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Lampiran 1. Hasil determinasi tanaman daun sirsak (*Annona muricata* Linn.)



UPT-LABORATORIUM

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Nomor : 009/DET/UPT-LAB/25.04.2022
 Hal : Hasil determinasi tumbuhan
 Lamp. : -

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 NIM : 24185568A
 Prodi : S1 Farmasi, Universitas Setia Budi, Surakarta
 Nama Sampel : *Annona muricata*, L

HASIL DETERMINASI TUMBUHAN

Klasifikasi

Kingdom : Plantae
 Super Divisi : Spermatophyta
 Divisi : Magnoliophyta
 Kelas : Magnoliopsida/Dicotyledoneae
 Ordo : Polycarpiceae
 Famili : Annonaceae
 Genus : *Annona*
 Species : *Annona muricata*, L

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :

1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 15a. golongan 8. 109b – 119b – 120b – 128b – 129b – 135b – 136b – 139b – 140b – 142b – 143b – 146b – 154b – 155b – 156a – 162b – 163a – 164b – 165b – 166a. Familia 50. Annonaceae. 1b – 2. *Annona*. 1a. *Annona muricata*, L.

Deskripsi:

- Habitus : Pohon, tinggi 3 – 8 meter.
- Batang : Bulat, berkayu, percabangan monopodial.
- Daun : Daun tunggal, bangun lanset atau bulat telur terbalik, ujung meruncing pendek, pangkal runcing, tepi rata, tulang daun menyirip, seperti kulit, panjang 10,5 – 13,1 cm, permukaan atas hijau tua dan mengkilat, permukaan bawah hijau muda, tangkai pendek.
- Bunga : Bunga tunggal, beraturan, berhadapan dengan daun. Daun kelopak 3, kecil. Daun mahkota berdaging, 3 yang terluar hijau kemudian kuning, panjang 3,5 – 5 cm, 3 yang terdalam bulat telur, kuning muda. Daun kelopak dan daun mahkota terluar pada kuncup tersusun seperti katup, daun mahkota terdalam seperti genting. Dasar bunga sangat cekung. Benangsari banyak. Penghubung ruangsari di atas ruang sari melebar, menutup ruangnya, putih. Bakal buah banyak, bakal biji 1. Tangkai putik langsing, berambut. Kepala putik silindris.
- Buah : Buah majemuk tak beraturan, berduri tempel, bentuk telur miring atau bengkok, hijau tua, daging buah putih, masam.
- Biji : Biji berwarna coklat kehitaman, keras, permukaan halus mengkilat, berujung tumpul, Panjang kira-kira 16,8 mm, lebar 9,6 mm. Jumlah biji dalam satu buah bervariasi antara 20-70 butir.
- Akar : Akar tunggang.

Kepala UPT-LAB
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 25 April 2022

Penanggung jawab
Determinasi Tumbuhan

Dra. Dewi Sulistyawati, M.Sc.

Lampiran 2. Proses pembuatan serbuk daun sirsak (*Annona muricata* Linn.)



Lampiran 3. Proses pembuatan ekstrak daun sirsak (*Annona muricata* Linn.)



Etanol 96%



Perendaman daun sirsak



Hasil filtrate



Penyarian dengan kertas flanel



Penyarian dengan kertas saring



Proses evaporasi



Hasil ekstrak kental

Lampiran 4. Susut pengeringan dengan (Moisture Balance)

Replikasi ke-1 (8,9%)



Replikasi ke-2 (8,7%)



Replikasi ke-3 (9,0%)

Lampiran 5. Kadar air serbuk (Sterling Bidwel)



