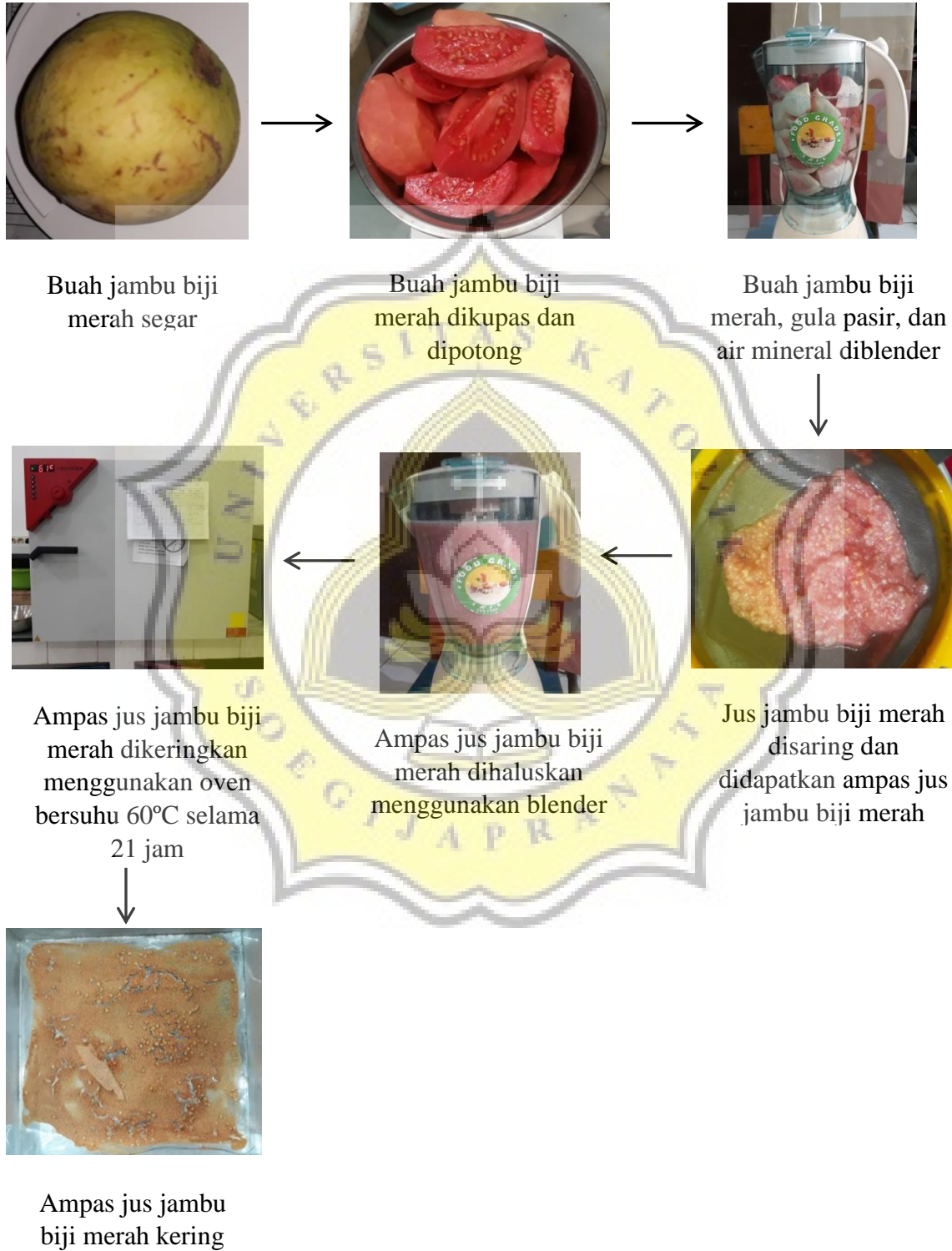


7. LAMPIRAN

Lampiran 1. Gambar diagram alir pembuatan jus jambu biji merah dan pengeringan ampas jus jambu biji merah



