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LAMPIRAN

Lampiran 1. Hasil Perhitungan Rendemen Inulin

Bahan baku yang digunakan adalah tepung umbi dahlia sebanyak 80 g. Hasil inulin kering yang didapat yaitu sebanyak 28,6 g. Rendemen inulin umbi dahlia adalah :

$$\text{Rendemen inulin umbi dahlia (\%)} = \frac{\text{Berat inulin umbi dahlia (g)}}{\text{Berat tepung umbi dahlia (g)}} \text{ x } 100$$

$$\text{Rendemen inulin umbi dahlia (\%)} = \frac{28{,}6 \text{ g}}{80 \text{ g}} \text{ x } 100$$

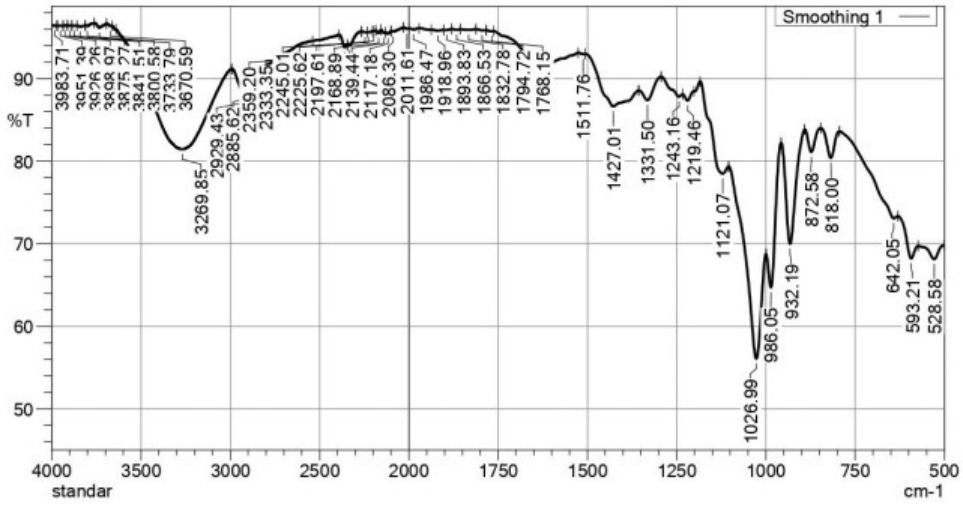
Rendemen inulin umbi dahlia = **35,75 %**

Lampiran 2a. Hasil Pengujian FTIR Inulin Dahlia

Peak Pick

Date: 22/04/2024 12:31:15
System Administrator

File name: D:\220424 - mentari1.ispd



	Item	Value
1	Comment	standar
2	Sample name	Inulin'
3	Sample ID	
6	Apodization	Happ-Genzel
7	Min	500
8	Max	4000
9	No. of Scans	32
10	Resolution	2 cm-1
11	FTIR Model	IRSpirit_DESKTOP-F56SDMU-Instrument1

