

**CULINARY INNOVATION AND NEW PRODUCT
DEVELOPMENT REPORT**

**UTILIZATION OF MANDAI (CEMPEDAK SKIN) AND
OYSTER MUSHROOM AS INGREDIENTS FOR
VEGETARIAN FLOSS**



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Surabaya, October 2th, 2025



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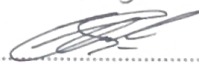
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PREFACE

Praise to God, for giving me strength and letting me through all the difficulties so I was able to finish this Culinary Innovation and New Product Development Report.

I also take this opportunity to express my gratitude to :

1. Chef Zaldy Iskandar, B. Sc as director of Otimmo Internasional Master Gourmet Academy.
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4. My parents who always pray for me and support me in terms of material and moral support during the process of completing this report.
5. My friends who were always there for me during the process of working on this report.
6. Myself who doesn't give up easily and stays calm during the process of making this report.

That is all I can say, I apologize if there are errors or inconsistencies in the use of words or sentences. Hopefully, the following report is helpful for the reader. Thank you.

Surabaya, October 2th, 2025



Andi Malya S

ABSTRACT

This study developed vegetarian shredded products from mandai (fermented cempedak skin) and oyster mushrooms as a healthy food alternative for consumers who have animal protein allergies or are on a vegetarian diet. Mandai was chosen because it contains 4.5-6.2% protein, 5.8-7.3% crude fiber, as well as essential minerals such as potassium, calcium, and magnesium. Oyster mushrooms contribute to a high protein content of 20-30% of the dry weight and fibrous texture that resembles meat after processing. The manufacturing process includes washing mandai to remove the sour taste of fermentation, distilling mandai and oyster mushrooms, grinding fine spices at 75°C, then frying at 170°C until it reaches the desired dry texture. The product is packaged using aluminum foil pouch packaging with a heat sealing system to maintain quality. The results of the organoleptic test by 10 panelists showed an average score of 4 out of 5, with the aroma aspect getting the best rating (44/50) thanks to the use of traditional spices such as bay leaves, lemongrass, and lime leaves combined with coconut milk. The texture gets the lowest score (37/50) because it is still slightly moist but can be improved by drying for longer. Nutritional analysis per serving (100 grams) showed a content of 90.52 calories, 1.46g of protein, 3.73g of fiber, and 4.62g of fat with a healthier profile than conventional shredded meat because it is low in saturated fat and cholesterol-free. The product has a one-month durability at room temperature with a water activity of 0.3-0.4 which prevents the growth of pathogenic microorganisms. This research succeeded in creating an innovative product that introduces mandai to consumers outside its traditional territory while providing a sustainable food alternative by utilizing cempedak skin waste.

Keywords: *Cempedak skin, Kalimantan, Mandai*

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