

## 7. LAMPIRAN

### Lampiran 1. Hasil Uji Normalitas Ikan Asap UMKM Mina Karya

**Tests of Normality**

Hari	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kadar_air	Hari 0	.166	6	.200*	.978	6	.940
	Hari 3 non vakum	.173	6	.200*	.967	6	.870
	Hari 3 vakum	.350	6	.021	.806	6	.067
	Hari 6 non vakum	.201	6	.200*	.911	6	.441
	Hari 6 non vakum	.152	6	.200*	.974	6	.917
pH	Hari 0	.282	6	.146	.790	6	.047
	Hari 3 non vakum	.229	6	.200*	.864	6	.205
	Hari 3 vakum	.271	6	.191	.851	6	.160
	Hari 6 non vakum	.293	6	.117	.835	6	.118
	Hari 6 non vakum	.214	6	.200*	.920	6	.507
Aw	Hari 0	.193	6	.200*	.947	6	.718
	Hari 3 non vakum	.183	6	.200*	.971	6	.897
	Hari 3 vakum	.233	6	.200*	.915	6	.471
	Hari 6 non vakum	.141	6	.200*	.982	6	.961
	Hari 6 non vakum	.177	6	.200*	.894	6	.342
TVB	Hari 0	.234	6	.200*	.881	6	.273
	Hari 3 non vakum	.307	6	.080	.761	6	.025
	Hari 3 vakum	.195	6	.200*	.930	6	.577
	Hari 6 non vakum	.203	6	.200*	.963	6	.840
	Hari 6 non vakum	.169	6	.200*	.983	6	.965

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Lampiran 2. Hasil Uji Homogenitas Ikan Asap UMKM Mina Karya

### Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Kadar_air	Based on Mean	3.524	4	25	.021
	Based on Median	2.887	4	25	.043
	Based on Median and with adjusted df	2.887	4	16.397	.055
	Based on trimmed mean	3.444	4	25	.023
pH	Based on Mean	7.499	4	25	.000
	Based on Median	6.297	4	25	.001
	Based on Median and with adjusted df	6.297	4	11.378	.006
	Based on trimmed mean	7.424	4	25	.000
Aw	Based on Mean	2.563	4	25	.063
	Based on Median	2.215	4	25	.096
	Based on Median and with adjusted df	2.215	4	18.784	.106
	Based on trimmed mean	2.520	4	25	.067
TVB	Based on Mean	1.693	4	25	.183
	Based on Median	1.550	4	25	.218
	Based on Median and with adjusted df	1.550	4	20.825	.225
	Based on trimmed mean	1.695	4	25	.183

### Lampiran 3. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (Kadar Air) Ikan Asap UMKM Mina Karya

#### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.94019	-2.09488	2.09488
	Equal variances not assumed			.000	10.000	1.000	.00000	.94019	-2.09488	2.09488
Hari_3	Equal variances assumed	.752	.406	1.109	10	.293	.46467	.41889	-.46867	1.39800
	Equal variances not assumed			1.109	8.867	.296	.46467	.41889	-.46508	1.41442
Hari_6	Equal variances assumed	6.094	.033	-.611	10	.555	-.43100	.70592	-2.00388	1.14188
	Equal variances not assumed			-.611	5.836	.564	-.43100	.70592	-2.17016	1.30816

### Lampiran 4. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (pH) Ikan Asap UMKM Mina Karya

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.13935	-.31049	.31049
	Equal variances not assumed			.000	10.000	1.000	.00000	.13935	-.31049	.31049
Hari_3	Equal variances assumed	2.471	.147	-1.044	10	.321	-.16667	.15960	-.52227	.18894
	Equal variances not assumed			-1.044	7.359	.329	-.16667	.15960	-.54035	.20702
Hari_6	Equal variances assumed	24.826	.001	-.424	10	.680	-.07667	.18075	-.47941	.32607
	Equal variances not assumed			-.424	5.115	.689	-.07667	.18075	-.53818	.38485