Peak table

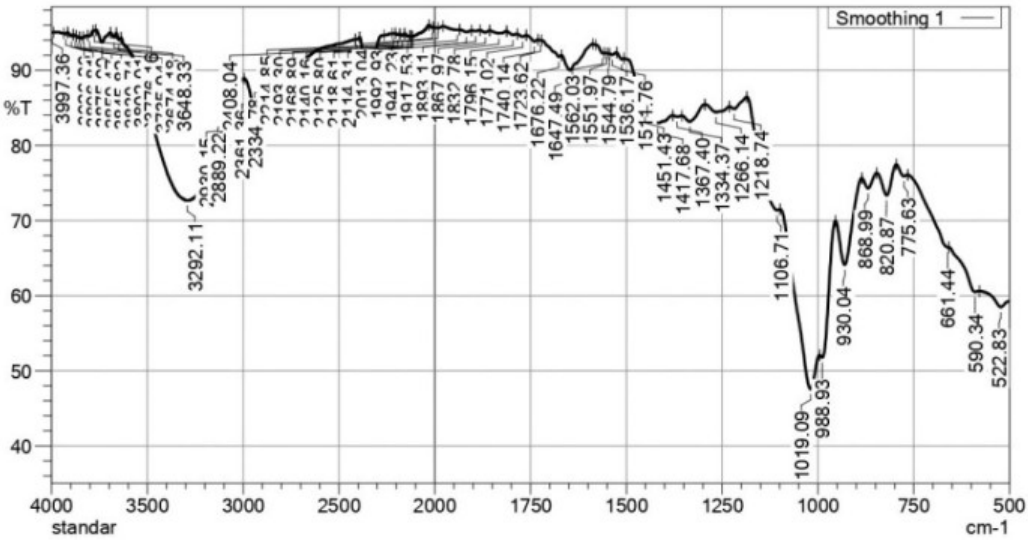
	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area	Comment
1	528.58	68.13	1.63	573.82	501.29	2237.425	43.571	
2	593.21	68.21	2.76	629.84	573.82	1653.113	58.135	
3	642.05	73.06	1.04	794.30	629.84	3526.495	-14.179	
4	818.00	80.39	3.40	846.73	794.30	924.980	76.067	
5	872.58	81.10	2.82	891.25	846.73	771.293	55.612	
6	932.19	69.97	12.87	957.33	891.25	1497.253	376.646	
7	986.05	64.70	8.38	999.70	957.33	1197.650	158.848	
8	1026.99	56.07	15.43	1104.55	999.70	3376.118	654.966	
9	1121.07	78.49	3.01	1184.27	1104.55	1395.481	161.004	
10	1219.46	87.32	0.92	1233.11	1201.51	383.938	13.254	
11	1243.16	87.82	0.64	1293.43	1233.11	676.523	22.865	
12	1331.50	87.39	1.83	1355.91	1293.43	713.638	51.077	
13	1427.01	86.64	4.01	1506.73	1355.91	1704.554	313.013	
14	1511.76	92.96	0.06	1525.40	1506.73	130.240	0.648	

Lampiran 2b. Hasil Pengujian FTIR Inulin Komersil

Peak Pick

Date: 22/04/2024 12:35:59
System Administrator

File name: D:\220424 - mentari2.ispd



	Item	Value
1	Comment	standar
2	Sample name	Inulin'
3	Sample ID	
6	Apodization	Happ-Genzel
7	Min	500
8	Max	4000
9	No. of Scans	32
10	Resolution	2 cm-1
11	FTIR Model	IRSpirit_DESKTOP-F56SDMU-Instrument1

Peak table

	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area	Comment
1	522.83	58.47	1.16	578.85	500.57	3164.020	26.957	
2	590.34	60.48	0.97	658.57	578.85	2920.505	12.467	
3	661.44	66.41	0.28	765.57	658.57	3057.501	-18.913	
4	775.63	75.90	0.64	795.74	765.57	711.597	11.029	
5	820.87	73.36	3.55	846.73	795.74	1266.097	88.367	
6	868.99	74.29	1.65	885.51	846.73	963.328	31.990	
7	930.04	64.10	7.87	954.45	885.51	2130.835	255.426	
8	988.93	51.75	3.40	996.11	954.45	1699.771	75.759	
9	1019.09	47.57	8.85	1098.81	996.11	4366.964	441.878	
10	1106.71	71.35	1.50	1185.71	1098.81	1985.922	158.302	
11	1218.74	84.86	0.65	1230.95	1185.71	657.088	14.766	
12	1266.14	84.43	0.89	1294.87	1230.95	971.475	32.363	
			1.30	1355.19	1294.87	963.595	40.541	
			0.16	1378.89	1355.19	381.974	1.926	