Lampiran 2. Gambar diagram alir ekstraksi minyak ampas jus jambu biji merah



Ampas jus jambu
biji merah kering
ditimbang sebanyak
30 g



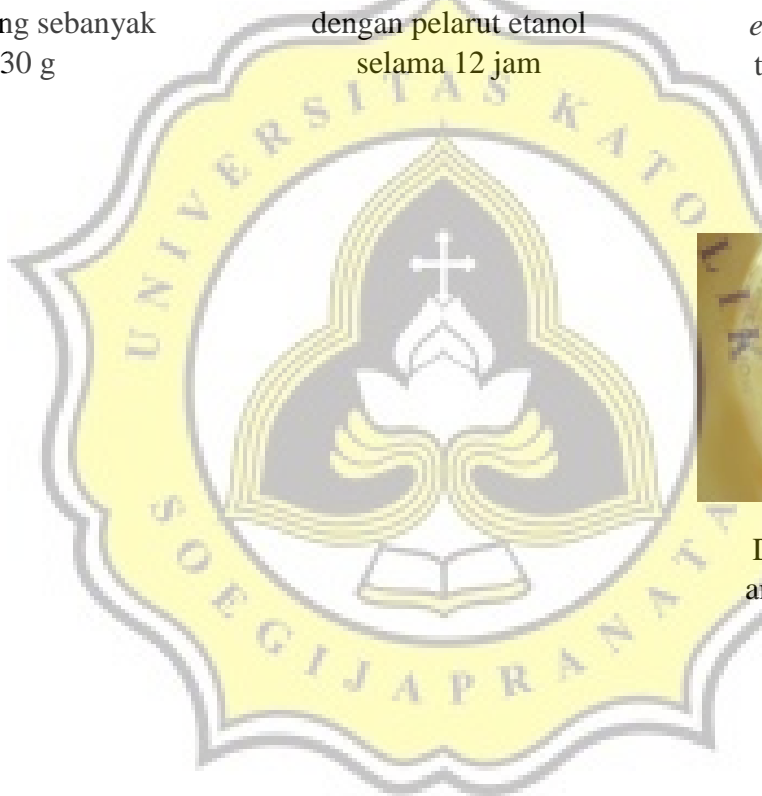
Diekstraksi
menggunakan *soxhlet*
dengan pelarut etanol
selama 12 jam



Dikonsentraksikan
menggunakan *rotary
evaporator* dibawah
tekanan 0,075 MPa



Didapatkan minyak
ampas jus jambu biji
merah



Lampiran 3. Pembuatan emulsi



Minyak ampas jus jambu biji merah, tween 80, serta buffer fosfat pH 7 ditimbang, dicampurkan, dan diaduk hingga homogen



Bahan pengkapsul yaitu maltodekstrin dan *xanthan gum* ditimbang



Campuran antara minyak ampas jus jambu biji merah, tween 80, dan buffer fosfat pH 7 dicampurkan dengan bahan pengkapsul dan dihomogenasi menggunakan homogenizer 9900 rpm selama 2 menit



Didapatkan emulsi yang kemudian dikeringkan menggunakan metode *freeze drying* dan *vacuum drying*



Lampiran 4. Gambar diagram alir enkapsulasi menggunakan metode pengeringan *freeze drying*