### Lampiran 5. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (Aw) Ikan Asap UMKM Mina Karya

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.00349	-.00778	.00778
	Equal variances not assumed			.000	10.000	1.000	.00000	.00349	-.00778	.00778
Hari_3	Equal variances assumed	1.251	.290	-.089	10	.931	-.00050	.00563	-.01305	.01205
	Equal variances not assumed			-.089	9.338	.931	-.00050	.00563	-.01317	.01217
Hari_6	Equal variances assumed	3.432	.094	4.240	10	.002	.01300	.00307	.00617	.01983
	Equal variances not assumed			4.240	6.788	.004	.01300	.00307	.00570	.02030

### Lampiran 6. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (TVB) Ikan Asap UMKM Mina Karya

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	23.00251	-51.25279	51.25279
	Equal variances not assumed			.000	10.000	1.000	.00000	23.00251	-51.25279	51.25279
Hari_3	Equal variances assumed	.108	.749	-1.380	10	.198	-20.18167	14.61941	-52.75574	12.39241
	Equal variances not assumed			-1.380	9.830	.198	-20.18167	14.61941	-52.83226	12.46893
Hari_6	Equal variances assumed	1.375	.268	-.976	10	.352	-16.57167	16.97441	-54.39301	21.24967
	Equal variances not assumed			-.976	8.194	.357	-16.57167	16.97441	-55.55369	22.41036

### Lampiran 7. Uji Normalitas Ikan Asap Cair 12 %

**Tests of Normality**

Hari	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kadar_air	Hari 0	.131	6	.200*	.973	6	.911
	Hari 3 non vakum	.163	6	.200*	.988	6	.983
	Hari 3 vakum	.226	6	.200*	.936	6	.630
	Hari 6 non vakum	.195	6	.200*	.955	6	.781
	Hari 6 vakum	.246	6	.200*	.944	6	.688
pH	Hari 0	.102	6	.200*	1.000	6	1.000
	Hari 3 non vakum	.178	6	.200*	.916	6	.477
	Hari 3 vakum	.191	6	.200*	.937	6	.638
	Hari 6 non vakum	.153	6	.200*	.955	6	.782
	Hari 6 vakum	.229	6	.200*	.929	6	.570
Aw	Hari 0	.234	6	.200*	.961	6	.828
	Hari 3 non vakum	.233	6	.200*	.932	6	.596
	Hari 3 vakum	.196	6	.200*	.954	6	.773
	Hari 6 non vakum	.285	6	.138	.870	6	.224
	Hari 6 vakum	.297	6	.105	.852	6	.163
TVB	Hari 0	.233	6	.200*	.885	6	.293
	Hari 3 non vakum	.272	6	.187	.865	6	.206
	Hari 3 vakum	.269	6	.200*	.864	6	.203
	Hari 6 non vakum	.201	6	.200*	.862	6	.197
	Hari 6 vakum	.168	6	.200*	.985	6	.973

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Lampiran 8. Uji Homogenitas Ikan Asap Cair 12 %

**Test of Homogeneity of Variance**

		Levene Statistic	df1	df2	Sig.
Kadar_air	Based on Mean	.316	4	25	.865
	Based on Median	.227	4	25	.920
	Based on Median and with adjusted df	.227	4	23.105	.920
	Based on trimmed mean	.309	4	25	.869
pH	Based on Mean	1.146	4	25	.358
	Based on Median	1.107	4	25	.375
	Based on Median and with adjusted df	1.107	4	22.622	.378
	Based on trimmed mean	1.144	4	25	.359
Aw	Based on Mean	1.215	4	25	.329
	Based on Median	.895	4	25	.481
	Based on Median and with adjusted df	.895	4	19.832	.485
	Based on trimmed mean	1.199	4	25	.336
TVB	Based on Mean	1.082	4	25	.387
	Based on Median	.896	4	25	.481
	Based on Median and with adjusted df	.896	4	20.501	.484
	Based on trimmed mean	1.079	4	25	.388