Lampiran 3. Data Skor Panelis Organoleptik Es Krim

Skor Hedonik Panelis Parameter Warna, Aroma, dan Rasa

PANELIS	KONTROL			F1			F2			F3		
	WARNA	AROMA	RASA	WARNA	AROMA	RASA	WARNA	AROMA	RASA	WARNA	AROMA	RASA
1	6	6	6	6	6	2	3	3	2	3	4	1
2	5	6	6	6	4	4	3	4	5	3	4	2
3	6	7	7	6	2	3	5	4	2	4	4	1
4	5	6	5	3	4	3	5	3	2	2	3	1
5	6	4	5	6	6	5	5	4	5	5	5	4
6	7	5	6	3	4	3	3	4	2	2	4	1
7	6	3	4	2	3	2	5	2	2	2	4	1
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9	6	5	4	3	4	2	2	5	1	3	4	1
10	7	6	6	5	6	3	2	5	2	5	3	2
11	7	4	6	5	3	3	5	4	2	4	4	1
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18	7	7	7	5	4	5	3	2	2	2	2	2
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21	6	6	3	2	5	2	2	5	1	2	3	1
22	7	7	7	5	6	7	5	6	3	5	6	3
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24	6	7	7	6	5	6	7	6	3	7	7	6
25	5	6	7	3	5	5	2	5	2	2	2	1
26	6	4	5	1	2	1	2	3	2	1	2	2
27	7	7	7	3	3	2	4	5	2	6	2	1
28	3	5	5	2	5	2	2	4	2	2	4	1
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34	6	6	6	5	6	5	5	5	5	5	5	5
35	5	4	5	6	4	4	6	6	6	6	6	6
36	4	5	4	5	4	3	5	4	4	4	4	3
37	6	6	6	5	5	5	4	4	4	4	5	5
Rata2	**6,00**	**5,70**	**5,81**	**4,49**	**4,46**	**3,54**	**3,89**	**4,27**	**2,86**	**3,78**	**4,03**	**2,35**
SD	**0,88**	**1,10**	**1,08**	**1,50**	**1,17**	**1,46**	**1,45**	**1,12**	**1,25**	**1,67**	**1,32**	**1,51**

Skor Hedonik Panelis Parameter Tekstur dan Overall

PANELIS	KONTROL		F1		F2		F3	
	TESKTUR	OVERALL	TEKSTUR	OVERALL	TEKSTUR	OVERALL	TEKSTUR	OVERALL
1	5	6	6	5	5	4	3	2
2	4	6	4	4	6	4	5	3
3	5	7	6	3	2	2	3	2
4	3	4	2	3	3	2	1	1
5	6	6	4	6	4	5	4	4
6	6	6	2	3	5	2	5	1
7	2	4	2	2	6	2	6	2
8	5	6	6	5	5	4	3	3
9	3	4	5	3	4	2	4	1
10	7	6	2	4	3	4	3	3
11	6	6	3	3	3	3	2	2
12	5	6	4	4	4	3	1	2
13	4	5	1	2	5	3	6	5
14	5	5	3	4	2	4	2	3
15	3	5	3	3	2	3	6	4
16	6	7	3	5	3	5	6	3
17	4	6	3	3	5	5	4	4
18	6	7	3	5	2	2	5	2
19	7	6	3	5	5	5	6	5
20	5	6	3	3	2	4	3	3
21	3	5	1	2	1	1	3	1
22	5	7	6	7	5	5	6	5
23	4	5	5	4	3	3	4	2
24	6	7	7	6	6	6	7	6
25	3	6	6	5	6	3	1	2
26	5	5	1	1	6	1	1	2
27	5	7	6	3	6	2	3	1
28	3	4	3	3	3	3	2	2
29	4	6	4	4	4	3	2	2
30	7	7	3	2	5	3	2	2
31	3	3	5	3	2	2	3	2
32	5	5	6	3	2	2	6	2
33	6	6	6	6	6	5	6	5
34	6	6	6	6	5	5	5	5
35	6	5	6	6	6	6	6	6
36	6	5	6	4	5	4	4	4
37	6	6	5	5	4	4	6	5
Rata2	**4,86**	**5,65**	**4,05**	**3,92**	**4,08**	**3,41**	**3,92**	**2,95**
SD	**1,34**	**1,01**	**1,75**	**1,42**	**1,53**	**1,34**	**1,80**	**1,49**

Hasil Uji Anova Parameter Warna, Aroma, Rasa, Tekstur dan *Overall*

		Sum of Squares	df	Mean Square	F	Sig.
Warna	Between Groups	115.676	3	38.559	19.477	.000*
	Within Groups	285.081	144	1.980		
	Total	400.757	147			
Aroma	Between Groups	61.858	3	20.619	14.758	.000*
	Within Groups	201.189	144	1.397		
	Total	263.047	147			
Rasa	Between Groups	258.399	3	86.133	48.145	.000*
	Within Groups	257.622	144	1.789		
	Total	516.020	147			
Tekstur	Between Groups	20.459	3	6.820	2.614	.054tn
	Within Groups	375.730	144	2.609		
	Total	396.189	147			
Overall	Between Groups	154.939	3	51.646	29.280	.000*
	Within Groups	254.000	144	1.764		
	Total	408.939	147			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Hasil Analisa Lanjut Duncan parameter Warna