Penjuanan toluene



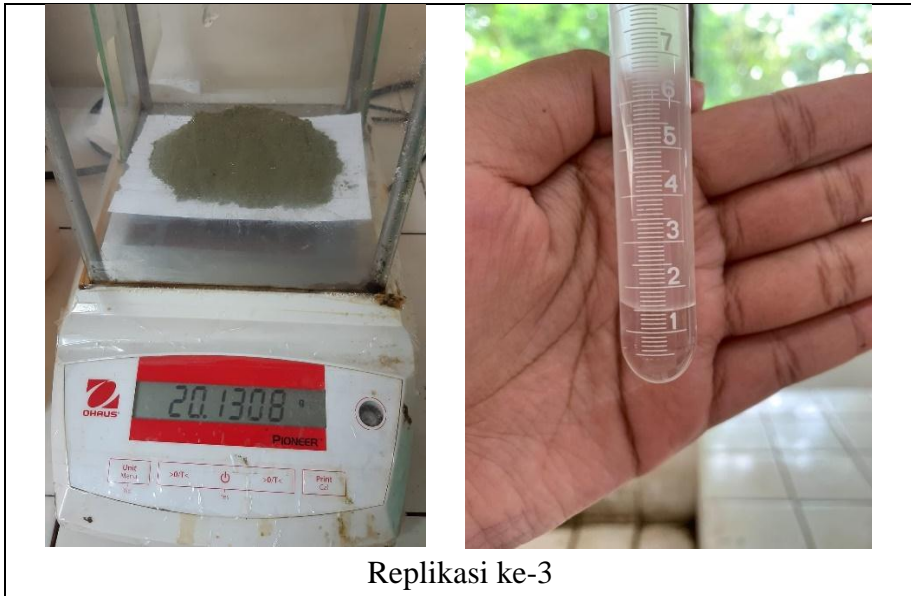
Destilasi toluene



Replikasi ke-1



Replikasi ke-2



Replikasi ke-3

Lampiran 6. Kadar air ekstrak (Gravimetri)



Oven



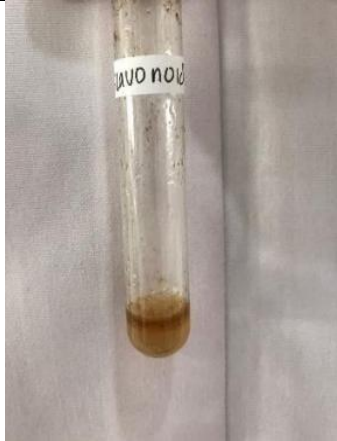
Desikator



Sebelum pengeringan



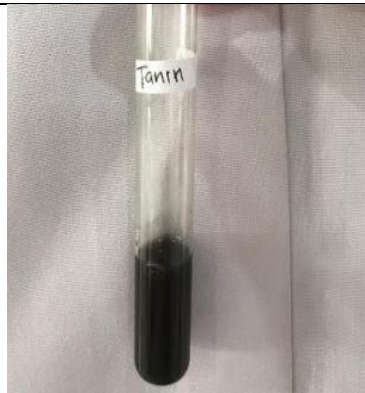
Sesudah pengeringan

Lampiran 7. Identifikasi senyawa kimia

(+) Flavonoid



(+) Saponin



(+) Tanin



(+) Alkaloid *mayer*

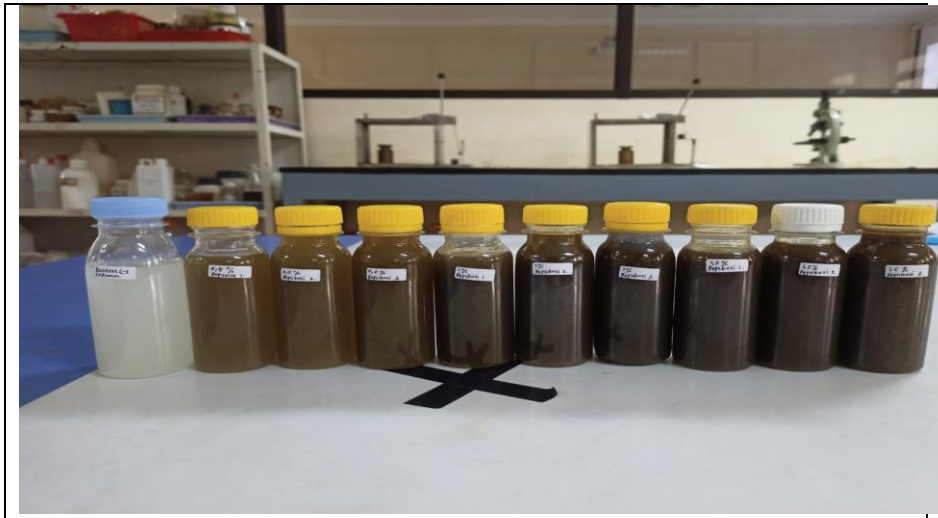


(+) Alkaloid *wagner*



(+) Alkaloid *Dragendorff*

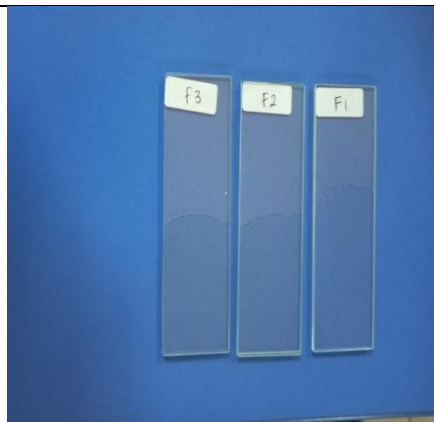
Lampiran 8. Hasil pembuatan sediaan serum ekstrak etanol daun sirsak