**Lampiran 9. Uji Anova Waktu Penyimpanan Ikan Asap 12 %**

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
kadar_air_non_vakum	Between Groups	17.504	2	8.752	6.903	.007
	Within Groups	19.018	15	1.268		
	Total	36.522	17			
kadar_air_vakum	Between Groups	42.399	2	21.200	13.740	.000
	Within Groups	23.144	15	1.543		
	Total	65.543	17			
pH_non_vakum	Between Groups	.032	2	.016	14.203	.000
	Within Groups	.017	15	.001		
	Total	.049	17			
pH_vakum	Between Groups	.005	2	.003	2.628	.105
	Within Groups	.015	15	.001		
	Total	.020	17			
Aw_non_vakum	Between Groups	.000	2	.000	4.677	.026
	Within Groups	.000	15	.000		
	Total	.001	17			
Aw_vakum	Between Groups	.001	2	.000	7.531	.005
	Within Groups	.001	15	.000		
	Total	.001	17			
TVB_non_vakum	Between Groups	3976.866	2	1988.433	1.986	.174
	Within Groups	15168.515	15	1011.234		
	Total	19145.382	17			
TVB_vakum	Between Groups	3365.128	2	1682.564	1.500	.255
	Within Groups	16829.903	15	1121.987		
	Total	20194.931	17			

**Lampiran 10. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (Kadar Air) Ikan Asap Cair 12 %**

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.75461	-1.68138	1.68138
	Equal variances not assumed			.000	10.000	1.000	.00000	.75461	-1.68138	1.68138
Hari_3	Equal variances assumed	.174	.685	1.187	10	.263	.82217	.69273	-.72133	2.36566
	Equal variances not assumed			1.187	9.923	.263	.82217	.69273	-.72296	2.36729
Hari_6	Equal variances assumed	.482	.503	2.245	10	.049	1.33983	.59673	.01025	2.66942
	Equal variances not assumed			2.245	9.333	.050	1.33983	.59673	-.00274	2.68240

## Lampiran 11. Hasil Uji T-Test Perbedaan Perlakuan Kemasan pH Ikan Asap Cair 12

%

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.01402	-.03125	.03125
	Equal variances not assumed			.000	10.000	1.000	.00000	.01402	-.03125	.03125
Hari_3	Equal variances assumed	.135	.721	1.666	10	.127	-.03667	.02201	-.01237	.08571
	Equal variances not assumed			1.666	9.899	.127	-.03667	.02201	-.01244	.08578
Hari_6	Equal variances assumed	1.157	.307	5.289	10	.000	.10167	.01922	.05884	1.4449
	Equal variances not assumed			5.289	9.038	.000	.10167	.01922	.05821	1.4512

## Lampiran 12. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (Aw) Ikan Asap Cair 12

%

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	.00396	-.00882	.00882
	Equal variances not assumed			.000	10.000	1.000	.00000	.00396	-.00882	.00882
Hari_3	Equal variances assumed	1.257	.288	-1.289	10	.226	-.00550	.00427	-.01501	.00401
	Equal variances not assumed			-1.289	9.168	.229	-.00550	.00427	-.01513	.00413
Hari_6	Equal variances assumed	.984	.345	.795	10	.445	.00217	.00273	-.00391	.00824
	Equal variances not assumed			.795	8.888	.447	.00217	.00273	-.00401	.00834

**Lampiran 13. Hasil Uji T-Test Perbedaan Perlakuan Kemasan (TVB) Ikan Asap Cair  
12 %**

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.000	1.000	.000	10	1.000	.00000	23.69336	-52.79211	52.79211
	Equal variances not assumed			.000	10.000	1.000	.00000	23.69336	-52.79211	52.79211
Hari_3	Equal variances assumed	.029	.868	.522	10	.613	7.48667	14.35227	-24.49218	39.46552
	Equal variances not assumed			.522	9.664	.614	7.48667	14.35227	-24.64351	39.61684
Hari_6	Equal variances assumed	.287	.604	-1.161	10	.272	-20.09167	17.29877	-58.63573	18.45239
	Equal variances not assumed			-1.161	9.106	.275	-20.09167	17.29877	-59.15507	18.97174