Emulsi dari langkah pembuatan emulsi

Dituang ke toples plastik dan dibekukan

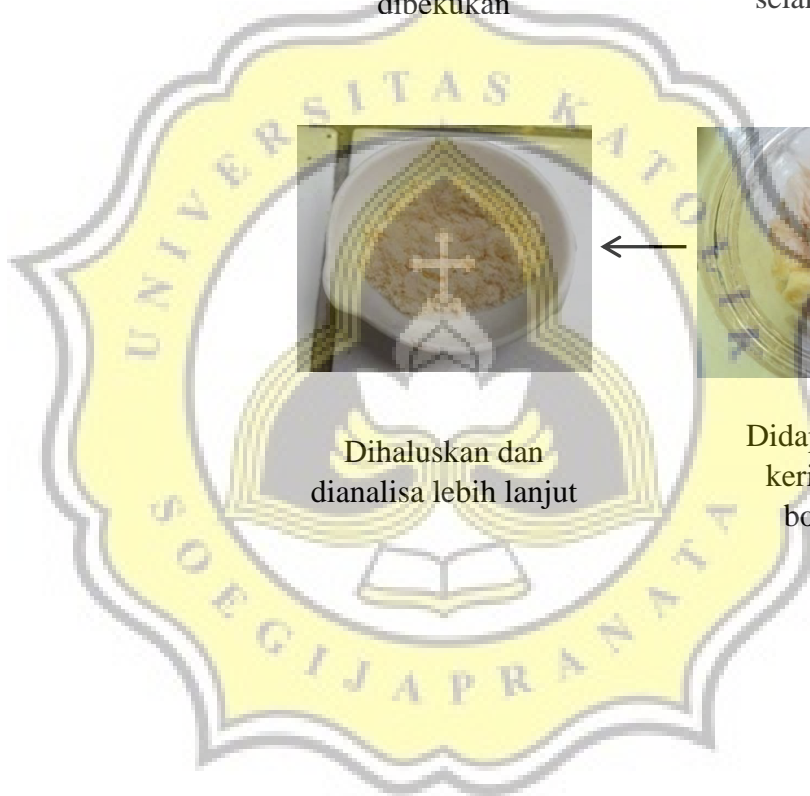
Dimasukkan ke *freeze dryer* bersuhu -101°C selama 1 minggu



Dihaluskan dan dianalisa lebih lanjut



Didapatkan hasil kering berupa bongkahan



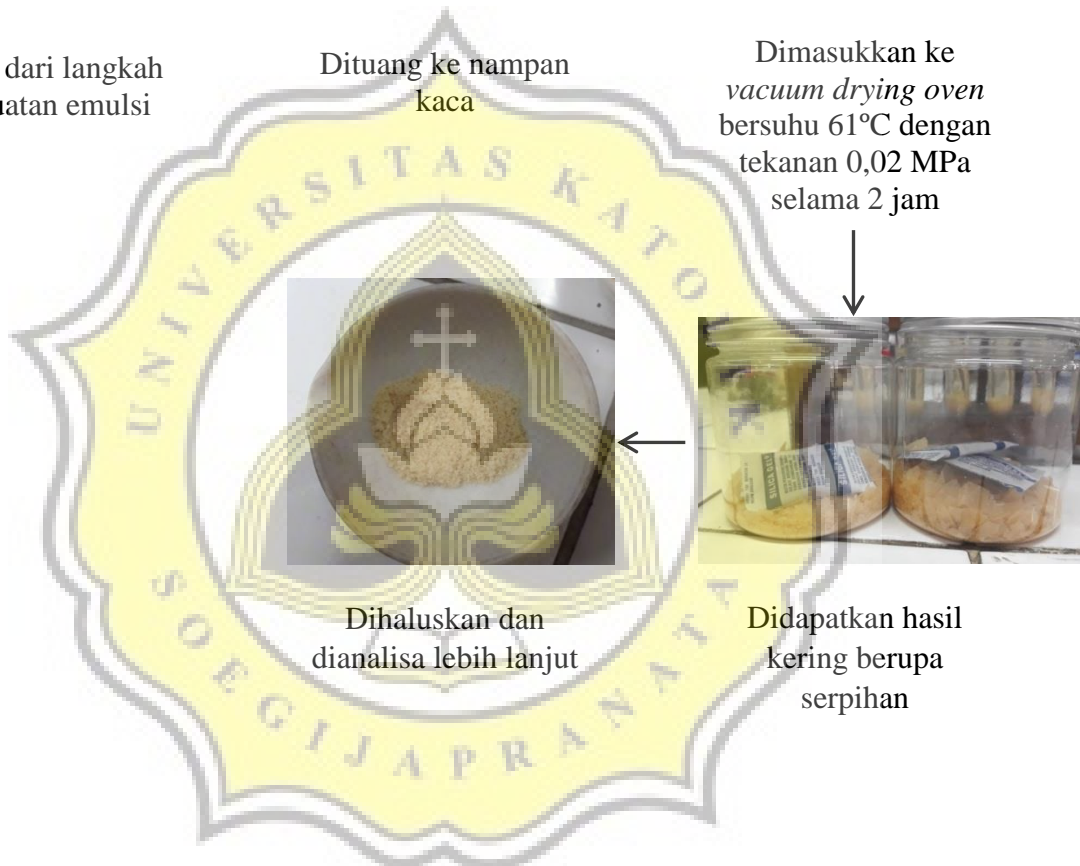
Lampiran 5. Gambar diagram alir enkapsulasi menggunakan metode pengeringan *vacuum drying*