Lampiran 9. Uji mutu fisik dan stabilitas sediaan serum



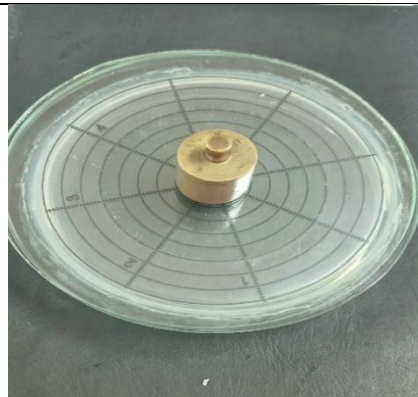
Uji pH meter



Uji homogenitas



Uji viskositas



Uji daya sebar

Lampiran 10. Perhitungan presentase rendemen daun sirsak kering terhadap daun basah.

Bobot basah (kg)	Bobot kering (kg)	Rendemen (%)
8	4,1	51,25%

% rendemen daun kering terhadap daun basah

$$\begin{aligned}
 &= \frac{\text{Bobot daun kering (kg)}}{\text{Bobot daun basah (kg)}} \times 100\% \\
 &= \frac{4,1\text{kg}}{8,0\text{ kg}} \times 100\% \\
 &= 51,25\%
 \end{aligned}$$

Lampiran 11. Perhitungan presentase rendemen serbuk terhadap daun kering.

Bobot basah (kg)	Bobot kering (kg)	Rendemen (%)
4,1	3,2	75,61%

% rendemen daun kering terhadap daun basah

$$\begin{aligned}
 &= \frac{\text{Bobot daun kering (kg)}}{\text{Bobot daun basah (kg)}} \times 100\% \\
 &= \frac{3,2\text{kg}}{4,1\text{kg}} \times 100\% \\
 &= 75,61\%
 \end{aligned}$$

Lampiran 12. Perhitungan presentase rendemen ekstrak daun sirsak

Bobot serbuk (gram)	Bobot ekstrak (gram)	Rendemen (%)
1000	127	12,70%

% rendemen daun kering terhadap daun basah

$$\begin{aligned}
 &= \frac{\text{Bobot daun kering (kg)}}{\text{Bobot daun basah (kg)}} \times 100\% \\
 &= \frac{127\text{kg}}{1000\text{kg}} \times 100\% \\
 &= 12,70\%
 \end{aligned}$$

Lampiran 13. Perhitungan kadar air dengan sterling bidwell

Bobot serbuk (gram)	Volume terbaca (mL)	Kadar air (%)
20,1261	1,7	8,44
20,1287	1,6	7,94
20,1308	1,5	7,45
Rata-rata (%±SD)		7,94±0,49

$$\begin{aligned} \text{Replikasi 1} &= \frac{\text{Volume terbaca (mL)}}{\text{Bobot sampel (g)}} \times 100\% \\ &= \frac{1,7 \text{ mL}}{20,1261} \times 100\% \\ &= 8,44\% \end{aligned}$$

$$\begin{aligned} \text{Replikasi 2} &= \frac{\text{Volume terbaca (mL)}}{\text{Bobot sampel (g)}} \times 100\% \\ &= \frac{1,6 \text{ mL}}{20,1287} \times 100\% \\ &= 7,94\% \end{aligned}$$

$$\begin{aligned} \text{Replikasi 3} &= \frac{\text{Volume terbaca (mL)}}{\text{Bobot sampel (g)}} \times 100\% \\ &= \frac{1,5 \text{ mL}}{20,1308} \times 100\% \\ &= 7,45\% \end{aligned}$$

