Supervisor:* Andika Putra Setiawan S.ST., M.T. *and* Danu Indra Wardhana S.TP. M.P.

Chocolate paste snack is a snack product made from cocoa powder which is in the form of a paste and does not melt at room temperature, and does not experience separation of fat and water. This product contains various additional ingredients such as vegetable oil, milk, sugar, cocoa powder, stabilizers, emulsifiers, antioxidants and additional flavors. As an alternative to conventional chocolate, Carob powder, which is low in fat and caffeine free, was chosen because it has a characteristic chocolate taste and is rich in fiber. This research aims to develop a chocolate paste snack formulation using Carob powder as a substituent for conventional chocolate.

This research was conducted at the Indonesian Coffee and Cocoa Research Center and at the Agro-Industrial Processing Technology Laboratory, Muhammadiyah University of Jember from May to July 2024. The research design used a Completely Randomized Design (CRD) with four different formulations. The variables observed included organoleptic tests, water content, sugar content, fat content, and ANOVA analysis.

The research results show that the test results are in accordance with SNI 7934:2014. The best sugar content test results were found in the 4th formulation with a percentage of 2.853%. The best results for the fat content test were in the first formulation with a percentage of 45%, this was due to the high amount of cocoa powder added compared to carob powder. The best water content test results were found in formulations 2 and 3 with a percentage result of 0.2%. Overall, this study provides evidence that the use of Carob powder as a chocolate substituent in chocolate paste snacks can produce products with good sensory

qualities, as well as lower sugar and fat content, which is suitable for health-conscious consumers.