Emulsi dari langkah pembuatan emulsi

Dituang ke nampan kaca

Dimasukkan ke *vacuum drying oven* bersuhu 61°C dengan tekanan $0,02\text{ MPa}$ selama 2 jam



Dihaluskan dan dianalisa lebih lanjut

Didapatkan hasil kering berupa serpihan

Lampiran 6. Uji normalitas karakteristik kimia minyak ampas jus jambu biji merah

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FFA	.180	6	.200(*)	.920	6	.505
P_Anisidin	.214	6	.200(*)	.916	6	.477
Total_Karoten	.205	6	.200(*)	.926	6	.548
Rendemen	.319	6	.056	.683	6	.004
Akt_Antioksidan	.304	6	.088	.824	6	.095

* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lampiran 7. Uji normalitas karakteristik kimia serbuk hasil enkapsulasi

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Akt_Antioksidan	.225	12	.094	.840	12	.028
Total_Karoten	.204	12	.182	.861	12	.050
Surface_Oil	.226	12	.093	.909	12	.206
Minyak_terenkapsulasi	.207	12	.164	.843	12	.030
Rendemen	.171	12	.200(*)	.875	12	.077
Kadar_air	.113	12	.200(*)	.970	12	.908

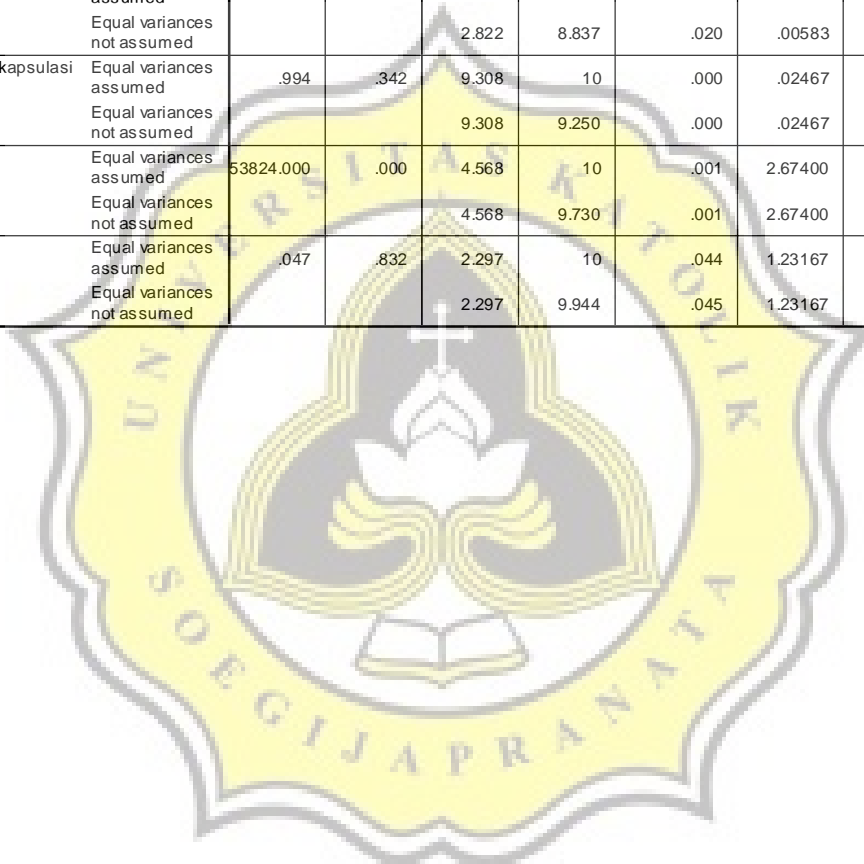
* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lampiran 8. Uji beda karakteristik kimia serbuk hasil enkapsulasi