Rata-rata presentase kadar air serbuk metode *sterling bidwell*

$$\begin{aligned} &= \frac{\text{replikasi 1} + \text{replikasi 2} + \text{replikasi 3}}{3} \\ &= \frac{8,44\% + 7,94\% + 7,47\%}{3} \\ &= 7,94\% \end{aligned}$$

Lampiran 14. Perhitungan kadar air ekstrak daun sirsak dengan gravimetri

No	Berat krus kosong (gram)	Berat krus kosong + ekstrak sebelum di oven (gram)	Bobot awal (gram)	Berat krus + ekstrak setelah di oven (gram)	Bobot akhir (gram)	Kadar air (%)
1.	20,3780	22,4883	2,1103	22,4038	1,9528	8,74
2.	20,4976	22,5688	2,0712	22,4887	1,8911	8,69
3.	20,3132	22,3338	2,0260	22,2646	1,8516	8,61
Rata-rata (%±SD)						8,84±0,06

1. Perhitungan replikasi 1

- Bobot krus kosong = 20,3780 g
- Bobot krus + sampel = 22,4883 g
- Sampel = 22,4883 g – 20,3780 g
= 2,1103 g (bobot awal)
- Bobot krus + sampel akhir = 22,4038 g
- Sampel = 22,4038 g – 22,3780 g
= 1,9528 g (bobot akhir)

$$\begin{aligned} \text{Replikasi 1} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\ &= \frac{2,1103 \text{ g} - 1,9258 \text{ g}}{2,1103 \text{ g}} \times 100\% \\ &= 8,74\% \end{aligned}$$

2. Perhitungan replikasi 2

- Bobot krus kosong = 22,5688 g
- Bobot krus + sampel = 20,4976 g
- Sampel = 22,5688 g – 20,4976 g
= 2,0712 (bobot awal)
- Bobot krus + sampel akhir = 22,4887 g
- Sampel = 22,4887 g – 22,5688 g
= 1,8911 g (bobot akhir)

$$\begin{aligned} \text{Replikasi 2} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\ &= \frac{2,0712 \text{ g} - 1,8911 \text{ g}}{2,0712 \text{ g}} \times 100\% \\ &= 8,69\% \end{aligned}$$

3. Perhitungan replikasi 3

- Bobot krus kosong = 20,3132 g

61

$$\begin{aligned}\text{Bobot krus + sampel} &= 22,3338 \text{ g} \\ \text{Sampel} &= 22,3338 \text{ g} - 20,3132 \text{ g} \\ &= 2,0260 \text{ g (bobot awal)}\end{aligned}$$

- $$\begin{aligned}\text{Bobot krus + sampel akhir} &= 22,2646 \text{ g} \\ \text{Sampel} &= 22,2646 \text{ g} - 20,3132 \text{ g} \\ &= 1,8516 \text{ g (bobot akhir)}\end{aligned}$$

$$\begin{aligned}\text{Replikasi 3} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\ &= \frac{2,0260 \text{ g} - 1,8516 \text{ g}}{2,0260 \text{ g}} \times 100\% \\ &= 8,61\%\end{aligned}$$

Lampiran 15. Hasil analisis data uji mutu fisik pH

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Basis	.196	3	.	.996	3	.878
formula 1 ekstrak 0,5%	.253	3	.	.964	3	.637
formula 2 ekstrak 1%	.362	3	.	.805	3	.127
formula 3 ekstrak 1,5%	.213	3	.	.990	3	.806

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_pH	Based on Mean	3.528	3	8	.068
	Based on Median	.933	3	8	.468
	Based on Median and with adjusted df	.933	3	3.878	.505
	Based on trimmed mean	3.271	3	8	.080

ANOVA

Uji_pH						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	4.356	3	1.452	107.359	.000	
Within Groups	.108	8	.014			
Total	4.464	11				

Multiple Comparisons

Dependent Variable: Uji_pH

Tukey HSD

(I) kelompok	(J) kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Basis	formula 1 ekstrak 0,5%	.05667	.09496	.930	-.2474	.3607
	formula 2 ekstrak 1%	.92000*	.09496	.000	.6159	1.2241
	formula 3 ekstrak 1,5%	1.43333*	.09496	.000	1.1293	1.7374
formula 1 ekstrak 0,5%	Basis	-.05667	.09496	.930	-.3607	.2474
	formula 2 ekstrak 1%	.86333*	.09496	.000	.5593	1.1674
	formula 3 ekstrak 1,5%	1.37667*	.09496	.000	1.0726	1.6807
formula 2 ekstrak 1%	Basis	-.92000*	.09496	.000	-1.2241	-.6159
	formula 1 ekstrak 0,5%	-.86333*	.09496	.000	-1.1674	-.5593
	formula 3 ekstrak 1,5%	.51333*	.09496	.003	.2093	.8174
formula 3 ekstrak 1,5%	Basis	-	.09496	.000	-1.7374	-1.1293
	formula 1 ekstrak 0,5%	1.37667*	.09496	.000	-1.6807	-1.0726
	formula 2 ekstrak 1%	-.51333*	.09496	.003	-.8174	-.2093