**Lampiran 14. Hasil Uji T-Test Perbedaan Metode Pengasapan Pada pH Pengasapan  
UMKM dan Asap Cair 12 %**

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	193.548	.000	2.491	10	.032	.24667	.09903	.02600	.46733
	Equal variances not assumed			2.491	5.101	.054	.24667	.09903	-.00640	.49973
Hari_3	Equal variances assumed	10.845	.008	.256	10	.803	.03667	.14347	-.28299	.35633
	Equal variances not assumed			.256	5.107	.808	.03667	.14347	-.32981	.40314
Hari_6	Equal variances assumed	26.122	.000	.637	10	.538	.11500	.18040	-.28696	.51696
	Equal variances not assumed			.637	5.076	.551	.11500	.18040	-.34666	.57666



## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	193.548	.000	2.491	10	.032	.24667	.09903	.02600	.46733
	Equal variances not assumed			2.491	5.101	.054	.24667	.09903	-.00640	.49973
Hari_3	Equal variances assumed	32.079	.000	3.274	10	.008	.24000	.07330	.07667	.40333
	Equal variances not assumed			3.274	5.521	.019	.24000	.07330	.05679	.42321
Hari_6	Equal variances assumed	4.167	.069	13.177	10	.000	.29333	.02226	.24373	.34293
	Equal variances not assumed			13.177	8.014	.000	.29333	.02226	.24202	.34465

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	193.548	.000	2.491	10	.032	.24667	.09903	.02600	.46733
	Equal variances not assumed			2.491	5.101	.054	.24667	.09903	-.00640	.49973
Hari_3	Equal variances assumed	10.537	.009	.511	10	.621	.07333	.14364	-.24671	.39337
	Equal variances not assumed			.511	5.131	.631	.07333	.14364	-.29308	.43974
Hari_6	Equal variances assumed	27.590	.000	1.203	10	.257	.21667	.18007	-.18455	.61788
	Equal variances not assumed			1.203	5.039	.282	.21667	.18007	-.24515	.67848

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	193.548	.000	-2.491	10	.032	-.24667	.09903	-.46733	-.02600
	Equal variances not assumed			-2.491	5.101	.054	-.24667	.09903	-.49973	.00640
Hari_3	Equal variances assumed	34.397	.000	-2.787	10	.019	-.20333	.07297	-.36592	-.04075
	Equal variances not assumed			-2.787	5.426	.035	-.20333	.07297	-.38656	-.02010
Hari_6	Equal variances assumed	.727	.414	-7.722	10	.000	-.19167	.02482	-.24697	-.13636
	Equal variances not assumed			-7.722	9.598	.000	-.19167	.02482	-.24729	-.13605

### Lampiran 15. Hasil Uji T-Test Perbedaan Metode Pengasapan Pada Aw Pengasapan UMKM dan Asap Cair 12 %

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hari_0	Equal variances assumed	.118	.738	1.340	10	.210	.00500	.00373	-.00331	.01331
	Equal variances not assumed			1.340	9.847	.210	.00500	.00373	-.00333	.01333
Hari_3	Equal variances assumed	.278	.609	3.181	10	.010	.01350	.00424	.00405	.02295
	Equal variances not assumed			3.181	9.207	.011	.01350	.00424	.00393	.02307
Hari_6	Equal variances assumed	1.651	.228	7.466	10	.000	.02400	.00321	.01684	.03116
	Equal variances not assumed			7.466	7.772	.000	.02400	.00321	.01655	.03145

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hari_0	Equal variances assumed	.118	.738	1.340	10	.210	.00500	.00373	-.00331	.01331
	Equal variances not assumed			1.340	9.847	.210	.00500	.00373	-.00333	.01333
Hari_3	Equal variances assumed	.880	.370	1.504	10	.163	.00850	.00565	-.00409	.02109
	Equal variances not assumed			1.504	9.375	.165	.00850	.00565	-.00421	.02121
Hari_6	Equal variances assumed	3.063	.111	5.167	10	.000	.01317	.00255	.00749	.01884
	Equal variances not assumed			5.167	7.688	.001	.01317	.00255	.00725	.01909