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
Akt_Antioksidan	Equal variances assumed	38.062	.000	4.821	10	.001	17.44173	3.61777	9.38085	25.50262
	Equal variances not assumed			4.821	5.238	.004	17.44173	3.61777	8.26782	26.61565
Total_Karoten	Equal variances assumed	2.203	.169	9.044	10	.000	.27833	.03078	.20976	.34691
	Equal variances not assumed			9.044	7.923	.000	.27833	.03078	.20724	.34943
Surface_Oil	Equal variances assumed	2.396	.153	2.822	10	.018	.00583	.00207	.00123	.01044
	Equal variances not assumed			2.822	8.837	.020	.00583	.00207	.00114	.01052
Minyak_terenkapsulasi	Equal variances assumed	.994	.342	9.308	10	.000	.02467	.00265	.01876	.03057
	Equal variances not assumed			9.308	9.250	.000	.02467	.00265	.01870	.03064
Rendemen	Equal variances assumed	53824.000	.000	4.568	10	.001	2.67400	.58538	1.36969	3.97831
	Equal variances not assumed			4.568	9.730	.001	2.67400	.58538	1.36477	3.98323
Kadar_air	Equal variances assumed	.047	.832	2.297	10	.044	1.23167	.53626	.03682	2.42652
	Equal variances not assumed			2.297	9.944	.045	1.23167	.53626	.03590	2.42743



Doc vs Internet + Library

95.67% Originality	4.33% Similarity	303 Sources
--------------------	------------------	-------------

Web sources: 143 sources found

1. http://repository.unika.ac.id/7048/8/05.70.0031%20Elisabeth%20Santy%20Agustine%20-%20LAM...	0.55%
2. http://repository.unika.ac.id/2396/3/10.70.0039%20Biondy%20Adiyoga%20BAB%20II.pdf	0.43%
3. https://docplayer.info/106377-Laporan-tetap-praktikum-mikrobiologi-umum.html	0.31%
4. https://docplayer.info/31409737-Perubahan-mutu-dan-pendugaan-umur-simpan-surimi-kering-beku-..	0.27%
5. https://id.123dok.com/document/7q071wiz-pengaruh-substitusi-tepung-ikan-dengan-tepung-kepala-..	0.19%
6. https://id.123dok.com/document/oz1ev8y9-pengaruh-jenis-zat-penstabil-dan-konsentrasi-zat-penst...	0.19%
7. https://docplayer.info/34466687-l-pondahuluan-bernilai-ekonomis-tinggi-dan-telah-diusahakan-adala..	0.17%
8. http://repository.unika.ac.id/5783/1/11.70.0037%20Elisabeth%20Tiffany%20Kristanto%20COVER....	0.15%
9. http://ojs.uph.edu/index.php/DJM/article/download/197/130	0.15%
10. http://www.jurnalfarmasihigea.org/index.php/higea/article/download/67/64	0.15%
11. http://eprints.umm.ac.id/35834/4/jiptummp-gdl-bungamarce-47473-4-bab3.pdf	0.15%
12. https://repository.ipb.ac.id/bitstream/handle/123456789/60528/BAB%20II%20Bahan%20dan%20...	0.15%
13. https://repository.ipb.ac.id/bitstream/handle/123456789/57251/BAB%203%20METODOLOGI%20...	0.15%
14. https://repository.telkomuniversity.ac.id/pustaka/files/65623/jurnal_eproc/analisis-perbandingan-k...	0.15%
15. https://aly-iloenx.blogspot.com/2012/09/faktor-faktor-yang-berhubungan-dengan.html	0.15%
16. https://id.123dok.com/document/1y955dlz-gambaran-karies-gigi-berdasarkan-kadar-fluor-air-sumu..	0.15%
17. http://eprints.undip.ac.id/54684/1/Full_Text.pdf	0.15%
18. http://repository.amikom.ac.id/files/Publikasi_09.12.4019.pdf	0.15%
19. http://lib.ui.ac.id/file?file=digital/20318873-S-PDF-Fitriah%20Andriani.pdf	0.15%
20. http://repository.unand.ac.id/17138/1/skripsi_desi.pdf	0.15%
21. http://jurnal.unsyiah.ac.id/floratek/article/download/532/452	0.14%
22. https://repository.ipb.ac.id/bitstream/handle/123456789/68820/H14gbn.pdf?sequence=1&isAllowe...	0.14%
23. https://husnulhotimah96.blogspot.com/2016/10/laporan-budidaya-tanaman-kedelai.html	0.14%
24. https://repository.ipb.ac.id/bitstream/handle/123456789/1296/A06rpu.pdf	0.14%
25. https://docplayer.info/33059744-Prosiding-abstrak-seminar-nasional-optimalisasi-observasi-dampa..	0.14%
26. https://jpa.ub.ac.id/index.php/jpa/article/download/155/164	0.14%
27. https://id.123dok.com/document/yj8jnx5q-studi-awal-mikroplastik-dalam-sedimen-air-dan-tubuh-ud..	0.14%
28. http://digilib.uin-suka.ac.id/12261/1/BAB%201%2C%20V%2C%20DAFTAR%20PUSTAKA.pdf	0.14%
29. https://core.ac.uk/download/pdf/160449551.pdf	0.14%
30. http://repository.unika.ac.id/11564/1/12.70.0007%20Anastasia%20Stella%20Angelina%20COVER..	0.14%
31. https://text-id.123dok.com/document/zwwr47gz-karakteristik-fisikokimia-steamed-cake-mocaf-de...	0.14%
32. https://id.123dok.com/document/eqowpv0y-analisis-intervensi-melemahnya-nilai-tukar-rupiah-terh...	0.14%
33. https://rahmadkereng.blogspot.com/2015/03/dinamika-kehidupan-mantan-tenaga-kerja.html	0.14%
34. https://repository.telkomuniversity.ac.id/pustaka/files/136775/jurnal_eproc/analisis-dan-implemen...	0.14%