*. The mean difference is significant at the 0.05 level.

Lampiran 16. Hasil analisis data mutu fisik viskositas

Tests of normality

Formulasi	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Basis	.175	3	.	1.000	3	1.000
formulasi 1 ekstrak 0,5%	.253	3	.	.964	3	.637
formulasi 2 ekstrak 1%	.175	3	.	1.000	3	1.000
formulasi 3 ekstrak 1,5	.175	3	.	1.000	3	1.000

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_Viskositas	Based on Mean	.000	3	8	1.000
	Based on Median	.000	3	8	1.000
	Based on Median and with adjusted df	.000	3	8.000	1.000
	Based on trimmed mean	.000	3	8	1.000

ANOVA

Uji_Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	97500.000	3	32500.000	13.000	.000
Within Groups	20000.000	8	2500.000		
Total	117500.000	11			

Multiple Comparisons

Dependent Variable: Uji_Viskositas

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Basis	Formulasi 1 ekstrak 0,5%	-100.000	40.825	.144	-230.74	30.74
	Formulasi 2 ekstrak 1%	-150.000*	40.825	.026	-280.74	-19.26
	Formulasi 3 ekstrak 1,5%	-250.000*	40.825	.001	-380.74	-119.26
Formulasi 1 ekstrak 0,5%	Basis	100.000	40.825	.144	-30.74	230.74
	Formulasi 2 ekstrak 1%	-50.000	40.825	.630	-180.74	80.74
	Formulasi 3 ekstrak 1,5%	-150.000*	40.825	.026	-280.74	-19.26
Formulasi 2 ekstrak 1%	Basis	150.000*	40.825	.026	19.26	280.74
	Formulasi 1 ekstrak 0,5%	50.000	40.825	.630	-80.74	180.74
	Formulasi 3 ekstrak 1,5%	-100.000	40.825	.144	-230.74	30.74
Formulasi 3 ekstrak 1,5%	Basis	250.000*	40.825	.001	119.26	380.74
	Formulasi 1 ekstrak 0,5%	150.000*	40.825	.026	19.26	280.74
	Formulasi 2 ekstrak 1%	100.000	40.825	.144	-30.74	230.74

*. The mean difference is significant at the 0.05 level.

Lampiran 17. Hasil analisis data mutu fisik daya sebar
Tests of normality

Kelompok_perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Basis	.292	3	.	.923	3	.463
Formula 1 ekstrak 0,5%	.253	3	.	.964	3	.637
Formula 2 ekstrak 1%	.175	3	.	1.000	3	1.000
Formula 3 ekstrak 1,5%	.175	3	.	1.000	3	1.000
Basis	.253	3	.	.964	3	.637
Formula 1 ekstrak 0,5%	.253	3	.	.964	3	.637
Formula 2 ekstrak 1%	.253	3	.	.964	3	.637
Formula 3 ekstrak 1,5%	.292	3	.	.923	3	.463
Basis	.175	3	.	1.000	3	1.000
Formula 1 ekstrak 0,5%	.253	3	.	.964	3	.637
Formula 2 ekstrak 1%	.253	3	.	.964	3	.637
Formula 3 ekstrak 1,5%	.253	3	.	.964	3	.637

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tanpa_beban	Between Groups	23.743	3	7.914	365.282	.000
	Within Groups	.173	8	.022		
	Total	23.917	11			
Beban_50g	Between Groups	31.562	3	10.521	371.324	.000
	Within Groups	.227	8	.028		
	Total	31.789	11			
Beban_100g	Between Groups	30.789	3	10.263	513.153	.000
	Within Groups	.160	8	.020		
	Total	30.949	11			