Duncan$_a$

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F3	37	3.7838		
F2	37	3.8919	3.8919	
F1	37		4.4865	
Kontrol	37			6.0000
Sig.		.742	.071	1.000

Hasil Analisa Lanjut Duncan parameter Aroma

Duncan$_a$

	N	Subset for alpha = 0.05	
		1	2
	7	4.0270	
	7	4.2703	
	7	4.4595	
	7		5.7027
		.140	1.000

Hasil Analisa Lanjut Duncan parameter Rasa

Duncan[a]

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F3	37	2.3514		
F2	37	2.8649		
F1	37		3.5405	
Kontrol	37			5.8108
Sig.		.101	1.000	1.000

Hasil Analisa Lanjut Duncan parameter Tekstur

Duncan[a]

Perlakuan	N	Subset for alpha = 0.05	
		1	2
F3	37	3.9189	
F1	37	4.0541	
F2	37	4.0811	
Kontrol	37		4.8649
Sig.		.688	1.000

Hasil Analisa Lanjut Duncan parameter *Overall*

Duncan[a]

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F3	37	2.9459		
F2	37	3.4054	3.4054	
F1	37		3.9189	
Kontrol	37			5.6486
Sig.		.139	.098	1.000

Lampiran 4a. Hasil Analisa Overrun

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1959.754	3	653.251	138.397	.000*
Within Groups	37.761	8	4.720		
Total	1997.515	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05			
		1	2	3	4
F3	3	50.4167			
F2	3		61.2317		
F0	3			70.6687	
F1	3				85.2090
Sig.		1.000	1.000	1.000	1.000

Lampiran 4b. Hasil Analisa Melting Rate

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.136	3	7.379	632.452	.000*
Within Groups	.093	8	.012		
Total	22.229	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05		
		1	2	3
		12.7000		
		12.8667	12.8667	
			13.0667	
				16.0000
		.095	.053	1.000

Lampiran 4c. Hasil Analisa Viskositas

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3365.156	3	1121.719	6764.132	.000*
Within Groups	1.327	8	.166		
Total	3366.483	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05			
		1	2	3	4
F1	3	46.8667			
F0	3		67.3667		
F2	3			71.4333	
F3	3				94.0333
Sig.		1.000	1.000	1.000	1.000

Lampiran 4d. Hasil Analisa Warna

color instrument					
Title:	color instrument		Section:	test department	
Style number:	CS-10		Conner:	tester	
Illuminant:	D65/SCI/10				
	Name	L	a	b	
Standard sample	Sample	93.65	0.75	0.23	
Measu sample	T1	82.42	-2.47	18.05	
	T2	79.87	-2.58	20.30	
	T3	79.76	-2.04	22.90	
	T4	83.64	0.83	14.51	
	T5	82.55	0.05	13.91	
	T6	82.08	0.43	14.94	
	T7	72.79	1.68	22.26	
	T8	71.66	1.36	22.18	
	T9	71.72	1.67	22.39	
	T10	69.46	2.90	23.54	
	T11	69.42	2.87	24.21	
	T12	66.39	2.81	24.26	

Lampiran 4e. Hasil Analisa Kadar Lemak

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.637	3	6.212	451.471	.000*
Within Groups	.110	8	.014		
Total	18.747	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05			
		1	2	3	4
F3	3	1.7275			
F2	3		2.5391		
F1	3			3.3295	
F0	3				5.0957
Sig.		1.000	1.000	1.000	1.000

Lampiran 4f. Hasil Analisa Kadar Protein

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.901	3	1.967	6.436	.016tn
Within Groups	2.445	8	.306		
Total	8.346	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

[illegible]	[illegible]	Subset for alpha = 0.05	
		1	2
		4.66	
		5.0067	
		5.45677	
			6.5233
		.129	1.000

Lampiran 4g. Hasil Analisa Total Padatan

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1504.282	3	501.427	178.233	.000*
Within Groups	22.507	8	2.813		
Total	1526.789	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05			
		1	2	3	4
F1	3	43.3333			
F0	3		60.8667		
F2	3			64.4333	
F3	3				74.3333
Sig.		1.000	1.000	1.000	1.000