 Similarity

 Citation

 Similarity from a chosen source

 References

 Possible character replacement

35. https://repository.ipb.ac.id/bitstream/handle/123456789/44578/A07amu.pdf?sequence=1	0.14%
36. https://repository.ipb.ac.id/bitstream/handle/123456789/85773/G16atw.pdf?sequence=1&isAllowe...	0.14%
37. https://id.123dok.com/document/4zp4vwoz-faktor-faktor-yang-mempengaruhi-kesempatan-kerja-p...	0.14%
38. https://docplayer.info/86310-Babi-pendahulu-jumlah-uang-beredar-teramat-penting-karena-peranan...	0.14%
39. https://mimizhumar27.blogspot.com/2014/12/laporan-pemeliharaan-ayam-broiler.html	0.14%
40. http://eprints.undip.ac.id/19194/1/Radita_Kusumaningrum.pdf	0.14%
41. https://docplayer.info/282790-Bab-6-pinjaman-bab-6-pinjaman.html	0.14%
42. http://jurnal.polgan.ac.id/index.php/sinkron/article/download/176/124	0.14%
43. https://ojs.unm.ac.id/ptp/article/download/6222/3554	0.14%
44. https://docplayer.info/264081-Bab-i-pendahuluan-dalam-lagi-bahasa-tercakup-dalam-kebudayaan-...	0.14%
45. https://id.123dok.com/document/wye38d0q-pembangunan-aplikasi-media-pembelajaran-tahsin-qu...	0.14%
46. https://ejournal.unib.ac.id/index.php/jspi/article/download/801/pdf_125	0.14%
47. http://publikasi.mercubuana.ac.id/index.php/jtm/article/download/1203/912	0.14%
48. https://jpa.ub.ac.id/index.php/jpa/article/viewFile/92/110	0.14%
49. https://id.123dok.com/document/wq2kjneq-analisis-gelatin-sapi-dan-gelatin-babi-pada-produk-cang...	0.14%
50. https://id.123dok.com/document/zwwr4x1z-evaluasi-karakteristik-fisikokimiawi-royal-icing-sugar-y...	0.14%
51. http://repository.unika.ac.id/11732/1/12.70.0171%20Emmanuel%20Natalino%20COVER.pdf	0.14%
52. http://ejournal.unsrat.ac.id/index.php/actadiurna/article/viewFile/2333/1887	0.14%
53. http://repository.unika.ac.id/736/1/12.70.0083%20-%20KP%20MYRIAM%20THERESE%20ANGE...	0.14%
54. http://directory.umm.ac.id/penelitian/PKML/pdf/PEMBUATAN%20ABON%20AMPAS%20TAHU%...	0.14%
55. https://dcycheesadonna.wordpress.com/2015/01/14/analisis-kualitatif-boraks-dan-kadar-protein-pa...	0.14%
56. http://repository.unika.ac.id/11585/1/12.70.0009%20Ferra%20Aprilia%20Kristanti%20COVER.pdf	0.14%
57. http://www.skripsitipftp.staff.ub.ac.id/files/2014/10/JURNAL-Theresia-Dyan-Tiara-Septivirta.pdf	0.14%