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Kelompok_p erlakuan	(J) Kelompok_perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tanpa_beban	Basis	Formula 1 ekstrak 0,5%	.6000*	.1202	.005	.215	.985
		Formula 2 ekstrak 1%	2.8667*	.1202	.000	2.482	3.252
		Formula 3 ekstrak 1,5%	3.2667*	.1202	.000	2.882	3.652
	Formula 1 ekstrak 0,5%	Basis	-.6000*	.1202	.005	-.985	-.215
		Formula 2 ekstrak 1%	2.2667*	.1202	.000	1.882	2.652

		Formula 3 ekstrak 1,5%	2.6667*	.1202	.000	2.282	3.052
	Formula 2 ekstrak 1%	Basis	-2.8667*	.1202	.000	-3.252	-2.482
		Formula 1 ekstrak 0,5%	-2.2667*	.1202	.000	-2.652	-1.882
		Formula 3 ekstrak 1,5%	.4000*	.1202	.042	.015	.785
	Formula 3 ekstrak 1,5%	Basis	-3.2667*	.1202	.000	-3.652	-2.882
		Formula 1 ekstrak 0,5%	-2.6667*	.1202	.000	-3.052	-2.282
		Formula 2 ekstrak 1%	-.4000*	.1202	.042	-.785	-.015
Beban_50g	Basis	Formula 1 ekstrak 0,5%	.7000*	.1374	.004	.260	1.140
		Formula 2 ekstrak 1%	3.2667*	.1374	.000	2.827	3.707
		Formula 3 ekstrak 1,5%	3.8000*	.1374	.000	3.360	4.240
	Formula 1 ekstrak 0,5%	Basis	-.7000*	.1374	.004	-1.140	-.260
		Formula 2 ekstrak 1%	2.5667*	.1374	.000	2.127	3.007
		Formula 3 ekstrak 1,5%	3.1000*	.1374	.000	2.660	3.540
	Formula 2 ekstrak 1%	Basis	-3.2667*	.1374	.000	-3.707	-2.827
		Formula 1 ekstrak 0,5%	-2.5667*	.1374	.000	-3.007	-2.127
		Formula 3 ekstrak 1,5%	.5333*	.1374	.020	.093	.973
	Formula 3 ekstrak 1,5%	Basis	-3.8000*	.1374	.000	-4.240	-3.360
		Formula 1 ekstrak 0,5%	-3.1000*	.1374	.000	-3.540	-2.660
		Formula 2 ekstrak 1%	-.5333*	.1374	.020	-.973	-.093
Beban_100g	Basis	Formula 1 ekstrak 0,5%	.5667*	.1155	.005	.197	.936
		Formula 2 ekstrak 1%	3.1333*	.1155	.000	2.764	3.503
		Formula 3 ekstrak 1,5%	3.7333*	.1155	.000	3.364	4.103
	Formula 1 ekstrak 0,5%	Basis	-.5667*	.1155	.005	-.936	-.197
		Formula 2 ekstrak 1%	2.5667*	.1155	.000	2.197	2.936
		Formula 3 ekstrak 1,5%	3.1667*	.1155	.000	2.797	3.536
	Formula 2 ekstrak 1%	Basis	-3.1333*	.1155	.000	-3.503	-2.764
		Formula 1 ekstrak 0,5%	-2.5667*	.1155	.000	-2.936	-2.197
		Formula 3 ekstrak 1,5%	.6000*	.1155	.004	.230	.970
	Formula 3 ekstrak 1,5%	Basis	-3.7333*	.1155	.000	-4.103	-3.364
		Formula 1 ekstrak 0,5%	-3.1667*	.1155	.000	-3.536	-2.797
		Formula 2 ekstrak 1%	-.6000*	.1155	.004	-.970	-.230

*. The mean difference is significant at the 0.05 level.

Lampiran 18. Hasil analisis data uji stabilitas pH

Formula	Replikasi	Sebelum uji stabilitas	Setelah uji stabilitas
Basis	1	6.29	5.99
	2	6.24	5.89
	3	6.20	6.05
	Rata-rata \pm SD	6,25 \pm 0,04	5,97 \pm 0,08
1	1	6.19	6.01
	2	6.17	5.99
	3	6.20	5.81
	Rata-rata \pm SD	6,19 \pm 0,01	5,94 \pm 0,11
2	1	5.42	5.06
	2	5.40	5.03
	3	5.15	5.01
	Rata-rata \pm SD	5,33 \pm 0,15	5,04 \pm 0,02
3	1	4.99	4.53
	2	4.79	4.58
	3	4.65	4.48
	Rata-rata \pm SD	4,81 \pm 0,17	4,53 \pm 0,05