Lampiran 4h. Hasil Analisa Kadar Abu

Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.139	3	0.380	53.024	.000*
Within Groups	0.057	8	0.007		
Total	1.196	11			

Keterangan: tn) Tidak Nyata *Nyata
Jika sig<0.05 = berperngaruh nyata
Jika sig>0.05 = tidak berpengaruh nyata

Duncan[a]

F	N	Subset for alpha = 0.05		
		1	2	3
	3	1.3333		
	3	1.3467		
	3		1.7833	
	3			2.0633
		0.852	1.000	1.000

Lampiran 4i. Hasil Analisa Serat Pangan Larut

HASIL PENGUJIAN

Result of Analysis

Nomor : 2552/BBSPJIA/MS.08-LHU.1/VI/2024
Number
Nomor Analisis : 3729
Analysis Number
Halaman : 2 dari 2
Page *of*

Kode Sampel	Satuan	Hasil	Metode Uji / Teknik
3729	%	3,33%	AOAC 993.19 (45.4.08.2011)
3730	%	3,24%	AOAC 993.19 (45.4.08.2011)
3731	%	3,15%	AOAC 993.19 (45.4.08.2011)

Ditandatangani secara elektronik menggunakan Sertifikat Elektronik yang diterbitkan BSrE
Electronically signed using Electronic Certificate issued by BSrE

Deputi Manajer Teknis III
Deputy Technical Manager III

Yunita Rahmawati, S.Si
NIP. 198504082005022001

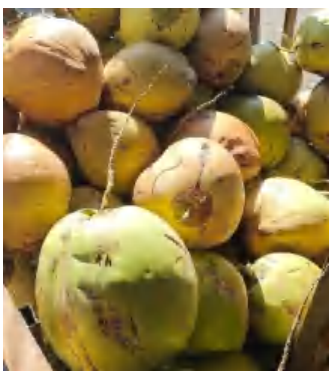
Lampiran 5. Dokumentasi Penelitian

1. Pembuatan Tepung Dahlia



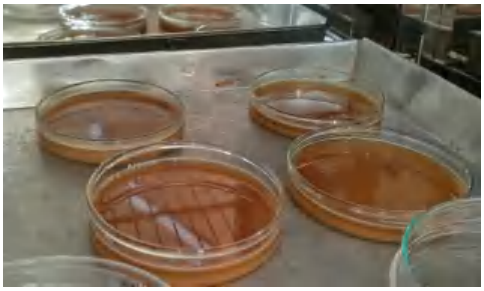



2. Pembuatan Bubur Kelapa Muda

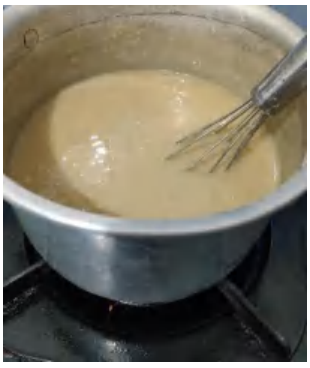


3. Ekstraksi Inulin Umbi Dahlia





4. Pembuatan Es Krim

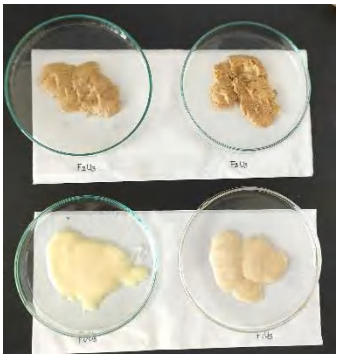
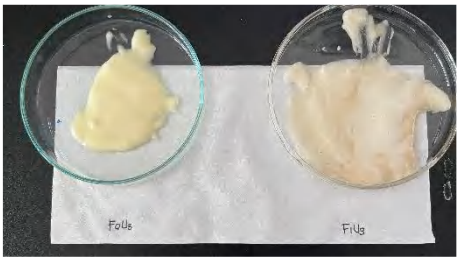