58. http://repository.usu.ac.id/bitstream/handle/123456789/68712/Chapter%20III-V.pdf?sequence=3&...	0.14%
59. https://fathurrahmankampasi.blogspot.com/2017/09/skripsi-kajian-mutu-mie-basah-yang.html	0.14%
60. http://repository.unib.ac.id/8142/1/IV%2CV%2CLAMP%2CIL-14-tri.FE.pdf	0.14%
61. https://www.slideshare.net/albermet/analisis-biaya-operasional-kendaraan-dan-waktu-perjalanan	0.14%
62. https://core.ac.uk/download/pdf/35398411.pdf	0.14%
63. https://id.123dok.com/document/zxn04ndq-uji-sensori-dengan-metode-preferenceuntuk-produk-ba...	0.14%
64. https://jpa.ub.ac.id/index.php/jpa/article/viewFile/64/81	0.14%
65. http://repository.unika.ac.id/11589/1/12.70.0014%20Paulus%20Yosef%20Surya%20Prima%20An...	0.14%
66. https://docplayer.info/33902284-Bab-2-landasan-teori.html	0.14%
67. https://repository.ipb.ac.id/bitstream/handle/123456789/59976/F10yup.pdf;sequence=1	0.14%
68. https://repository.ipb.ac.id/bitstream/handle/123456789/59767/F10ars.pdf?sequence=1&isAllowed..	0.14%
69. http://journal.ipb.ac.id/index.php/jtip/article/viewFile/9105/7161	0.14%
70. https://repository.ipb.ac.id/bitstream/handle/123456789/14941/TRI%20PURWANDOKO_F2008.pd..	0.14%
71. https://jurnalpangan.com/index.php/pangan/article/view/144/130	0.14%
72. http://repository.unhas.ac.id/bitstream/handle/123456789/24674/ADHELIA%20ULFI_H12113502_...	0.14%
73. https://core.ac.uk/download/pdf/160449540.pdf	0.14%
74. https://repository.ipb.ac.id/bitstream/handle/123456789/60511/H10ioc.pdf?sequence=12&isAllowe..	0.14%
75. https://core.ac.uk/download/pdf/35399495.pdf	0.14%
76. https://id.123dok.com/document/7q0xw4gq-pengaruh-media-penyimpanan-dan-pemberian-air-pend...	0.14%
77. https://docplayer.info/436550-Ppgm-merupakan-proyek-yang-penting-bagi-industri-minyak-dan-gas...	0.14%
78. https://repository.ipb.ac.id/bitstream/handle/123456789/19430/A09pra.pdf?sequence=2&isAllowe...	0.14%
79. https://text-id.123dok.com/document/zwwr4x1z-evaluasi-karakteristik-fisikokimiawi-royal-icing-su...	0.14%
80. https://repository.ipb.ac.id/jspui/bitstream/123456789/61686/1/G10amu1.pdf	0.14%

 Similarity

 Citation

 Similarity from a chosen source

 References

 Possible character replacement