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Basis sebelum stabilitas	.196	3	.	.996	3	.878
Basis sesudah stabilitas	.232	3	.	.980	3	.726
Formula 1 sebelum stabilitas	.253	3	.	.964	3	.637
Formula 1 sesudah stabilitas	.353	3	.	.824	3	.174
Formula 2 sebelum stabilitas	.362	3	.	.805	3	.127
Formula 2 sesudah stabilitas	.219	3	.	.987	3	.780
Formula 3 sebelum stabilitas	.213	3	.	.990	3	.806
Formula 3 sesudah stabilitas	.353	3	.	.823	3	.170

a. Lilliefors Significance Correction

Paired Samples Test

		Paired Differences				T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower Upper			
Pair 1	Basis sebelum stabilitas - Basis sesudah stabilitas	.26667	.10408	.06009	.00811 .52522	4.438	2	.047
Pair 2	Formula 1 sebelum stabilitas - Formula 1 sesudah stabilitas	.25000	.12124	.07000	-.05119 .55119	3.571	2	.070
Pair 3	Formula 2 sebelum stabilitas - Formula 2 sesudah stabilitas	.29000	.13000	.07506	-.03294 .61294	3.864	2	.061
Pair 4	Formula 3 sebelum stabilitas - Formula 3 sesudah stabilitas	.41667	.18877	.10899	-.05226 .88559	3.823	2	.062

Lampiran 19. Hasil analisis data uji stabilitas viskositas

Formula	Replikasi	Sebelum stabilitas	Sesudah stabilitas
Basis	1	600	550
	2	650	650
	3	700	600
	Rata-rata \pm SD	650,00 \pm 50,00	600,00 \pm 50,00
1	1	450	350
	2	500	450
	3	550	400
	Rata-rata \pm SD	500,00 \pm 50,00	400,00 \pm 50,00
2	1	550	450
	2	500	550
	3	600	500
	Rata-rata \pm SD	550,00 \pm 50,00	500,00 \pm 50,00
3	1	550	500
	2	500	650
	3	600	600
	Rata-rata \pm SD	650,00 \pm 50,00	600,00 \pm 50,00

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Basis sebelum stabilitas	.175	3	.	1.000	3	1.000
Basis setelah stabilitas	.253	3	.	.964	3	.637
Formula 1 sebelum stabilitas	.175	3	.	1.000	3	1.000
Formula 1 setelah stabilitas	.175	3	.	1.000	3	1.000
Formula 2 sebelum stabilitas	.175	3	.	1.000	3	1.000
Formula 2 setelah stabilitas	.175	3	.	1.000	3	1.000
Formula 3 sebelum stabilitas	.175	3	.	1.000	3	1.000
Formula 3 setelah stabilitas	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Paired Samples Test

		Paired Differences						T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
				Lower	Upper					
Pair 1	Basis sebelum stabilitas - Basis setelah stabilitas	66.66667	104.08330	60.09252	-191.89058	325.22392	1.109	2	.225	

Pair 2	Formula 1 sebelum stabilitas - Formula 1 setelah stabilitas	100.00000	50.00000	28.86751	-24.20689	224.20689	3.464	2	.074
Pair 3	Formula 2 sebelum stabilitas - Formula 2 setelah stabilitas	50.00000	86.60254	50.00000	-165.13264	265.13264	1.000	2	.423
Pair 4	Formula 3 sebelum stabilitas - Formula 3 setelah stabilitas	50.00000	50.00000	28.86751	-74.20689	174.20689	1.732	2	.635