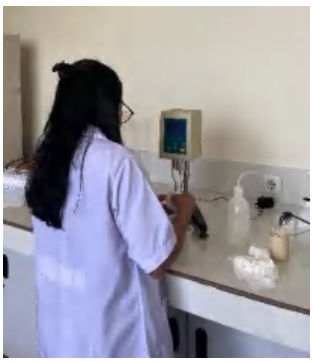
5. Pengujian Organoleptik



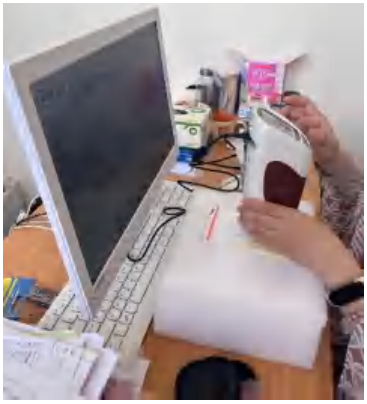
a. Melting Rate

b. Viskositas

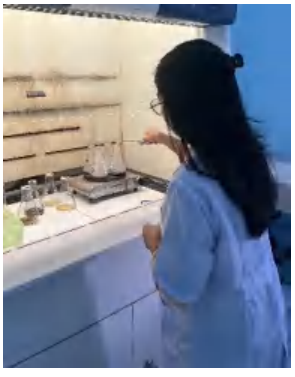
c. Kolorimeter



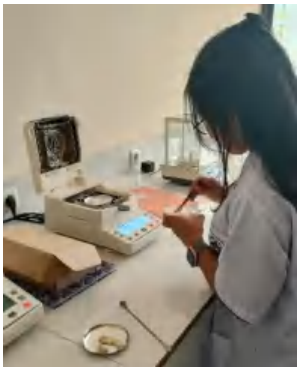
6. Pengujian Kimia

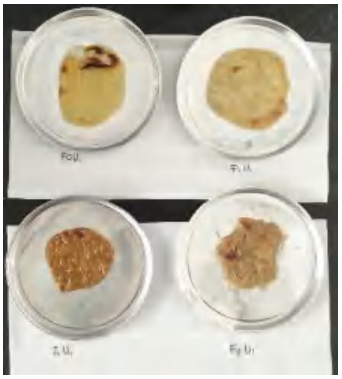
a. Lemak

b. Protein

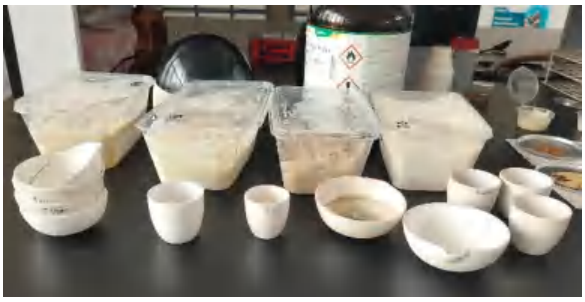




c. Total Padatan





d. Kadar Abu



CURRICULUM VITAE

A. Data Pribadi

1. Nama : Mentari Mangguali
2. Tempat, tanggal lahir : Dili, 16 Februari 1992
3. Alamat : Mappedeceng, Luwu Utara
4. Kewarganegaraan : Warga Negara Indonesia

B. Riwayat Pendidikan

1. Tamat TK tahun 1998 di TK Buana Kirana Semarang
2. Tamat SD tahun 2004 di SDN 203 Sumberdadi Kab. Luwu Utara
3. Tamat SMP tahun 2007 di SMP Negeri 1 Bone-Bone Kab. Luwu Utara
4. Tamat SMA tahun 2010 di SMA Negeri 1 Bone-Bone Kab. Luwu Utara
5. Sarja (S1) tahun 2014 di Universitas Hasanuddin Makassar
6. Magister (S2) tahun 2019 di Sekolah Tinggi Agama Kristen Apolos Manado
7. Magister (S2) tahun 2024 di Universitas Hasanuddin Makassar

C. Riwayat Organisasi

1. Bendahara Organisasi PERAK (Persekutuan Remaja Kristen) SMAN 1 Bone-bone
2. Keluarga Mahasiswa Tekper Unhas
3. Koordinator Kerohanian PMK Faperta Unhas

D. Karya ilmiah yang telah dipublikasikan

1. Mangguali M., Meta, M., & Syarifuddin, A. (2024). Study of Inulin Content and Extraction Methods in Several Types of Tuber: Review Paper. *BIO Web of Conferences*, *96*, Article 01031. https://doi.org/10.1051/bioconf/20249601031