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APPENDIX

1. Approval Recipe



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

APPROVAL RECIPE

- Recipe Name : SPANISH MACKEREL *SOTT'OLIO*
- TITLE OF C&D : APPLICATION OF *COSMOS CAUDATUS* LEAVES IN OIL AS A FISH PRESERVING MEDIA RICH IN BIOACTIVE COMPOUNDS
- Yield : 1-2 portion
- Main Ingredients : *Cosmos Caudatus* Leaves
- Ingredients :
- Cosmos Caudatus* Oil :
- 2 gr Sliced Dried Red Chili
 - 5 gr Peeled Garlic Cloves
 - 20 gr *Cosmos Caudatus* Leaves
 - 2 gr Salt
 - 2 gr Sugar
 - 2 gr Mushroom Seasoning
 - 300 ml Canola Oil
- Spanish Mackerel *Sott'olio* :
- 240 gr Fillet Spanish Mackerel
 - 25 gr Peeled Garlic Cloves
 - 24 gr Peeled Ginger
 - 600 mL Water, for boiling
 - 12 gr Salt
 - 10 gr Lemon Juice
 - 300 mL *Cosmos Caudatus* Oil



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

Method:

Cosmos Caudatus Oil :

1. Place canola oil, *cosmos caudatus* leaves, garlic, salt, sugar, mushroom seasoning into a blender and blend until smooth
2. Transfer the mixture into a BFA zipper bag and sous vide for 1 hour at 50 degrees celcius
3. Once sous vide process is complete, immediately immerse the bag in cold water

Spanish Mackerel *Sott'olio* :

1. Marinate the fish fillet with lemon juice for 5 minutes, then rinse
2. Cut the fish into bite sized then boil with garlic, ginger, and salt for seasoning and cook for 15 minutes
3. Once cooked, drain the fish and let it cool before placing it into a jar
4. Place half of the fish into a sterilized jar, add the *Cosmos Caudatus* oil until the fish is submerged, and then add in the remaining fish. Fill the jar with the rest of cosmos oil until full, then refrigerate.

Product Description

Products made from *cosmos caudatus* leaves are rich in nutrients and bio-active compounds. It possesses anti-inflammatory benefits, excellent for the heart, skin, and digestion system. On the other hand, Spanish mackerels are high in omega-3 fatty acids and protein, which improves heart health, brain function, and muscle growth. With the versatility of both main ingredients makes them a valuable addition to various dishes, both offering diverse health benefits and enhancing overall wellbeing.



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

TRIAL PROGRESS (50 – 100 WORDS)

During the first trial the fish tastes bland, lacking the absorption of flavor from the *cosmos caudatus* leaves into the fish. Therefore, it needs to be eaten with the *cosmos caudatus* leaves to enhance the overall taste. Overall, there is a lack of seasoning in the fish and the *cosmos caudatus* oil.


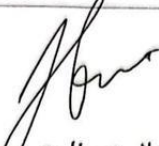

TRIAL DOCUMENTATION



Student Name : Muhammad Ilham Rashif
NIM : 2274130010075



CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

Advisor	1 st Examiner	2 nd Examiner
 Name: Jessica Horton Date: 08/05/24	 Name: Gilbert Y. Y Date: 08/15/24	 Name: Henri Date: 13/15/2024

2. Sensory Test



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CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT SENSORY TEST

DATE : 14 Mei 2024

NAME : Muhammad Ilham Rashif

NIM : 2274130010075

PRODUCT : APPLICATION OF COSMOS CAUDATUS LEAVES IN OIL AS A FISH PRESERVING MEDIA RICH IN BIOACTIVE COMPOUNDS

ADVISOR : Jessica Hartan, A.Md. Par.

PANELIST	SIGHT	SMELL	TEXTURE	TASTE	OVERALL	TOTAL
Panelist 1	5	5	3	5	4	22
Panelist 2	3	3	3	4	4	17
Panelist 3	4	4	4	4	4	20
Panelist 4	4	4	4	4	4	20
Panelist 5	5	5	4	5	4	23
Panelist 6	4	4	4	4	3	19
Panelist 7	4	2	4	4	4	18
Panelist 8	4	3	3	4	4	18
Panelist 9	4	4	4	4	4	20
Panelist 10	5	5	4	5	4	23
TOTAL	42	39	37	43	39	200

NOTES :

1. all good, kuah terasa berminyak sekali
2. Ok
3. Enak, tidak amis, tp kurang asin dan terlalu berminyak
4. Interesting idea with the fish and the oil.
5. Nice product
6. Texture ikan agak kurang lembut sedikit
7. Bau masih amis
8. -
9. all good
10. Good





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CONSULTATION FORM
CULINARY INNOVATION AND
NEW PRODUCT DEVELOPMENT

Name : Muhammad Ihsan Rafiq
 Student Number : 2274180010075
 Advisor : Jessica Hartono A.Md.Pa.

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
1	19/03/24	Product Consultation determining about product brainstorming		Jessica
2	25/03/24	Finalizing choice of ingredients		Jessica
4	25/03/24	Revisi man treating Sattolio'		Jessica
4	03/10/24	Konsultasi revisi Bab 1		Jessica
5	09/10/24	Konsultasi revisi Bab 2		Jessica
6	11/10/24	Konsultasi revisi Bab 3		Jessica

No	Date	Topic Consultation	Name/ Signature	Advisor Signature
7	11/10/24	Konsultasi revisi		Jessica
8	26/09/24	revisi ingredient review		Jessica
9	01/10/24	Revisi background of the study		Jessica
10	03/10/24	Konsultasi tentang nutrisi faat		Jessica
11	09/10/24	revisi nutrition faat		Jessica
12	10/10/24	revisi HPP		Jessica

3. Consultation Form

4. Product Process Documentation

Ingredients of *Cosmos Caudatus* oil



Mix and blend ingredients of *Cosmos Caudatus* oil



Put blend mixture to inside the vacuum bag



Sous vide cosmos caudatus oil for 1 hour in 50 celcius



Ingredients of Spanish mackerel



Marinate Spanish Mackerel with lemon juice for 5 minutes



After marinate, wash the fish and cut to cube size and boil for 15 minutes



Spanish Mackerel Sottolio'