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hari_0	Equal variances assumed	.118	.738	1.340	10	.210	.00500	.00373	-.00331	.01331
	Equal variances not assumed			1.340	9.847	.210	.00500	.00373	-.00333	.01333
Hari_3	Equal variances assumed	.127	.729	1.651	10	.130	.00800	.00485	-.00280	.01880
	Equal variances not assumed			1.651	9.999	.130	.00800	.00485	-.00280	.01880
Hari_6	Equal variances assumed	.238	.636	7.268	10	.000	.02617	.00360	.01815	.03419
	Equal variances not assumed			7.268	9.522	.000	.02617	.00360	.01809	.03424

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hari_0	Equal variances assumed	.118	.738	-1.340	10	.210	-.00500	.00373	-.01331	.00331
	Equal variances not assumed			-1.340	9.847	.210	-.00500	.00373	-.01333	.00333
Hari_3	Equal variances assumed	3.772	.081	-2.722	10	.021	-.01400	.00514	-.02546	-.00254
	Equal variances not assumed			-2.722	7.877	.027	-.01400	.00514	-.02589	-.00211
Hari_6	Equal variances assumed	1.800	.209	-5.594	10	.000	-.01100	.00197	-.01538	-.00662
	Equal variances not assumed			-5.594	9.449	.000	-.01100	.00197	-.01542	-.00658

Lampiran 16. Foto Alat, Plastik, Keadaan di UMKM, dan Hasil Pengasapan Ikan Manyung Asap Cair  
 Lampiran 14. Foto Alat, Plastik, dan Hasil Ikan Manyung Asap Cair



Sumber : Dokumentasi Pribadi

Plastik Nylon (Poliamida) 0,08  $\mu\text{m}$  (17×25) cm



Sumber : Dokumentasi Pribadi

Mesin *Sealer ( FRE- 400) Pedal Plastic Sealing Machine*



Sumber : Dokumentasi Pribadi

Mesin *Vaccum Sealer DZ 400 500 Vaccum Packager*



Sumber : Dokumentasi Pribadi  
Kondisi Proses Produksi Pengolahan Ikan Asap Milik Bu Sukarti



Sumber : Dokumentasi Pribadi  
Penataan ikan di tray (asap cair)



Sumber : Dokumentasi Pribadi  
Penataan ikan di tray sesudah di oven (asap cair)



## Lampiran 17. Plagiasi Scan Unicheck



**8.52%** PLAGIARISM  
APPROXIMATELY

## Report #11242506

PENDAHULUAN Latar Belakang Indonesia merupakan negara yang kaya akan hasil sumber daya alam. Berdasarkan data statistik KKP (Kementerian Kelautan Perikanan) tahun 2018, produksi perikanan tangkap di Indonesia mencapai 7.248.297 ton. Ikan hasil tangkapan dapat diolah dengan berbagai cara seperti pengalengan, pemindangan, pengolahan berbasis lumatan daging (surimi), pengasapan dll (PERMEN-KP 2018). Salah satu proses pengolahan ikan yang terkenal di Kota Semarang adalah pengasapan. Ikan asap merupakan satu dari banyak produk olahan yang disukai oleh masyarakat Indonesia karena mempunyai aroma dan rasa yang khas. Ikan manyung (*Arius Thalassius*) memiliki nilai ekonomis penting dan banyak disukai masyarakat terutama dalam bentuk olahan maupun dalam kondisi segar. Salah satu contoh pengolahan ikan manyung adalah dengan pengasapan. Di kota Semarang, ikan manyung ini sangat berkaitan dengan ikon kuliner kota Semarang yang terkenal, yaitu sayur mangut yang berbahan dasar salah satunya dari ikan manyung (Taunay et al, 2013). Selain bernilai ekonomis, ikan-ikan demersal termasuk ikan manyung memiliki nilai gizi yang tinggi yaitu kandungan protein 12,7 21,2 g, lemak 0,2 2,9 g, air 75,1 81,1 g, dan abu 0,9 1,6 g (Khamidah et al, 2019). Untuk ikan manyung harga per kilogramnya mencapai Rp. 29.000 Rp. 38.000 (PPI