Lampiran 20. Hasil analisis data uji stabilitas daya sebar

	Beban (gram)	Stabilitas viskositas cPs±SD	
		Sebelum stabilitas	Sesudah stabilitas
Basis	0	7,34±0,20	8,5 ,±0,1
	50	8,33±0,15	8,8 ,±0,1
	100	8,7 ±0,1	9,1 ,±0,1
Formula 1	0	6,77±0,15	7,5 ±0,1
	50	7,63±0,15	8,23±0,15
	100	8,13±0,15	8,5 ±0,1
Formula 2	0	4,37±0,15	4,6 ±0,1
	50	4,8 ±0,21	5,2 ±0,1
	100	5,57±0,15	5,8 ±0,1
Formula 3	0	4 ±0,1	4,4 ±0,1
	50	4,53±0,15	4,93 ±0,15
	100	4,96±0,40	5,5 ±0,1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Basis sebelum stabilitas tanpa beban	.292	3	.	.923	3	.463
Basis setelah stabilitas tanpa beban	.175	3	.	1.000	3	1.000
Formula 1 sebelum stabilitas tanpa beban	.253	3	.	.964	3	.637
Formula 1 setelah stabilitas tanpa beban	.175	3	.	1.000	3	1.000
Formula 2 sebelum stabilitas tanpa beban	.175	3	.	1.000	3	1.000
Formula 2 setelah stabilitas tanpa beban	.175	3	.	1.000	3	1.000
Formula 3 sebelum stabilitas tanpa beban	.175	3	.	1.000	3	1.000
Formula 3 setelah stabilitas tanpa beban	.253	3	.	.964	3	.637
Basis sebelum stabilitas beban 50g	.253	3	.	.964	3	.637
Basis setelah stabilitas beban 50g	.175	3	.	1.000	3	1.000
Formula 1 sebelum stabilitas beban 50g	.253	3	.	.964	3	.637
Formula 1 setelah stabilitas beban 50g	.253	3	.	.964	3	.637
Formula 2 sebelum stabilitas beban 50g	.253	3	.	.964	3	.637
Formula 2 setelah stabilitas beban 50g	.175	3	.	1.000	3	1.000

Formula 3 sebelum stabilitas beban 50g	.292	3	.	.923	3	.463
Formula 3 setelah stabilitas beban 50g	.219	3	.	.987	3	.780
Basis sebelum stabilitas beban 100g	.175	3	.	1.000	3	1.000
Basis setelah stabilitas beban 100g	.175	3	.	1.000	3	1.000
Formula 1 sebelum stabilitas beban 100g	.253	3	.	.964	3	.637
Formula 1 setelah stabilitas beban 100g	.175	3	.	1.000	3	1.000
Formual 2 sebelum stabilitas beban 100g	.253	3	.	.964	3	.637
Formula 2 setelah stabilitas beban 100g	.175	3	.	1.000	3	1.000
Formula 3 sebelum stabilitas beban 100g	.253	3	.	.964	3	.637
Formula 3 setelah stabilitas beban 100g	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Basis sebelum stabilitas tanpa beban - Basis setelah stabilitas tanpa beban	-1.1333	.1528	.0882	-1.5128	-.7539	-12.851	2	.006
Pair 2	Formula 1 sebelum stabilitas tanpa beban - Formula 1 setelah stabilitas tanpa beban	-.7333	.1528	.0882	-1.1128	-.3539	-8.315	2	.014
Pair 4	Formula 3 sebelum stabilitas tanpa beban - Formula 3 setelah stabilitas tanpa beban	-.3667	.1528	.0882	-.7461	.0128	-4.158	2	.053
Pair 5	Basis sebelum stabilitas beban 50g - Basis setelah stabilitas beban 50g	-.4667	.1528	.0882	-.8461	-.0872	-5.292	2	.034

Pair 7	Formula 2 sebelum stabilitas beban 50g - Formula 2 setelah stabilitas beban 50g	-.4333	.0577	.0333	-.5768	-.2899	- 13.000	2	.006
Pair 8	Formula 3 sebelum stabilitas beban 50g - Formula 3 setelah stabilitas beban 50g	-.6000	.1000	.0577	-.8484	-.3516	- 10.392	2	.009
Pair 9	Basis sebelum stabilitas beban 100g - Basis setelah stabilitas beban 100g	-.4000	.1000	.0577	-.6484	-.1516	-6.928	2	.020
Pair 10	Formula 1 sebelum stabilitas beban 100g - Formula 1 setelah stabilitas beban 100g	-.3667	.2517	.1453	-.9918	.2585	-2.524	2	.128
Pair 11	Formual 2 sebelum stabilitas beban 100g - Formula 2 setelah stabilitas beban 100g	-.2333	.2082	.1202	-.7504	.2838	-1.941	2	.192
Pair 12	Formula 3 sebelum stabilitas beban 100g - Formula 3 setelah stabilitas beban 100g	-.5333	.2517	.1453	-1.1585	.0918	-3.671	2	.067