

## BIBLIOGRAPHY

- Anggraini T, Diana S, Sahadi DI, Firdaus A. 2014. Pengaruh Penambahan Peppermint (*Mentha piperita*, L.) Terhadap Kualitas Teh Daun Pegagan (*Centella asiatica*, L. Urban). *Jurnal Litbang Industri*, Vol 4(2): Hal 79-88.
- Buthelezi, N. M. D., Magwaza, L. S., & Tesfay, S. Z. 2019. Postharvest pre-storage processing improves antioxidants, nutritional and sensory quality of macadamia nuts. *Scientia Horticulturae*, 251, 197–208. <https://doi.org/10.1016/j.scienta.2019.03.026>
- Caserio, G., et al. "Listeria spp. in commercial fresh pesto sauce." 2006. *Industrie Alimentari*, 45(450), 49-52.
- Chandrasekara, N., & Shahidi, F. (011. Oxidative stability of cashew oils from raw and roasted nuts. *Journal of the American Oil Chemists Society*, 88(8), 1197–1202. <https://doi.org/10.1007/s11746-011-1782-3>
- Kementerian Negara Koperasi Dan Usaha Kecil Dan Menengah. 2009. *Pedoman Standar Kelayakan Kemasan Produk KUKM*, Jakarta.
- LIPI. 2016. Tanaman Obat Indonesia: Pegagan. LIPI, Jakarta. <http://www.iptek.net.id>,
- Maguire, L. S., S.M. O'sullivan, K. Galvin, T.P. O'connor, Dan N.M. O'brien. 2004. Fatty acid profile, tocopherol, squalene and phytosterol content of walnuts, almonds, peanuts, hazelnuts and the Macadamia nut. *International journal of food sciences and nutrition*. 55(3): 171-178.
- Maharani, P., Santoso, U., Aulia Rachma, Y., Fitriani, A., & Supriyadi. 2022. Efek Pengolahan Konvensional Pada Kandungan Gizi dan Anti Gizi Biji Petai. *Jurnal Teknologi Pertanian*, 23(2).
- Masino, F., Ulrici, A., & Antonelli, A. (n.d.). Extraction and quantification of main pigments in pesto sauces. *Eur Food Res Technol*. <https://doi.org/10.1007/s00217-007-0572-5>
- Nicoli, M. C. (Ed.). *Shelf life assessment of food* (1st ed.). CRC Press. 2012. <https://doi.org/10.1201/b11871>
- Pujimulyani, D., Raharjo, S., Marsono, & Santoso, U. 2010. Pengaruh blanching terhadap aktivitas antioksidan, kadar fenol, flavonoid, dan tanin terkondensasi kunir putih (*Curcuma mangga* Val.). *AgriTECH*, 30(3), 141–147.
- Purwati, N., & Yanti, E. F. 2022. Penetapan Kadar Flavonoid Total dan Uji Aktivitas Antioksidan Ekstrak Etanol Daun Macadamia (*Macadamia integrifolia*) dengan Metode DPPH. *J. Islamic Pharm*, 7(2).

<https://doi.org/10.18860/jip.v7i2.17522>

- Sowmya, R. S., Warke, V. G., Mahajan, G. B., & Annapure, U. S. 2022. Quality and shelf-life assessment of pesto prepared using herbs cultivated by hydroponics. *International Journal of Gastronomy and Food Science*, 30, 100608.
- Srichamnong, W., & Srzednicki, G. 2015. Internal discoloration of various varieties of Macadamia nuts as influenced by enzymatic browning and Maillard reaction. *Scientia Horticulturae*, 192, 180–186. <https://doi.org/10.1016/j.scienta.2015.06.012>
- Sulistiani, S., & Fitriana, N. E. (2021). Sterilisasi alat kedokteran gigi dengan sterilizer (dry heat) dan teknik boiling. *JDHT Journal of Dental Hygiene and Therapy*, 2(1). <https://doi.org/10.36082/jdht.v2i1.221>
- Sutardi. 2016. Kandungan Bahan Aktif Tanaman Pegagan Dan Khasiatnya Untuk Meningkatkan Sistem Imun Tubuh. *Jurnal Litbang Pertanian*, 35(3). <https://doi.org/10.21082/jp3.v35n3.2016.p121-130>
- Yusran, Asriani I, Asri S. 2016. Bioaktivitas Ekstrak Metanol Daun Pegagan (*Centella asiatica L.*) Terhadap Pertumbuhan Bakteri *Mycobacterium tuberculosis*. Al-Kimia

## APPENDIX



Akademi Kuliner & Patiseri  
**OTTIMO**  
INTERNASIONAL  
CUINNARY ARTS - GASTRONOMY - BAKING & PASTRY ART

### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

**DATE** : 22 April 2024  
**NAME** : Davina Kristie Wijaya  
**NIM** : 2274130010001  
**PRODUCT** : PESTO SAUCE SUBSTITUTE WITH PEGAGAN LEAVES AND MACADAMIA NUTS  
**ADVISOR** : Elma Sulistiya, S.TP., M.Sc.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	5	5	5	2	4	21
Panelist 2	4	2	4	3	4	17
Panelist 3	5	4	5	5	4	23
Panelist 4	5	4	4	4	4	21
Panelist 5	4	4	3	2	3	16
Panelist 6	4	3	2	4	4	17
Panelist 7	5	5	4	5	5	24
Panelist 8	4	4	4	2	3	17
Panelist 9	4	2	4	4	4	18
Panelist 10	5	4	5	5	4	23
<b>TOTAL</b>	45	37	40	36	39	197

#### NOTES :

1. Tolong diperbaiki rasanya karena masih meninggalkan rasa pahit yang cukup kencang
2. The smell is a bit annoying for me, and has a bit of spicy aftertaste
3. Nicely done
4. Good
5. Untuk produk bisa lebih di perbaiki di rasa
6. Tekstur masih bergerindil
7. All good
8. Rasanya dapat ditingkatkan lagi
9. Aroma perlu ada perbaikan
10. -





## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

### APPROVAL RECIPEE

**Recipe Name** : PEGAMIA SAUCE  
**TITLE OF C&D** : PESTO SAUCE SUBSTITUTE WITH PEGAGAN LEAVES AND MACADAMIA NUTS  
**Yield** : 1-2 portion  
**Main Ingredients** : 150 g pegagan leaves  
**Ingredients** :  
– 150 g pegagan leaves – 10 g sugar  
– 30 g garlic – 5 g ground black pepper  
– 30 g roast macadamia nut – 15 g parmesan cheese  
– 70 ml salad oil  
– 8 g salt

**Method** :  
1. Blanch the pegagan leaves with a little bit of salt then drain it.  
2. Cook the garlic in salad oil until it is fully cooked.  
3. Blend the pegagan leaves, garlic confit until half smooth.  
4. Add the salt, sugar, black pepper, and parmesan cheese and blend again until the texture becomes smooth.  
5. Put the sauce in a glass jar and store it in the refrigerator.

#### Product Description

This product is a sauce that resembles pesto and can be used as a spread for bread and sauce pasta. Pegagan leaves themselves contain several bioactive compounds such as acidic sides in the form of glycosides, which are widely used in traditional medicine or herbal medicine, both in the form of herbs and as a single ingredient. Some of the benefits of pegagan plants are as a remedy for nerve weakness, fever, bronchitis, diabetes, psikoneurosis, hemorrhoids, and high blood pressure, appetite enhancer, and to maintain vitality. In addition, macadamia nuts are a valuable source of nutrients, in particular



## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

monounsaturated fatty acids. Macadamia nuts have been shown to improve various risk factors for cardiovascular disease, including hypercholesterolemia, body weight, oxidative stress, and inflammation. Macadamia nuts may be useful when consumed alone, or in combination with traditional pharmacotherapy to reduce risk of cardiovascular disease.

### TRIAL PROGRESS

The trial of making this product was carried out on March 25, 2024. The trial results showed that the sauce I wanted to make was successful. However, it requires the addition of salt, sugar, and ground black pepper to add flavour. In addition, the texture of the sauce that has been made is less smooth so that in the future the sauce must have a smoother texture.

### TRIAL DOCUMENTATION





## CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

Student Name : Davina Kristie Wijaya  
NIM : 2274130010001

Advisor	1 <sup>st</sup> Examiner	2 <sup>nd</sup> Examiner
 Name: Elma Sulistya, S. TP., M.Sc. Date: 28 March 2024	 Name: Yohana Prasetyo, A.Md. Par., S.Sn. Date: 28 March 2024	 Name: Michael Valent, A.Md. Par. Date: 28 March 2024



Akademi Kuliner & Patiseri  
**OTTIMO**  
 INTERNASIONAL  
 CULINARY INNOVATION AND  
 NEW PRODUCT DEVELOPMENT  
OTTIMO ART GOURMET KITCHEN & BAKERY ARTS

Akademi Kuliner & Patiseri  
**OTTIMO**

CULINARY INNOVATION AND  
 NEW PRODUCT DEVELOPMENT

Name  
 Student Number

: Davina Kristie Wijaya  
 : 227430001001  
 : Ms. Elma

Name  
 Advisor

: Elma

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
1.	07/03	konultasi pemilihan bahasa dalam produk		Elma
2.	07/03	Pasta pagangga 1 Almond Crispy Papangan		Elma
3.	07/03	Pasta pagangga		Elma
4.	26/03	Konsultasi Resonse tandan wajah		Elma
5.	16/05	Konsultasi proposal		Elma
6.	14/05	Konsultasi laporan		Elma

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
7.	13/06	Konsultasi lepasan		
8.	24/07	Konsultasi Nutrition fact		
9.	3/07	Konsultasi laporan		
10.	20/07	Konsultasi qian praktek		



